

**SIXTH ASIAN POPULATION ASSOCIATION CONFERENCE REPORT  
2024**



**6<sup>th</sup>  
APA  
CONFERENCE**

**27-30 November 2024  
Kathmandu, Nepal**



#### **Disclaimer**

The Sixth Asian Population Association (APA) Conference, held from November 27-30, 2024, in Kathmandu, Nepal, was organized to foster dialogue on population and development issues. The contents of this report are intended for informational purposes only and represent the discussions, findings, and perspectives shared during the conference.

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## ACKNOWLEDGEMENTS

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On behalf of the 6th APA Conference National Organizing Committee Nepal and the host, Central Department of Population Studies (CDPS), Tribhuvan University, and the Asian Population Association (APA), I, Yogendra Bahadur Gurung, extend my deepest gratitude for your invaluable contribution to the success of the 6th Asian Population Association (APA) Conference 2024. It is with immense pride and appreciation that we reflect on this remarkable event, which brought together over 500 delegates from 28 countries to engage in meaningful discussions on Asia's critical demographic challenges.

Inaugurated by the Rt. Hon. Prime Minister KP Sharma Oli, the conference served as a vibrant platform for exchanging insights on pivotal themes, including declining fertility rates, aging populations, rapid migration, health disparities, gender equality, and the multifaceted implications of climate change. Over the course of four days, we witnessed a dynamic interplay of knowledge sharing, innovative research presentations, and collaborative efforts aimed at addressing the intersection of population dynamics and sustainable development.

We extend our sincere gratitude to the Government of Nepal and Tribhuvan University for their invaluable support. We also acknowledge the significant contributions of our supporting partner organizations UNFPA, IOM, NEPPRD, CPDRG, ADRI, IUPMS, CREHPA, FPAN, ISERN, MSI, and the CDPS faculty and staff. A special note of appreciation goes to the Soltee Hotel and all others who contributed to making this conference possible.

We were honored to welcome our distinguished guests

- Rt. Hon. Prime Minister
- Honorable former Prime Minister, Special Guest
- President, Asian Population Association (APA)
- Honorable Minister, Ministry of Health and Population
- Honorable Minister, Ministry of Communications and Information Technology
- Honorable Minister, Ministry of Labor, Employment and Social Security
- Honorable Minister, Ministry of Culture, Tourism and Civil Aviation
- Province Deputy Speakers
- Rector, Tribhuvan University
- Registrar, Tribhuvan University
- Chair, Inaugural Ceremony, 6th Asian Population Association Conference
- Vice Chancellor – Tribhuvan University
- Secretary – Ministry of Health and Population and Coordinator – 6th APA Conference National Advisory/Facilitation Committee
- APA council members
- UNFPA, Country Representative
- IOM Chief of Missions
- Deans, campus chiefs, department heads – Tribhuvan University
- Regional technical specialist on population and development, UNFPA
- Respected professors – Tribhuvan University and the globe
- Ministry secretaries and joint secretaries
- Distinguished guests, delegates, session chairs, speakers, oral and poster Presenter (s);, and ladies and gentlemen

The 6th Asian Population Association Conference is particularly relevant given Nepal's current demographic shifts. Nepal is experiencing a "demographic window of opportunity" with a high potential of "reaping the demographic dividend." While there is progress, challenges like emigration and gender inequality persist.

The conference aims to

- Analyze and discuss issues concerning Nepal's population dynamics.
- Develop evidence-based policy responses to harness the opportunities of demographic change.

Ultimately, this conference seeks to contribute to the development of policies that place people at the center, ensuring that population is considered a resource for Nepal's future.

We encourage all attendees to actively participate in making the 6th APA Conference a success. Your engagement will contribute to strengthening APA and making a positive impact on Asia and the globe.

Once again, thank you for making the 6th APA Conference an outstanding success. We eagerly look forward to welcoming you to Nepal in the future for continued dialogue and collaboration.

林玲子

Reiko Hayashi

President, APA



Prof. Dr. Yogendra B Gurung

Head, CDPS, TU

## Summary Report

This Report presents summary of the overall proceedings of the Conference organized on 27- 30 November 2024 at Hotel Soaltee in Kathmandu, Nepal. The conference aimed to highlight and address critical population dynamics and development issues that impact not only Nepal but the entire Asian region. As the largest and most prominent gathering of professional population researchers and policymakers in Asia and the rest of the world, this conference aimed to enrich discussions and help shape the future direction of population policies in the region. The Sixth APA Conference also provided a vital platform for academicians, policymakers, and other stakeholders to come together and share their insights, foster collaboration, and advocate for innovative approaches to emerging population issues. The event has brought together over 500 experts and policymakers from 35 countries to discuss key demographic issues in Asia. The conference comes at a time when Nepal’s population structure is shifting, as reflected in the 2021 Population and Housing Census. The country has achieved replacement-level fertility, reduced infant mortality rates, and increased life expectancy to 71.3 years. The conference topics include, among others, fertility, mortality, aging, migration, urbanization, gender issues, and public health.

## The Organizers and the Supporters of the Conference



Asian Population Association (APA) was the main organizer of this Conference. It was locally organized by the Central Department of Population Studies (CDPS), Tribhuvan University, in collaboration with the Ministry of Health and Population (MoHP), the United Nations Population Fund (UNFPA) Nepal, International Organization for Migration (IOM) and Population Association of Nepal (PAN). The Conference was supported by National Forum of Parliamentarians on Population and Development (NFPPD), Centre for Research on Environment Health and Population Activities (CREHPA), Family Planning Association of Nepal (FPAN), Asian Demographic Research Institute (ADRI), China Population and Development Research Center (CPDR), Institute for Social and Environmental Research and Marie Stopes Nepal (MSN).





## Themes and Presentations

The 6th Asian Population Association Conference marked a milestone in advancing dialogues on critical population and development issues. Bringing together experts, policymakers, researchers, and early-career professionals, the conference featured 237 Oral and 186 Poster Presentations under 17 Themes, spanning 59 Oral (Plenary and Parallel) and 4 Poster Sessions. The presence of Rt. Hon'ble Prime Minister K.P. Sharma Oli underscored Nepal's commitment to addressing population dynamics, food security, equitable migration policies, and the Sustainable Development Goals (SDGs). His heartfelt wishes to a new mother and her child symbolized hope for a "BETTER FUTURE FOR HUMANKIND" and highlighted the population's potential as a cornerstone for a prosperous and inclusive future. Reflecting on eight major components, the conference emphasized the interconnectedness of population dynamics with health, mobility, environment, and innovation while showcasing regional and global perspectives

### 1. East Asia's Demographic Shifts and Their Impacts

East Asia, South Asia, and Southeast Asia are experiencing significant demographic shifts, including low fertility rates, increasing life expectancy, and evolving marriage patterns. These trends are leading to an "aged boom," necessitating innovative policy responses. While birth promotion policies are being considered, the focus now should shift towards maximizing the potential of the aging population. China's one-child policy has created a "marriage squeeze," delaying marriages due to societal and economic pressures on men. Urbanization is shown to reduce son preference in China. In Iran, education and egalitarian gender attitudes are contributing to later marriages. Higher education is linked to increased childlessness, particularly among women balancing work and family. Marriage patterns are evolving, with

rising remarriage rates influenced by factors like women's education. In Indonesia, the concept of "halal love" reflects the integration of religiosity and autonomy in courtship.

Marriage patterns and fertility decisions are influenced by factors like education, gender attitudes, and economic conditions, leading to delayed marriages in countries like Iran and China. Japan's rise in age-related deaths because of senility is becoming a leading cause of death.

## **2. Addressing Gender Disparities and Improving Health Outcomes in Asia**

Gender-specific interventions were highlighted as crucial for maternal and child health, tackling stunting, anemia, and low-birthweight issues. Discussions called for family-centered contraceptive decisions, gender-sensitive tuberculosis policies, and inclusive approaches to address multi-morbidity and mental health impacts of migration.

## **3. Climate Change and Societal Shifts on Vulnerable Populations**

Climate change is worsening food insecurity and health risks, particularly for the population engaged in agriculture and coastal areas vulnerable to cyclones. In South Korea, elderly over 85 years face increased vulnerability to extreme heat events, particularly in metropolitan areas. Despite initiatives like India's 'Swachha Bharat' mission, rural areas are seeing rising open garbage disposal that negatively impact public health. Meanwhile, child nutrition in India remains a challenge, with crop diversity reducing stunting and underweight but not addressing wasting. East Asia's aging population requires policy adaptations that is apparent from Thailand's birth promotion policies failing to address population decline.

## **4. Empowering Women through Education and Gender-Responsive Policies in South Asia**

Policies should empower women through education, vocational training and gender equality in work and family roles. Despite awareness, girl trafficking in Nepal's border regions persists. Gender, societal norms, culture, and poverty influence health, contraceptive use, disease prevention, mental health, education, and empowerment, requiring culturally sensitive interventions.

Rural women in India are more likely to be insured with higher public insurance coverage. Vocational courses transform out-of-school girls' lives, enhancing self-efficacy and reshaping gender roles. Addressing the dual burdens and stigmas faced by single women in the workforce is key to promoting gender equity and labor participation.

## **5. Enhancing Demographic Analysis through Digital Technologies and Automation**

APIs (Application Programming Interfaces) can automate analysis protocols by applying them directly to datasets, enabling the generation of results at predetermined intervals. Visual outputs, such as heatmaps are easily interpretable simplifying training of managers in data analysis and enhancing efficiency. Machine learning models like Random Forest and Decision Tree offer high accuracy in demographic analysis, identifying key social, behavioral, and demographic determinants. This facilitates more informed decision-making and effective policy development.

## **6. Data and Demographics in Asia**

Data quality and quantity in Asia's central statistical bureaus have declined over the past 15 years, impacting decision-making. The rise of digital nomads is reshaping migration, and the labor markets have contributed to developing economies but still face challenges in taxation, stability, and integration. Education and policy investments are key to harnessing human capital, achieving demographic dividends and ensuring sustainable development.

## **7. Migration and Labor Migration in South Asia**

Migration is shaped by cultural norms, care needs, and systemic challenges. Temporary childbirth migration (TCM) highlights the need for supportive systems for women, while labor migration policies must ensure access to education, healthcare, social security, and protection from harm. Depression in elderly Indian migrants and the exploitation of workers under the Gulf's 'Kafala' system emphasize the need for psychological support and labor reforms. Parental migration impacts children's mental health, with higher risks for internal migrants' children. In Japan, return migration supports parent-child co-residence, influenced by family roles and life stages, stressing the need for tailored policies and support systems.

## **8. Population Policy Challenges and Recommendations for Asia**

The overall presentations in all the sessions emphasized critical areas for policy reform and development across Asia. Key topics included migrant rights, labor conditions, reproductive health, climate change and gender-sensitive policies. The discussions also highlighted the need for family support for migrant workers, the importance of sub-national population projections, and the growing demand for urban resilience in rapidly expanding cities. Throughout the sessions, a strong emphasis was placed on the necessity of data-driven approaches, inclusive policymaking, and targeted interventions to address the region's complex demographic and socio-economic challenges effectively.



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## Inaugural Session

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### 6th Asian Population Association Conference

**Date:** Wednesday, 27th November 2024

#### Overview

The Inaugural Session of the 6th Asian Population Association (APA) Conference took place on 27th November 2024 in Kathmandu, Nepal. The event brought together distinguished guests, policymakers, researchers, and representatives from 24 countries, underscoring the importance of regional collaboration to tackle demographic challenges and opportunities. Hosted by Tribhuvan University (TU) with support from the, UNFPA, IOM, NEPPRD, CPDRG, ADRI, IUPMS, CREHPA, FPAN, ISERN, MSI, and the CDPS faculty and staff. The session focused on leveraging population dynamics for sustainable development.

#### Dais and Special Guests

The session began with the arrival of special guests and organizers, who took their seats on the dais. Key attendees included

- **Rt. Hon'ble KP Sharma Oli**, Prime Minister of Nepal (Chief Guest)
- **Hon'ble Sher B. Deuba**, Former Prime Minister of Nepal
- **Prof. Dr. Keshar Jung Baral**, Vice Chancellor, Tribhuvan University
- **Mr. Bishma Adhikari**, General Secretary, National Forum of Parliament on Population and Development (NFPPD)
- **Dr. Won Young Hong**, UNFPA Country Representative, Nepal
- **Ms. Helene Fors**, Chief of Mission, International Organization for Migration (IOM), Nepal Office
- **Prof. Dr. Yogendra Bahadur Gurung**, Head, Central Department of Population Studies (CDPS), TU
- **Dr. Reiko Hayashi**, President, Asian Population Association (APA)

Furthermore, notable attendees included ministers, province deputy speakers, TU leadership, and ministry secretaries.

#### Key Addresses

##### **Rt. Hon'ble KP Sharma Oli, Prime Minister of Nepal**

The program commenced with Prime Minister Oli expressing his gratitude for the successful efforts in fostering the exchange of ideas during the conference. He made a symbolic connection between a newborn baby and the future of the population, emphasizing the importance of a better future for humankind. Prime Minister Oli stressed the collective responsibility to ensure food security for all, stating, "It is our collective responsibility to ensure that no individual suffers from food scarcity." He called for the recognition of older individuals as valuable contributors to society and advocated for collaboration between the government and academic institutions. Looking ahead to the 30th anniversary of the Asian Population Conference, he expressed confidence that this milestone would serve as a turning point for rethinking approaches to achieving the Sustainable Development Goals (SDGs) and building a prosperous Nepal.

### **Hon'ble Sher B. Deuba, Former Prime Minister of Nepal**

Former Prime Minister Deuba expressed his pleasure at the conference's focus on population and demographic issues, acknowledging their complexity in South Asian countries. He underscored the potential of youth as demographic assets who could drive socio-economic growth if their innovation and productivity were effectively harnessed. Deuba also touched on migration challenges and the unequal distribution of resources, emphasizing the risks posed by climate change, child marriage, and global warming. He concluded by extending his best wishes to the international delegates.

### **Prof. Dr. Yogendra Bahadur Gurung, Head of the Organizing Committee**

In his welcome speech, Prof. Dr. Gurung highlighted the significance of the conference in fostering collaboration, sharing knowledge, and addressing pressing demographic issues. He emphasized Nepal's "demographic window of opportunity" and the potential for "reaping the demographic dividend." However, he also pointed out challenges such as gender inequality, internal migration, and an aging society. He concluded by advocating for the population as a resource for development, which would lead to a "Prosperous Nepal and Happy Nepal."

### **Dr. Reiko Hayashi, President, Asian Population Association (APA)**

Dr. Hayashi opened the session by thanking the supporting partners and highlighting the history of APA conferences. She discussed the paper review process and the format of the four-day event, which would see participation from 24 countries. Dr. Hayashi also touched on the new population trend in Asia, including the increasing trend of Nepali migration to Japan, where the Nepali population now matches the combined populations of European and North American citizens.

### **Dr. Won Young Hong, UNFPA Country Representative, Nepal**

Dr. Hong emphasized the need to revisit population policies to ensure that population dynamics do not become burdens but are leveraged as resources for development. She acknowledged the challenges faced by Asian countries, particularly in addressing diverse populations and shared environmental concerns. Dr. Hong stressed that no single country could solve these challenges alone, and the APA provided a crucial platform for regional collaboration and collective action.

### **Prof. Dr. Keshar Jung Baral, Vice Chancellor of Tribhuvan University**

Prof. Dr. Baral highlighted the importance of addressing population issues on international forums, where empirical insights could provide valuable feedback to policymakers. He praised the conference for encouraging collaboration between policymakers, researchers, government officials, and early-career students, and reaffirmed TU's commitment to bridging policy gaps through partnerships with international organizations.

### **Special Moment**

The conference began with a unique moment when a live virtual interview was conducted between the Chief Guest, Rt. Hon'ble KP Sharma Oli, and a mother who had given birth to her first child earlier in the day at KMC Hospital, Kathmandu. Prime Minister Oli welcomed the newborn baby girl and conveyed his best wishes for the health and well-being of both the mother and child, symbolizing hope and the central theme of the conference—population and demographic health.

### **Conclusion**

The inaugural session of the 6th APA Conference was marked by insightful speeches and a significant symbolic moment, setting the stage for the next four days of discussions and knowledge-sharing. The event

underscored the importance of regional collaboration in addressing the complex challenges related to population dynamics, emphasizing the need for inclusive, sustainable development across Asia.

## **SESSION 1. IPUMS CENSUS MICRODATA COLLECTION FREE-USE DATA FOR RESEARCH**

**Theme:** Free-Use Census Data for Comparative Research

### **I. Session Overview**

The session focused on introducing the IPUMS Census Microdata Collection, highlighting its global significance in providing harmonized, accessible census data for researchers. Presentations emphasized the project's comprehensive approach to international data collection, harmonization, and accessibility across 104 countries.

### **II. Presentation Summaries**

#### **1. IPUMS Census Microdata Collection Global Data Resources**

**Presenter(s):** Matthew Sobek, Sula Sarkar Affiliation University of Minnesota Primary Insights

- Comprehensive collection of 565 censuses covering 1.3 billion individual records
- Harmonized data from 104 countries, with extensive Asian dataset coverage
- Developed tools for data exploration and user-friendly access

### **III Analysis of Floor Questions Cross-Cutting Themes**

#### **Data Accessibility**

- Critical importance of harmonized international census data
- Challenges in accessing recent data due to reporting delays
- Potential for cross-disciplinary research applications

#### **Methodological Innovations**

- Importance of geospatial data integration
- Development of user-friendly data extraction tools
- API integration for R and Python

#### **Research and Policy Implications**

- Support for evidence-based policymaking
- Potential to inform Sustainable Development Goals (SDGs)
- Applications in migration, urbanization, and demographic studies

### **IV. Audience Engagement and Session Dynamics**

#### **High-Engagement Areas**

- Discussion of data harmonization methodologies
- Exploration of research applications across different disciplines



**V. Session Conclusion**

The session underscored the critical need for

- Accessible and harmonized international census data
- Innovative approaches to data collection and analysis
- Supporting evidence-based research and policymaking

**VI. Key Strategic Implications**

**1. Data Democratization** Establishing a comprehensive, freely accessible platform for global census data that enables comparative research and informed decision-making.

**2. Research Empowerment** Providing researchers with tools to explore complex demographic trends across international contexts, particularly in developing regions.

**Key Observations**

The engagement pattern suggested that presentations offering

- ✓ Strong interest in comparative research capabilities
- ✓ Focus on practical applications of harmonized census data

**SESSION 1.1 MATERNAL HEALTH AND FAMILY PLANNING**

**Session Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Session Chair(s):** Bernard Baffour

**I. Session Overview**

The session focused on critical aspects of maternal healthcare across Indonesia, Nepal, and India, examining factors that influence reproductive health services utilization, access, and outcomes. Presentations highlighted significant challenges and opportunities in improving maternal health, with a particular emphasis on addressing socio-cultural barriers, inequalities, and the pivotal role of community health workers.

**II. Presentations Summaries****1. The Effect of Child Marriage on the Utilization of Maternal Health Care Services in Indonesia**

**Presenter(s):** Sari Kristiana, Desy Nuri Fajarningtiya

**Affiliation:** Research Center for Population, BRIN, Jakarta

**Abstract**

A woman in Indonesia dies every hour due to complications related to pregnancy, birth, and post-delivery. Child marriage was associated with increased risks of adverse pregnancy outcomes. This study aimed to assess the effect of child marriage and the utilization of maternal health care services in Indonesia. This study utilized data from the 2017 Indonesia Demographic and Health Survey and restricted its analysis to a subsample of 14,528 currently married women of reproductive age who had at least one live birth in the five years preceding the survey. Logistic regression models were constructed to estimate adjusted odds ratios. Women who did not experience child marriage were more likely to have  $\geq 4$  antenatal care visits during pregnancy (AOR 1.22; 95% CI 1.07-1.40), to use skilled attendance at delivery (AOR 1.25; 95% CI 1.08-1.44), and to use facility-based delivery (AOR 1.25; 95% CI 1.13-1.39) compared to those who experienced child marriage, after controlling for socio-economic and demographic factors. Higher education, fewer living children, media exposure, higher wealth index, and

urban residence may play a role in the findings. Addressing the social and economic barriers that prevent women from accessing health care may help to increase the uptake of maternal health care services.

#### **Primary Insights**

- Women married at or after age 18 demonstrate significantly better access to healthcare services
- Child marriage correlates with reduced maternal healthcare access and increased mortality risks
- Methodological approach utilized the 2017 Indonesia Demographic and Health Survey with logistic regression analysis

## **2. Trends and Inequalities in the Utilization of Continuum of Care for Maternal Healthcare Services in Nepal Evidence from 1996 to 2022 Nepal Demographic and Health Surveys**

**Presenter(s):** Sujan Karki, Patama Vapattanawong

**Affiliations:** Institute for Population and Social Research, Mahidol University

#### **Abstract**

The continuum of care for maternal health is accessing care during pregnancy, childbirth, and postpartum. Wealth status is the major factor for inequalities in the utilization of health services in Nepal. Completing all three care in maternal health is the full continuum of care for this study. The study used all six rounds of survey data from 1996 to 2022 Nepal Demographic Health Surveys (NDHS). The 18,742 women with the last livebirths three years preceding the survey were pulled into the single dataset. The result showed the complete continuum of care was 6.6% in 1996 and 67% in 2022. Similarly, 41.3% of women did not receive any maternal healthcare services in 1996 and 1.3% in 2022. The highest rate of zero maternal healthcare was 42.2% in 2001. The concentration index shows significant inequalities in the utilization of continuum of care in all rounds of surveys; the highest inequality was in 2001(0.57), and the lowest was in 2022(0.11). The findings from the study conclude that though the utilization rate of the continuum of care is increasing in trend, some women still do not have access to maternal healthcare services. Inequality significantly persists in maternal healthcare services in Nepal.

#### **Primary Insights**

- Remarkable increase in maternal healthcare utilization from 6.6% in 1996 to 67% in 2022
- Persistent disparities among rural, urban, and marginalized population groups
- Comprehensive analysis of six National Demographic and Health Survey datasets

## **3. Assessing the Performance and Challenges of Community Health Workers in Promoting Maternal and Newborn Health Services in India A Systematic Review and Meta-analysis**

**Presenter(s):** Sukriti Chawla, Sukriti Chawla, Chandan Kumar, Montu Bose, Shikha Shrivastav

**Affiliation:** TERI School of Advanced Studies, New Delhi

#### **Abstract:**

Introduction: Maternal and Newborn Health (MNH) services are essential for well-being of mothers and newborns. ASHAs play a significant role in promoting MNH services in India. However, there are inequities in coverage of MNH services, which indicate challenges in the performance of ASHAs. This study systematically reviewed performance and challenges of ASHAs in promoting MNH services.

**Methodology:** The study is based on systematic review and meta-analyses. Bibliographic databases were searched to screen literature. Of 6,072 studies found, 75 were included for systematic review, including 37 quantitative studies for meta-analysis. Literature data were extracted, and random-effect models were used to calculate the pooled effect size (Relative Risk) of ASHAs in delivering the three MNH services separately.

**Results:** The meta-analyses suggest a marginally positive effect of ASHAs in influencing MNH services. Various factors emerged from the qualitative studies as enablers and barriers, classified into three major sections: individual, cultural, and health-system.

**Conclusions:** This study finds a lack of holistic approach in evaluating ASHAs' performance. There is a need to adopt a comprehensive assessment framework for monitoring performance and addressing challenges of ASHAs for improving coverage of MNH services.

### **Primary Insights**

- Community Health Workers (CHWs), particularly ASHAs, positively impact maternal and newborn health services
- Identified barriers include inadequate training, insufficient incentives, and cultural resistance
- Systematic review of 37 studies using PRISMA guidelines and random-effect models

### **III. Analysis of Floor Questions Cross-Cutting Themes**

#### **Healthcare Equity**

- Critical need to address access disparities based on wealth, geography, and cultural factors
- Imperative to strengthen health systems in rural and marginalized communities

#### **Cultural and Social Dynamics**

- Importance of challenging traditions that undermine healthcare utilization
- Necessity of community engagement and awareness campaigns promoting reproductive rights

#### **Health Worker Support**

- Recommendations for improving CHW training, incentives, and supervision
- Integrating CHW feedback into policy development processes

### **IV. Audience Engagement and Session Dynamics**

The session revealed a nuanced pattern of audience participation, characterized by varying levels of engagement across different presentations

#### **High-Engagement Presentations**

- **Nepal's Maternal Healthcare Trends** Sparked active audience interaction with probing questions about urban-rural disparities and care continuum strategies.
- **Community Health Workers in India** Generated significant discussion around the scalability of CHW contributions and policy integration mechanisms.

#### **Limited-Engagement Presentation**

- **Child Marriage in Indonesia** Experienced more subdued audience participation, potentially due to insufficient exploration of the complex religious and social dimensions underlying the research findings.

### **V. Session Conclusion**

The session underscored significant progress in maternal healthcare while highlighting persistent challenges. The presentations collectively emphasized the critical need for

- Culturally sensitive policies
- Evidence-based interventions
- Robust support for frontline health workers

The findings reinforce the importance of holistic approaches that address systemic barriers, promote equity, and empower communities to improve reproductive health outcomes.

Moreover, the varied audience engagement highlights the importance of developing presentation strategies that can effectively communicate complex, culturally sensitive research topics to foster more comprehensive and meaningful academic discourse.

## **VI. Key Strategic Implications**

**1. Comprehensive Policy Approach:** Development of holistic, culturally sensitive strategies that address multi-dimensional barriers to maternal healthcare access, including non-economic factors such as social norms, education, and infrastructure limitations in underserved communities.

**2. Empowerment through Integrated Solutions:** Strengthening healthcare systems by simultaneously investing in community health worker support, reproductive health education, targeted infrastructure development, and public-private partnerships to create a more robust and equitable reproductive healthcare ecosystem.

## **SESSION 1.2 DISPARITIES IN MORTALITY AND MORBIDITY**

**Session Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Session Chair(s):** Yu-Hua Chen

### **I. Session Overview**

This session explored mortality and morbidity disparities through two compelling presentations focusing on demographic shifts, health trends, and policy implications in Japan and Iran. The session highlighted critical insights into aging populations, youth mortality, and the evolving landscape of public health challenges.

### **II. Presentations Summaries**

#### **1. Mortality and Morbidity Statistics in Ageing Societies the Case of Japan**

**Presenter(s):** Reiko Hayashi

**Affiliation:** National Institute of Population and Social Security Research (IPSS), Tokyo, Japan

#### **Abstract**

While the number of deaths increases with the increasing number of very old people, the life expectancy kept on rising in Japan until 2020. Malignant neoplasms, heart diseases and cerebrovascular diseases have been the three major killers, but deaths caused by these causes are decreasing in terms of age-adjusted death rate. On the other hand, senility is becoming the common cause of death and has now become the third largest cause of death in 2022. Together with other ill-defined causes such as heart failure, cardiac arrest or respiratory failure, the causes which used to be labelled as “garbage codes” are increasing rapidly, even though the death certificates are filled in by medical doctors. While there would be a need to re-train doctors, cause-of-death statistics alone are not capable of capturing the whole process of ageing, degeneration, and frailty, which leads to death. As for the morbidity statistics, the Patient Survey conducted every three years since 1953 needs to be supplemented by digital health data such as public

health and long-term care insurance claim data. When the linkage becomes possible, the integrated data should be able to re-construct the health-to-death process and provide insights into healthy ageing.

**Primary Insights**

- Rising life expectancy coupled with changing mortality patterns
- Senility emerging as the most prevalent cause of death among elderly populations

**2. The Trend of Death Rate and Causes of Death Based on the ICD-10 among Young People in Iran (15-24 years) from 1990 to 2019**

**Presenter(s):** Maryam Tajvar, Mahdiyeh Heydari, Khadijeh Yari Fard

**Affiliation:** Tehran University of Medical Sciences, Tehran, Iran

**Abstract**

**Background:** This study aimed to determine the trend of mortality rate and the cause of death, based on the ICD-10, among young people in Iran during the last three decades.

**Methods:** The present study is a secondary analysis of data, which examines the trend of death rate and its causes among young adult, longitudinally during 1990-2019. The data source was the GBD website. Linear Regression analysis was used to measure the slope of changes in mortality rates and causes of death during the period, where "time" was the independent variable and "mortality rate" and "causes of mortality" were dependent variables.

**Results:** The death rate of young people declined by 56% during the period, equal to an average of 2.17 units per year. The most common cause of death has been injuries (69%), then NCDs (25%), and finally communicable diseases (6%). However, death due to injuries (except SUD), communicable diseases (except HIV), and NCDs (except musculoskeletal disorders) declined significantly by 1.43, 0.3, and 0.09 units per year, over 30 yr respectively.

**Conclusion:** Examining past trends in death rates and causes strengthens insights into the state and future trends in health, which are crucial for policymaking in developing countries with limited resources

**Primary Insights**

- 56% decline in overall death rate among young people from 1990 to 2019
- Injuries representing 69% of youth mortality
- Significant reductions in deaths from injuries, communicable diseases, and non-communicable diseases

**III. Analysis of Floor Questions Cross-Cutting Themes**

**Demographic Transitions**

- Varying impacts of population structures on mortality trends
- Need for adaptive healthcare strategies addressing demographic shifts

**Health Data and Policy Integration**

- Importance of comprehensive, digital health record systems
- Critical role of data-driven policy development

**Injury and Disease Prevention**

- Persistent challenges in reducing mortality from injuries
- Growing significance of non-communicable disease management



#### IV. Audience Engagement and Session Dynamics

The session demonstrated a high level of academic discourse and interactive engagement

##### Japan Presentation Engagement

- Active audience participation with insightful questions about
  - Data collection methodologies
  - Nuanced definitions of senility-related deaths
  - Potential applications of Japan's health data integration approaches

##### Iran Presentation Engagement

- Lively discussions focused on
  - Road traffic safety measures
  - Comparative analysis of mortality trends
  - Data transparency challenges
- Rich floor discussions comparing Iran's progress with Nepal's healthcare challenges

#### Key Observations

The engagement highlighted the audience's keen interest in

- ✓ Innovative health data methodologies
- ✓ Cross-country comparative health research
- ✓ Practical policy implications of demographic health studies

#### V. Session Conclusion

The session provided invaluable insights into mortality and morbidity disparities, highlighting the complex interplay between demographic transitions, healthcare systems, and public health strategies. By emphasizing data-driven approaches and targeted interventions, countries can more effectively address emerging health challenges across different population segments.

The presentations from Japan and Iran demonstrated that understanding mortality patterns requires nuanced, context-specific research and adaptive policy frameworks that can respond to evolving demographic and health landscapes.

#### VI. Key Strategic Implications

The research and presentations suggest two critical implications for addressing mortality and morbidity disparities

1. **Comprehensive Data Integration and Policy Development** Developing robust national health strategies that prioritize digital health records, comprehensive data collection, and nuanced understanding of demographic shifts—particularly for aging populations and youth mortality trends.
2. **Targeted Interventional Approaches** Implementing focused public health interventions that address specific mortality challenges, such as injury prevention, mental health support, and age-related health management, with an emphasis on data transparency and evidence-based policy formulation.

### SESSION 1.3 LABOR MIGRATION INTEGRATION AND CHALLENGES

**Session Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Session Chair(s):** Aswatini Anaf

## I. Session Overview

The session explored labor migration dynamics across multiple countries, examining the complex challenges faced by migrants and the policy frameworks that shape their experiences in destination countries.

## II. Presentations Summaries

### 1. International Migration and Challenges Encountered by Indian Laborers while Integrating in Nepal

**Presenter:** Tushar Dakua, Kailash Chandra Das

**Affiliation:** international Institute of Population Studies, Mumbai, India

#### Abstract

As per the World Bank data, globally 47% of people migrate within developing countries for work and employment purposes. Demographic and economic factors are the major drivers of emigration between developing countries. The present study aims to explore the challenges encountered by Indian labourers while integrating into Nepal.

The current study uses field survey data of 390 Indian migrants working in Nepal for the past year, drawn by snowball sampling design. Bivariate analysis with chi-square test, principal component analysis, and binary logistic regression were carried out for background variables with variables on integration challenges.

Most Indian migrants in Nepal belong to 20-40 years age group, are male, less educated, and migrate alone (without their families) to Nepal. Food and job-related challenges are most common in the general integration of Indian migrants. Binary regression results also depict that one-unit change in job, weather, and work role factors are associated with 0.4 times increase in integration. The relationships are statistically significant at ( $P > |t| = 0.000$ ).

For an inclusive integration of Indian migrants in Nepal, interventions are required from contractors, the government, and employers regarding food, healthcare maintenance, and risk assessment systems at the living and working places of the immigrants.

#### Primary Insights

- Significant integration difficulties despite an open border policy
- Persistent challenges in accessing necessities (food, water, shelter)
- Prevalence of verbal harassment despite bilateral treaty provisions
- Demographic concentration of male migrants aged 22-40
- Urgent need for comprehensive national migrant policies to address protection gaps.

### 2. A Path to Integration Thai Attitudes Towards Immigrants from Myanmar, Lao PDR, and Cambodia

**Presenter(s):** Aree Jampaklay

**Affiliation:** Institute for Population and Social Research Mahidol University, Nakhon Pathom, Thailand

#### Abstract

For countries receiving a remarkable number of immigrants, public attitudes towards immigration have become a major societal issue. The processes of embracing integration and immigrants' rights need to consider members of the receiving society as active agents of a bottom-up normative approach. Supportive public attitudes are crucial for immigrants' adjustment and mental health. Understanding

public attitudes toward immigrants among the members of the receiving society therefore provides important policy implications and is needed in designing psychosocial interventions aimed at fostering a supportive environment for the newcomers. The study setting of this analysis is Thailand, a country which has hosted around 4 million of migrants from its neighboring countries, Myanmar, Lao PDR, and Cambodia. This analysis aims at investigating attitudes of Thai people towards immigrants and how their knowledge about and exposure to immigrants predict their attitudes towards immigrants. Data were taken from a survey conducted in 2023 in Bangkok Thailand and covered 402 Thai nationals aged 18 and older. The study sample were designed to reflect variations in the aspect of gender, age, and other demographic and socioeconomic characteristics.

#### **Primary Insights**

- Comprehensive survey of 402 Thai nationals aged 18 and above
- Highlighted disproportionate challenges faced by female and LGBTI migrants
- Social media and television as primary sources of migrant information
- Revealed complex social attitudes towards immigrants from neighboring countries
- Demonstrated the critical role of public perception in migrant integration.

### **3. Issues Faced by Sri Lankan International Labor Migrants in Destination Countries The Role of Migration Governance Mechanisms**

**Presenter(s):** Sunethra Parera

**Affiliation:** University of Colombo, Colombo, Sri Lanka

#### **Abstract**

Over the decades, international labor migrants have contributed significantly to the Sri Lankan economy by sending foreign remittances. Still, a considerable proportion of migrants report their grievances and issues that they face in host countries. There is a lack of studies on migrant issues, coping mechanisms, and how governance institutions respond to such complaints. Therefore, this study aims to fill this gap by exploring the role of migration governance mechanisms. The study was based on primary survey data gathered from current migrants, returnee migrant workers, and key informant interviews with stakeholders. Secondary data were gathered through the migrant employee registration data system and reported complaints to the SLBFE. The study findings revealed that migrant workers continue to face issues with living and working conditions in the host countries and most grievances are reported by female migrants who work in Middle Eastern countries. However, there has been a significant improvement in signing Bilateral Labour Agreements, Memorandum of Understanding and Memorandum of Corporation between Sri Lanka with most of the destination countries over the past years. Findings suggest that strengthening institutional mechanisms and educating and empowering migrants are key instruments that facilitate safe, orderly, and regular migration.

#### **Primary Insights**

- Significant impact of recent economic crisis on migration patterns
- Predominance of low-paid job opportunities
- Female migrants (80%) characterized by lower educational backgrounds
- Later-life migration patterns for women compared to men
- Critical gaps in governance mechanisms supporting migrant workers

#### 4. Namdhari Sikhs in the United Kingdom A Vibrant Punjabi Diasporic Community

**Presenter(s):** Sanjana Sharma, Harpreet Singh, Sahil Sahil

**Affiliation:** Department of Geography, Banaras Hindu University, Varanasi, Varansi, Uttar Pradesh, India.  
Department of Computer Application, Chandigarh, India

##### Primary Insights

- Distinct cultural practices (vegetarian diet, white clothing)
- Historical migration driven by agricultural opportunities
- Concentration in Birmingham's agricultural regions
- Limited sample size with research focused on festival attendees
- Identified need for more comprehensive socio-economic analysis

#### III. Analysis of Floor Questions Cross-Cutting Themes

##### Thematic Discussions

- **Migration Governance** Extensive dialogue on the critical need for comprehensive policy frameworks that address migrant integration across different national contexts.
- **Rights and Protection** In-depth exploration of mechanisms to safeguard migrant rights, particularly for vulnerable populations including women and LGBTI communities.
- **Socio-Economic Challenges** Extensive discourse on the economic motivations driving migration and the systemic barriers migrants encounter in destination countries.

##### Thematic Discussions

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- **Socio-Economic Challenges** Extensive discourse on the economic motivations driving migration and the systemic barriers migrants encounter in destination countries.

#### IV. Audience Engagement and Session Dynamics

##### Engagement Patterns

- **High-Interaction Presentations**
  - The Thai migration attitudes study generated significant discussion about social perceptions and integration challenges.
  - Sri Lankan labor migration presentation sparked debates about economic motivations and governance mechanisms.
- **Limited Engagement Areas**
  - The Namdhari Sikhs case study received less interactive response, potentially due to its narrow focus and limited sample size.
- **Key Audience Observations**
  - Participants demonstrated a keen interest in
    - ✓ Comparative migration experiences across different countries
    - ✓ Policy implications for migrant integration
    - ✓ Challenges faced by marginalized migrant populations

## V. Session Conclusion

The session provided a comprehensive exploration of labor migration dynamics, revealing the intricate challenges migrants face across diverse geographical and social contexts. By examining migration experiences in countries like Nepal, Thailand, Sri Lanka, and the United Kingdom, the presentations illuminated the complex interplay of economic, social, and policy factors that shape migrant experiences. The discussions highlighted the critical need for more nuanced, compassionate, and comprehensive approaches to migration, emphasizing the importance of protecting migrant rights, addressing systemic barriers, and developing policies that recognize the human dignity of individuals seeking economic opportunities across borders.

## VI. Key Strategic Implication

### 1. Comprehensive and Inclusive Migration Policies:

Develop context-specific policies addressing multidimensional challenges of labor migration, ensuring robust protection, equitable access to services, and targeted support for vulnerable groups through integrated legal, social, and economic mechanisms.

### 2. Collaborative and Evidence-Based Approaches:

Strengthen international partnerships to standardize migrant rights, enhance information sharing, and adopt coordinated strategies, while investing in research, data methodologies, and impact assessments to inform effective policymaking.

## SESSION 1.4 QUANTIFYING URBANIZATION, AGEING, AND MIGRATION

**Session Theme:** Demographic Theory and Methods (including Demographic Training)

**Session Chair(s):** Xiaofei Wang

### I. Session Overview

This session explored innovative quantitative methods for analyzing urbanization, aging, and migration patterns using advanced statistical and geospatial approaches. The presentations highlighted the importance of integrating new tools and methodologies into demographic studies, addressing challenges like sparse data, rapid urbanization, and the impact of migration events.

### II. Presentations Summaries

#### 1. Fast, Scalable Bayesian Demography

**Presenter(s):** Dr. Junni Zhang, John Bryant

**Affiliation:** Peking University

#### **Abstract:**

An expanding body of academic research shows that Bayesian statistical methods are highly effective at estimating and forecasting demographic rates, particularly when data are sparse or noisy. However, applied demographers and statistical offices have been slow to adopt these methods. Available software for fitting Bayesian models typically requires specialist statistical expertise. Calculations can also be slow, particularly for disaggregated data, such as data on subnational areas. We summarize an ongoing work program to develop a family of models, and an open-source R package implementing these models, that aim to make Bayesian demographic methods accessible to a wide group of users. The methods are designed to be intuitive and use sophisticated algorithms for choosing appropriate default settings.



Internally, model-fitting is done using the R package TMB, which is extremely fast, even with thousands of parameters. We will include a non-technical overview of the methods and software, and illustrative examples

#### **Primary Insights**

- Developed the base R Package to address challenges with sparse demographic datasets
- Demonstrated Bayesian modeling's capacity for dynamic data smoothing and interpolation
- Case study on Iceland's internal migration rates showcased improved predictive accuracy

## **2. Measuring Urbanization Using Geospatial Datasets**

**Presenter(s):** Nawaj Sarif

**Affiliation:** International Institute for Population Sciences (IIPS), Mumbai, India

#### **Abstract:**

Urbanization is a key indicator of development worldwide and this continuous dynamic process of urbanization needs timely monitoring and close examination. However, the timely unavailability of data remained a significant concern, especially in developing countries. In India, the last census figure of the urban population was provided 13 years ago, and the next census is yet to happen, which presents a significant challenge for researchers and policymakers. Thus, this study proposes a novel approach to measure the urbanization level in India during 2000-2020 using the Global Human Settlement Layers and Gridded Population Data and verify with census data. The result shows that the level of urbanization measured using GHSL and Gridded Population data is very close to the census estimates, and the level of urbanization in India is expected to be 32.8 percent in 2020. Further, the result identified the cluster of different types of urban settlements across different parts of the country, highlighting the settlement transformation and urban expansion. The study found that the GHSL and gridded population data are highly useful for advanced measurement of urban indicators at any spatial and temporal scale. They could be immensely helpful for spatial overviews and when official statistics are not available.

#### **Primary Insights**

- Utilized Global Human Settlement Layer (GHSL) and Gridded Population Data
- Revealed significant discrepancies in urbanization measurements across South Asian countries
- Highlighted suburbanization trends and limitations of traditional census data

## **3. High migration events from Asia into Europe: a novel quantitative approach to future migration scenarios**

**Presenter(s):** Michaela Potančoková, Guillaume Marois, Jakub Bijak

**Affiliation:** International Institute for Applied Systems Analysis (IIASA). Laxenburg, Austria, ADRI, Shanghai University, Shanghai, China. University of Southampton, Southampton, United Kingdom

#### **Abstract:**

Forecasting future migration is challenging due to great volatility of flows, unreliable data and complexity of migration processes. Some of this uncertainty can be reduced by improved knowledge about past migration trends, underlying drivers and by extrapolating this knowledge into the future. This is commonly attempted in most narrative-based, what-if scenarios of future migration. Because migration is very

sensitive to changes in politics, violence, conflict as well as natural disasters, its future developments are largely unforeseeable. Such crises and macro-level events cannot be predicted, especially in long-term horizons. Therefore, we propose a novel framework for dealing with the intrinsic randomness of migration. In the QuantMig project, we have pioneered scenarios based on modelling of extreme migration events, anchored in the statistical theory of extreme values. We showcase, using the example of high migration events of once-in-a-decade and twice-in-a-century frequency of occurrence from three Asian regions into Europe, how such scenarios can be approached. Our novel framework is designed to help assess demographic and labour force impacts in destination countries. Our results illustrate differentiated impacts of high migration events from different Asian regions across different European destinations, considering the existing interconnectedness between origins and destinations and the role of migrant networks.

#### **Primary Insights**

- Applied extreme value theory and microsimulation to model rare migration events
- Analyzed short-term migration surges and their demographic implications
- Emphasized long-term strategies for migrant integration and demographic stability

#### **4. Stylize Facts of Cross-Border Remittances in India**

**Presenter(s):** Dr. Bhupesh Chintamani

**Affiliation:** Symbiosis International University, Pune, India. Punjab Agricultural University Ludhiana, Punjab, India.

#### **Abstract:**

The International migrations and worker remittances are not a new phenomenon in India. India is recognized globally for its large amount of diaspora (18 million) who are scattered across the globe. The available literature suggests that India has a strong linkage in due course through the channel of education and employment opportunities available at foreign destinations. It also established the fact that out-migration has benefited both the host and origin countries. At cross-border remittance, it is not a surprising fact that we have witnessed a substantial number of Indian origin professionals occupying the topmost position in many multinationals. The paper contemporary investigates the relationship between remittances and the macro-economic variable of India, hence, it has been divided into six sections as follows. Section I interrogated the standing position of India in the global scenario of remittances and episodes of remittances within the country. Section II describes the overview of remittance in association with the country's macro-level economic indicators. Section III and IV transmit regional and state-wise positioning of the remittance into the country. Finally, section V and VI evaluated the modalities and logistics of the operational cost of remittances.

#### **Primary Insights:**

- Tracked historical remittance trends from less than 1% to 4% of GDP post-1990
- Examined macro and micro impacts of remittances on economic and social development
- Identified challenges in remittance efficiency and transaction costs

#### **III Analysis of Floor Questions Cross-Cutting Themes**

##### **Methodological Innovation**

- Critical exploration of advanced statistical and geospatial techniques
- Emphasis on developing more flexible and comprehensive demographic analysis tools

### Migration and Urbanization Dynamics

- Importance of understanding complex migration patterns and urban transformation
- Need for integrated approaches considering economic, social, and environmental factors

### Data and Technological Challenges

- Discussions on limitations of traditional data collection methods
- Potential of digital technologies and advanced statistical techniques in demographic research

## IV. Audience Engagement and Session Dynamics

### High-Engagement Presentations

- Bayesian Demography Generated significant interest in methodological innovations
- Cross-Border Remittances Sparked discussions on economic implications

### Limited-Engagement Presentation

- Urbanization Measurement Received more technical scrutiny regarding methodological precision

## V. Session Conclusion

The session underscored the critical need for

- Advanced quantitative methods in demographic research
- Interdisciplinary approaches to understanding population dynamics
- Flexible analytical frameworks that can address complex global demographic challenges

## VI. Key Strategic Implications

1. **Methodological Advancement:** Development of sophisticated, adaptable research methods that can handle complex, sparse, and dynamic demographic datasets.
2. **Integrated Approach:** Leveraging technological innovations and interdisciplinary perspectives to create a more comprehensive understanding of population movements, urbanization, and economic transformations.

## POSTER PRESENTATION- DAY 1

### REFLECTIONS ON THE INTERDISCIPLINARY INSIGHTS FROM POSTER PRESENTATIONS

*“The poster presentations offered a rich platform for interdisciplinary dialogue, covering a wide range of topics including the impact of climate change on migration patterns and the role of technology in healthcare access. Key strengths included clarity and depth of content, engaging visuals, and active audience interaction, with insightful questions leading to productive discussions between presenters and attendees. Presenters demonstrated strong knowledge and effectively addressed queries, highlighting policy implications and practical recommendations. Common limitations included a need for larger fonts, improved annotations on visuals, and in some cases, a stronger focus on actionable solutions. Overall, the session fostered high interest among participants, with a large crowd consistently gathered around certain posters and lively discussions continuing beyond the designated presentation time, showcasing the relevance of research in addressing pressing global and local challenges”*

The inaugural day of poster presentations showcased a diverse spectrum of research addressing critical global challenges. Key themes emerged across various disciplines, including:

**Food, Water Security, and Urban Development** Investigations into sustainable urban agriculture, ensuring safe drinking water access in urban settings, and navigating the complexities of food security within peri-urban areas.

- Shashikant Kumar (Land Management for food and water security Towards peri-urban agricultural development)
- Megha Paul, Aparajita Chattopadhyay (Role of the AMRUT scheme in drinking water accessibility for urban development across states in India)
- Ram Prasad Dhakal (Factors associated with undernutrition using CIAF among children An analysis of Nepal Demographic and Health Survey data, 2016 and 2022)

**Health and Well-being of Vulnerable Populations** A significant focus was placed on understanding the health and well-being of marginalized groups, including children, the elderly, and individuals facing social and economic disparities.

- Meena Sehgal, Santosh Jatrana, Louise Johnson, Sujit Ghosh (Assessing child health in India Development and validation of a comprehensive Child Health Index)
- Madhurima Sharma, Indrajit Goswami (Wealth disparities and cognitive impairment among the elderly in India Analysing the contributing factors)
- Shrwan Khanal (Exploring healthcare utilization challenges among Nepalese migrants in Finland A qualitative study on barriers, digital healthcare, and transnational health practices)
- Kamalesh Kumar Patel (Association of screen time with the risk of depression in adolescents A systematic review and meta-analysis)
- Hridaya Devkota, Pratik Adhikary, Jaslina Bohora, Kalyan Lama, Sasmita Poudel (Examining anxiety and depression symptoms among pregnant and childbearing women with disabilities Insights from Nepal's Demographic and Health Survey data)
- Priyanka Kumari, Rahul Kumar (Exploring the impact of intimate partner violence on antenatal care utilization Insights from India and Nepal)
- Min Raj Adhikari (Well-being of elderly people living in old care homes of Kathmandu Valley)
- Kamala Devi Lamichhane, Padma Prasad Khatiwada (Dimension of housing adequacy in Nepal)

**Social Issues and Disparities** Presentations explore the multifaceted dimensions of social inequality, including wealth disparities, the impact of widowhood on social capital, and the challenges of inadequate housing.

- Abdullah Al Mahmud, Md Noorunnabi Talukder (Assessing needs for life skill and financial literacy training for young Rohingyas in Bangladesh)
- Vikesh Kumar, Kunal Keshri (Depression and its association with migration status and food insecurity among older adults in India)
- Rajabhusan Jagadish Nayak, Aniruddha Bhandari, Ashish Singh (Interlinkage of inequality and poverty in the United States in the last decade (2011-2021))
- Riti Deshmukh, Dr. Sabina Bano (How much land or house owned by schedule caste men A cross-sectional study in India)
- Akanksha Choudhary, Mohammad Hifz Ur Rahman, Ashish Singh (Does widowhood affect social capital in old age The case of India)
- Menghan Zhao, Yuanyuan Qi, Xianling Zhang (Financial risk aversion, investment, and outcomes among Chinese middle-aged and older adults The moderating role of online investment)

**Migration and Displacement** The challenges faced by migrant and displaced populations were examined, including food insecurity among older migrants and the critical need for life skills and financial literacy among young refugees.

- Shrwan Khanal (Exploring healthcare utilization challenges among Nepalese migrants in Finland)
- Kamalesh Kumar Patel (Association of screen time with the risk of depression in adolescents A systematic review and meta-analysis)
- Fatemeh Torabi, Kazem Saravani, Fatemeh Sadat Khodaparast, Hossein Kheradmand-Saadi (The prevalence and intensity of time poverty in urban areas of Iran)

- Priyanka Kumari, Rahul Kumar (Exploring the impact of intimate partner violence on antenatal care utilization)

**Environmental Health and Climate Change** Research highlighted the significant impact of climate change on human health, particularly among older populations. Furthermore, the crucial role of ecosystem services and environmental factors in influencing child health and nutrition were underscored.

- Megha Paul, Aparajita Chattopadhyay (Role of the AMRUT scheme in drinking water accessibility for urban development across states in India)
- Sruthi Anilkumar Hemalatha, Nawaj Sarif (Estimating the exposure of older populations to climate change-related disasters in India)
- Ram Prasad Dhakal (Factors associated with undernutrition using CIAF among children An analysis of Nepal Demographic and Health Survey data, 2016 and 2022)
- Cuiling Zhang, Can Jia, Danyin Wang (Trends in fertility among Chinese provinces Both from period and cohort perspective)
- Kamalesh Kumar Patel (Association of screen time with the risk of depression in adolescents)

**Disability and Gender** Studies explored the intersectionality of disability with other social determinants of health, emphasizing the importance of addressing gender disparities and the unique needs of aging populations with disabilities.

- Evi Nurvidya Arifin, Aris Ananta (Examining disability prevalence, gender disparities, and age patterns Insights from Indonesian data)
- Melanie Channon, Mahesh Puri, Minakshi Dahal (The mental health burden of menstrual restrictions in Nepal Evidence from cross-sectional survey data)
- Menghan Zhao, Yuanyuan Qi, Xianling Zhang (Financial risk aversion, investment, and outcomes among Chinese middle-aged and older adults)

**Malnutrition and Health Interventions** A focus on malnutrition in children included investigations into effective methods for assessing malnutrition rates and the development of interventions to improve the nutritional status of vulnerable populations.

- Diksha Rani, Hemkothang Lhungdim (Estimating malnutrition in Nepal using the composite index of anthropometric failure Evidence from the last 4 rounds of NHDS 2006, 2011, 2016, 2022)
- F Faharuddin (Fertility decline in Indonesia Trend, causes, and implications)
- Ram Prasad Dhakal (Factors associated with undernutrition using CIAF among children)

**Technology and Data Use** The transformative potential of AI and big data in revolutionizing vital registration systems and improving population health data management was highlighted.

- Mahima Kumari (Using AI and big data to revolutionize vital registration, surveys, and population censuses)
- Minakshi Dahal, Mahesh Puri, Fran Amery, Melanie Channon (Physical and psychosocial aspects of menstruation An analysis of public policies in Nepal)

## SESSION 2.1 CHANGING FERTILITY PATTERNS AND POLICIES

**Session Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Session Chair(s):** Fatemeh Torabi

### I. Session Overview

The session explored evolving fertility patterns in South Asia and beyond, analyzing socio-economic and cultural determinants of demographic trends, with a focus on sex imbalances, regional variations, and policy implications.

## II. Presentations Summaries

### 1. Sex imbalances at birth in Nepal since 2000 determinants, intensity, and future trends

**Presenter(s):** Christophe Z Guilmoto

**Affiliation:** CSH, New Delhi, India; CEPED/IRD, Paris, France

#### Abstract

This study provides a disaggregated analysis of the deterioration of the sex ratio at birth in Nepal using the latest survey and census data. The first section describes the various sources available to document sex imbalances at birth and the methods used here to capture son preference and the sex ratio directly or indirectly at birth. The following section summarizes the timing of the emergence of sex imbalances at birth since 2000 and their gradual dissemination across regions and social groups. Using 2021 data, I will examine the main correlates of sex imbalances at birth in Nepal. The objective consists notably of sorting out the influence of three factors associated with distorted SRB levels: Nepal's complex anthropological composition, some critical dimensions of gender inequality, and social and economic transformations. We conclude with a discussion of the stalling of the SRB in Nepal and its potential downturn in the years to come.

#### Primary Insights

- Rising skewed sex ratios at birth due to strong son preference
- Significant regional disparities between urban and rural areas
- Socioeconomic development and cultural beliefs as key influencing factors
- Predictive models suggesting ongoing challenges in gender balance

### 2. Discrepant Fertility in the Philippines Evidence from the 2022 National Demographic and Health Survey

**Presenter(s):** George Ringo Manapat Primary

**Affiliation:** School of Statistics, University of the Philippines Diliman, Quezon City, Philippines

#### Abstract

This study provides a disaggregated analysis of the deterioration of the sex ratio at birth in Nepal using the latest survey and census data. The first section describes the various sources available to document sex imbalances at birth and the methods used here to capture son preference and the sex ratio directly or indirectly at birth. The following section summarizes the timing of the emergence of sex imbalances at birth since 2000 and their gradual dissemination across regions and social groups. Using 2021 data, I will examine the main correlates of sex imbalances at birth in Nepal. The objective consists notably of sorting out the influence of three factors associated with distorted SRB levels: Nepal's complex anthropological composition, some critical dimensions of gender inequality, and social and economic transformations. We conclude with a discussion of the stalling of the SRB in Nepal and its potential downturn in the years to come.

#### Primary Insights

- Widespread discrepancies between desired and actual fertility rates
- Regional variations in fertility patterns
- Strong correlation between education, wealth, and fertility control

- Significant impact of contraceptive access on family planning

### 3. Who Wants a Second Child? The Effect of the Relaxation of One-Child Policy in China

**Presenter(s):** Anqi Li, Shiko Maruyama, Yangyang Zhang

**Affiliation:** Jinan University, Guangzhou, China

#### Abstract

This study examines the effect of easing China's One-Child Policy on fertility rates, leveraging staggered policy relaxations across provinces and demographic groups from the 1980s to 2016. Before the nationwide shift to the 1.5-child policy in 2014 and the two-child policy in 2016, eligibility for a second child was based on various criteria set by local governments, such as ethnicity, first child's gender, and household registration. Using this as a quasi-natural experiment, we form a generalized difference-in-differences strategy for more precise causal effects than before. Data from the China Family Panel Studies (CFPS) reveal that the policy relaxation led to a temporary increase in second-child births, dissipating after four years, indicating no long-term fertility boost despite an initial surge, suggesting that the relaxation only enabled those previously constrained to seize the opportunity. The effect was more pronounced among women of higher socioeconomic status, those with greater intrafamily bargaining power, younger women with less elderly care responsibilities, and residents in areas with lenient historical birth control policies and a culture of gender equality. These results highlight the intricate relationship between policy, socioeconomic status, and cultural norms in fertility decisions, calling for designing fertility policies that address the needs of unaffected couples.

#### Primary Insights

- Short-term impacts of One-Child Policy relaxation in 2014 and 2016
- Regional heterogeneity in policy response
- Uncertainty about long-term fertility rate changes
- Complex interplay between policy modifications and reproductive behaviors

### 4. Evolution of Family Structure in South Asia A Comparative Study Using DHS Data

**Presenter(s):** Ali Abbas Rizvi and Abhishek Singh

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

The concept of households and families depends on cultural, social, and economic factors that vary in time and between countries. In South Asia, marked by profound sociocultural diversity, this study explores evolving family structures across India, Pakistan, Bangladesh, and Nepal using three decades of Demographic and Health Survey (DHS) data. Family dynamics are pivotal in shaping human capital amid sociocultural shifts. We find consistent reductions in household size, notably in Nepal (4.15 in 2010s) and India (4.47 in 2010s). Large households declined across India, Bangladesh, and Nepal (25.60% in the 2010s). Conversely, Pakistan exhibits a milder decline. The number of single-person households rose in India (4.54% in the 2010s) and Nepal, mirroring urban lifestyles. Family structures shifted towards nuclear families, notably in India (64% in the 2010s), while extended families declined, especially in Pakistan (34.96%). Convergence analysis showed shared adaptations but at varying paces and extents. Nepal embraces smaller households more rapidly, unlike Pakistan's gradual transition. These changes reflect

standard socioeconomic shifts and urbanization, offering insights into the dynamic interplay between tradition and modernity.

#### Primary Insights

- Accelerating shift towards nuclear family structures
- Significant impact of urbanization and migration
- Country-specific variations in family transformation
- Emerging challenges in traditional family support systems

#### III. Analysis of Floor Questions Cross-Cutting Themes Thematic Discussions

- **Fertility Policy Dynamics** Comprehensive exploration of policy interventions and their nuanced impacts
- **Gender and Reproductive Rights** In-depth discourse on addressing son preference and women's reproductive autonomy
- **Socio-Economic Determinants** Extensive analysis of factors influencing fertility behaviors across different contexts

#### IV. Audience Engagement and Session Dynamics Engagement Patterns

- **High-Interaction Presentations**  
Nepal's sex ratio study generated significant discussion about cultural norms o Philippines fertility discrepancies sparked debates about women's empowerment
- **Limited Engagement Areas**  
China's One-Child Policy relaxation received more technical than emotional response

#### V. Session Conclusion

The session provided a comprehensive examination of fertility dynamics, revealing complex interactions between social, economic, and policy factors that shape reproductive behaviors across different geographical contexts. The presentations highlighted the critical need for nuanced, context-specific approaches to understanding and managing demographic changes.

#### VI. Key Strategic Implications

1. **Adaptive Policy Frameworks** Develop flexible, context-sensitive fertility policies that address regional variations, cultural nuances, and emerging demographic trends.
2. **Integrated Approach to Demographic Challenges** Implement holistic strategies that combine education, healthcare, economic empowerment, and cultural awareness to address complex fertility patterns.

## SESSION 2.2 HEALTH, SOCIAL NORMS, AND LIFE COURSE IN NEPAL

**Session Theme:** Nepal Special Sessions (Topics relevant to Nepal)

**Session Chair(s):** Keshav Prasad Adhikari

#### I. Session Overview

The session critically examined the intricate relationships between health, social norms, and life course experiences in Nepal, focusing on four key areas women's work-family trajectories, tuberculosis-related stigma, menstrual health challenges, and the impact of rural out-migration on land use and environmental dynamics.



## II. Presentations Summaries

### 1. Women's Work-Family Trajectories A Life Course Investigation of Work, Education, Marriage, and Childbearing in Nepal

**Presenter(s):** Sarah Brauner-Otto

**Affiliation** Department of Sociology, McGill University, Montreal, Canada

#### Abstract

Women's labor force participation is a central concern for governments, particularly in South Asia where recently rates have been stagnant or decreasing in many regions. Some research has pointed to women's increasing education and the shift in the labor market away from agriculture as key to understanding women's labor force participation. At the same time, low-income countries in general are witnessing continued decreases in fertility and changing marriage patterns. This paper explores the interplay between women's education, participation in paid labor, marriage, and childbearing in rural Nepal. Using unique life history data covering 85 years from the Chitwan Valley Family Study we will examine work-family trajectories, paying particular attention to variation by caste, cohort, and the type of work women are engaged in. Findings will provide new information about how these patterns have changed over time and shed light on any heterogeneity within these course life trajectories.

#### Primary Insights

- Education and workforce participation have increased among women
- Persistent traditional norms continue to shape life course patterns
- Early marriage and childbearing remain prevalent despite societal changes
- Adolescence increasingly includes schooling, but life event sequences remain largely unchanged

### 2. Correlates of Tuberculosis-Related Stigma Among Tuberculosis Patients in Kathmandu Metropolitan City

**Presenter(s):** Sulabh Ghimire, Prajowl Shrestha, Sharad Kumar Sharma,

**Affiliation** CIST College, Kathmandu, Nepal; National Tuberculosis Control Center, Kathmandu, Nepal

#### Abstract

Various interventions were implemented to prevent the spread of tuberculosis in the last few decades. Yet tuberculosis remains a public health problem in Nepal with over 69,000 new annual infection, of which only about a half (55%) are notified and treated. Kathmandu alone contributes about 10 percent of burden of tuberculosis in Nepal. Limited access to diagnostic facilities, flow of migrant workers in congregate setting, urban slum and poor knowledge and stigma among vulnerable population may have contributed to the higher burden and hindered the efforts to find and treat tuberculosis. However, tuberculosis stigma is less valued in research under tuberculosis program in Nepal. This study seeks to fill the existing gap in knowledge by investigating the level and factors contributing to stigma among tuberculosis patient in Kathmandu. The study will be conducted among 400 tuberculosis patients from the Tuberculosis treatment centers. A structured questionnaire will be developed containing tuberculosis patients background characteristics and stigma on tuberculosis. Both bivariate and multivariate analysis will be conducted to examine the level and correlations of tuberculosis related stigma. The study is expected to contribute to the existing literature by recommending effective strategies to reduce tuberculosis related stigma and to reduce missing cases and improving tuberculosis treatment outcome.

### **Primary Insights**

- 54.2% of TB patients experienced low stigma
- Illiteracy increases stigma 16.5 times
- Low income amplifies stigma 2.8 times
- Diabetes association increases stigma 3.4 times
- Stigma leads to discrimination and delayed treatment seeking

### **3. Exploring the Impact of Social Norms on Adolescent Girls' Menstrual Health in Nepal**

**Presenter(s):** Josephine McMillister, Melanie Channon, Fran Amery, Masesh Puri, Sarmila Dhakal, Silviya Chaulagain

**Affiliation:** University of Bath, Bath, United Kingdom. Center for Research on Environment, Health & Population Activities, Kathmandu, Nepal

#### **Abstract**

This paper explores how social norms impact adolescent girls' menstrual health in Nepal and aims to identify how they can be addressed. Three questions guide the research:

- What influences norms and beliefs regarding menstruation?
- How do menstrual norms and beliefs affect adolescent girls' menstrual experiences?
- How can the Nepali government support menstrual health?

A qualitative social-constructivist approach has been adopted to conduct the research. It includes primary data collection and analysis conducted in collaboration with the Center for Research on Environment, Health & Population Activities and secondary analysis of data produced through the UKRI-funded Menstrual Justice in Low- and Middle-Income Countries (MeJARa) project.

So far, data has been collected in two districts of Nepal: Surkhet and Kaski. In-depth interviews have been conducted with healthcare workers; teachers and school nurses; and community leaders and faith healers. Focus groups have taken place with adolescent girls, adult women and men.

Initial analysis shows that menstrual restrictions are common in both districts and girls comply to protect their families from misfortune. These girls feel ashamed and stigmatized which negatively impacts their menstrual experiences. Research outputs hope to improve girls' menstrual experiences by advancing our understanding of the of the processes and structures involved in enabling good menstrual health.

#### **Primary Insights**

- Chhaupadi practices perpetuate menstrual stigma
- Generational differences influence menstrual health perceptions
- Persistent stigma negatively impacts adolescent girls' mental health
- Traditional practices continue to restrict menstruating individuals

### **4. The Role of Breastfeeding History in the Development During Infancy and Childhood in Nepal**

**Presenter(s):** Vaishnavi Gupta, Murali Dhar

**Affiliation:** International Institute for Population Sciences, Mumbai, India

## Abstract

Childhood malnutrition continues to remain the focus area in low-middle-income countries including Nepal and India. The present study was conducted with objective of examining the role of Colostrum-feeding, exclusive breastfeeding (EBF), and complimentary breastfeeding (CBF) with nutritional outcomes during infancy and childhood. Data were obtained from latest Nepal Demographic and Health Survey (2022). Bivariate-analysis and chi-square test were carried out followed by multiple logistic regression to assess independent predictors. The prevalence of stunting, wasting, underweight and anemia were 25%, 8%, 19% and 43% respectively. The proportion of children ever-BF, EIBF, EBF and CF were 98.7%, 58.2%, 61.7% and 95.5% respectively. The Odds of being stunted was 1.13 & 0.78 times for not EIBF and CBF resp. The Odds of being wasted was 0.25 & 1.6 times for EBF & CF respectively. The odds of being underweight was 0.76 times for not EIBF. The odds of being anemic was 3.8 times for not being CF. Study highlights the continuance of nutrition issues especially stunting and anaemia. EIBF and EBF were also just over half. Therefore, there is need to strengthen the health education programs for potential mothers to educate them about ideal breastfeeding and to address the nutritional status of children to overcome malnutrition burden.

## Primary Insights

- Early breastfeeding (54.8%) and proper complementary feeding linked to better nutritional outcomes
- Malnutrition remains widespread stunting (25.2%), wasting (8.1%), underweight (19.3%), and anemia (43%)
- Gaps in dietary diversity during complementary feeding contribute to stunting and anemia, particularly in high-risk regions like Karnali Province
- Significant challenges in addressing child nutrition persist despite awareness of best practices

## 5. Does Rural Outmigration Affect Land Use and Land Cover Change? A Case Study from Sunkoshi Gaunpalika, Sindhupalchowk District, Nepal

**Presenter(s):** Rajib Khanal

**Affiliation** Central Department of Population Studies, Tribhuvan University

## Abstract

This study investigates the impact of rural out-migration on land use and land-cover change in the mid hill associated with agricultural systems. Descriptive and exploratory research designs have been used and both quantitative and qualitative information have been utilized to examine the impact on LULC. Of the total, about 63.9% of the households have sent their family members outside for work. Current means cultivated area of land is 6.5 ropani and, before 20 years, it was 6.9 ropani. GIS analysis confirms that agricultural land was 34.4% in 2002 which was a remarkable contraction of 11.3%. At the same time bare land was increased from 15.7% in 2002 to 33.5% in 2019. On the other hand, forest coverage was slightly increased from 49.9% in 2002 to 55.2% in 2016.

There is a significant change in the upland (rainfed) agricultural land ( $p < 0.001$ ) and low land ( $p < 0.05$ ) in the last 20 years. The decreasing rate for upland (rain-fed) cultivated land is higher than that for the low land (irrigated). The claim is that there has been a decreasing agricultural land and increasing bare land and slightly increasing the forest land. These changes have several implications for land-use policy measures and planning.

### Primary Insights

- Reduced agricultural land due to labor shortages
- Increased barren land and forest cover
- Migrant households hire external labor to maintain agricultural production
- Human-wildlife conflicts disrupt traditional farming practices

### III. Analysis of Floor Questions Cross-Cutting Themes

#### Demographic Challenges

- Intersection of social norms with health outcomes
- Persistent urban-rural disparities in health and social experiences
- Impact of migration on community structures and land use

#### Policy and Social Dynamics

- Critical need for targeted interventions addressing social stigma
- Challenges in transforming deeply rooted cultural practices
- Importance of comprehensive approaches to social change

### IV. Audience Engagement and Session Dynamics

#### High-Engagement Presentations

- Menstrual Health Research Generated significant discussion on cultural barriers
- TB Stigma Study Sparked debate on healthcare access and social discrimination
- Rural Migration Research Highlighted complex interactions between social and environmental changes

### V. Session Conclusion

The session underscored the urgent need for multi-dimensional approaches to address complex social challenges in Nepal. Interventions must simultaneously tackle educational, health, and social barriers, recognizing the interconnected nature of these factors. Policies must be contextually sensitive, addressing the unique experiences of marginalized populations while promoting social transformation.

### VI. Key Strategic Implications

**Social Equity:** Developing nuanced, context-specific interventions that address the unique challenges faced by different population groups in Nepal.

**Holistic Development:** Creating comprehensive strategies that integrate health, education, and social mobility, with a focus on challenging entrenched social norms and promoting inclusive growth.

## SESSION 2.3 GENDER, MIGRATION, AND EMPOWERMENT

**Session Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Session Chair(s):** Grace Cruz

### I. Session Overview

The session explored the complex intersections of gender, migration, and empowerment, with a particular focus on the South Asian context. Presentations addressed how migration influences mental health, decision-making, and family dynamics, with an emphasis on gender, caste, and socio-economic factors.

The session aimed to identify challenges and propose solutions to mitigate the negative impacts of migration while promoting the empowerment of migrant families, especially women.

## II. Presentations Summaries

### 1. Beyond Migration Examining the Impact of Migration Experience, Gender, and Ethno-Caste Identity on Mental Health

**Presenter(s):** Aryaa Rajouria

**Affiliation** University of Washington—Seattle, USA

#### Abstract

What are the effects of migration on the mental health of migrants in Nepal? Taking an intersectional approach, this study examines the combined effects of migration experience, ethno-caste identity, and gender as a multidimensional social determinant of health. It leverages the Chitwan Valley Family Study, a comprehensive panel dataset and event history analysis to address these questions in the context of Nepal. Migration in Nepal has become a major source of economic activity- leading to large segments of the population leaving to work abroad, returning home, and often, leaving again. This paper examines the interplay between migration, ethno-caste, and gender to influence mental health, thereby carefully investigating the role social stigma, social status and migratory community histories have on mental health disorder diagnoses. The results indicate that international migration increases the likelihood of mental health disorders for females from lower ethno-caste categories compared to their upper-ethno-caste or male counterparts. The probability of experiencing a mental health disorder either decreases or remains the same for most male migrants, except for Terai Janajati males, whose probability increases with each additional month away internationally. These findings indicate that gender relationships can vary within specific ethno-caste groups, highlighting the importance of inter- and intra-ethno-caste social mechanisms.

#### Primary Insights

- Domestic migration reduces mental health risks, particularly among marginalized caste groups like Dalit and Terai Janajati women.
- International migration exacerbates mental health risks, particularly for lower caste women, with anxiety and depression being significant concerns.
- The intersection of gender, caste, and migration type plays a critical role in shaping mental health outcomes.

### 2. Spatially Divided – Emotionally Connected Supporting New Family Forms in Sri Lanka

**Theme:** Family Formation and Dissolution, Family and Kinship

**Presenter(s):** Kumudika Boyagoda (on behalf of Ms. Sumitra), Sri Lanka

**Affiliation:** University of Colombo, Colombo, Sri Lanka

#### Abstract

Spatially divided families for extended periods are no longer an exception in Sri Lanka, a country where labor migration is high. Labor migration cannot be stopped. Especially in a situation where the country is facing an economic crisis. Yet, the family is a fundamental social institution and should not be sacrificed at

any cost. What is the pro-action needed? What do the families say? Using quantitative (survey) and qualitative (interviews) primary data from 181 families, this study explores family members' views. 93% suggested that the contract periods should be shortened, with 68% indicating one-year contracts and 27% indicating 6-month contracts. 57% suggested subsidized air tickets for the migrant, 26% suggested the same for families. 53% suggested family visas, while a minority suggested accompanying visas for the spouse. 61% suggested shorter working hours so that the migrant has time to virtually connect with families. It is suggested that migration policy is revised to accommodate the spatially divided families and their needs so that to achieve the benefits of labor mobility without sacrificing the family.

#### **Primary Insights**

- Migration often leads to family separation, resulting in more female-headed households and elderly single-person households.
- Families rely heavily on technology for maintaining connections, with 79% emphasizing the importance of better internet access.
- Migration can cause family breakdowns, such as divorce and strained relationships.

### **3. Implications of Male Migration on the Decision-Making and Autonomy of Migrants' Wives A Study from North India**

**Presenter(s):** Reshmi R S, Gulshan Kumar, Sumit N Dwivedi, Bhagat R B

**Affiliation:** International Institute for Population Sciences, Mumbai, India. Kashi Sahu college, Ranchi, India

#### **Abstract**

This paper examines the effects of male migration on the decision-making and autonomy of migrants' wives in the Middle Ganga Plain, an area known for significant male out-migration. The study surveyed 2716 women, including 1106 migrants' wives and 1610 non-migrants' wives, to understand the impact of migration on families' economic and social well-being. Using factor analysis, the study measured decision-making and autonomy as dependent variables, with the husband's migration status as the primary independent variable, distinguishing between migrants' wives and non-migrants' wives. The research found that husbands' migration positively influenced the decision-making and autonomy of migrants' wives, irrespective of their background characteristics. The study also revealed that husbands' migration abroad and membership in Self-help Groups (SHGs) positively correlated with women's decision-making and autonomy. Conversely, the joint family system negatively affected women's decision-making and autonomy. Overall, husbands' migration is crucial in empowering migrants' wives in decision-making, and various factors influence their involvement in household decisions. Policymakers and stakeholders should implement targeted empowerment programs for migrants' wives in this region. Further, longitudinal and qualitative research is needed to gain a comprehensive understanding of the impact of male migration on wives' autonomy.

#### **Primary Insights**

- Wives of male migrants, especially in nuclear families, exhibit higher decision-making power compared to non-migrants' wives.
- Financial independence, such as managing finances and participating in landholding, enhances autonomy.
- The length of migration does not significantly affect decision-making power.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Mental Health and Migration:** Several questions emphasized the need for intersectional approaches to addressing mental health risks faced by migrant populations, particularly concerning caste and gender.
- **Family Dynamics and Autonomy:** A recurring theme was the empowerment of wives through increased autonomy and decision-making power due to male migration. However, concerns about family separation and its emotional toll were also raised.
- **Policy Solutions:** The audience expressed a strong interest in developing policies that address the complexities of migration and gender, including improving family cohesion and promoting financial independence for women.

### IV. Audience Engagement

The audience was highly engaged, with lively discussions on the intersectionality of migration, gender, and mental health. The topic of how migration empowers women by increasing their autonomy, especially financially, sparked a lot of interest. Additionally, concerns about the emotional impacts of family separation were discussed, with suggestions for improving communication through technology and subsidized travel.

### V. Session Conclusion

The session concluded with a call for more nuanced policies that account for the complex interplay between gender, caste, and migration. There was an emphasis on supporting migrant families by promoting financial independence, addressing mental health needs, and enhancing family cohesion through policy interventions.

### VI. Key Strategic Implications

1. **Intersectional Policy Approaches:** Policies must address the unique challenges faced by migrants, particularly through the lens of caste, gender, and migration type.
2. **Empowerment through Financial Independence:** Promoting financial independence for both female migrants and the wives of male migrants is crucial for enhancing autonomy.
3. **Family Cohesion:** Policies should focus on minimizing the negative effects of migration on family unity by improving communication and facilitating family reunions.
4. **Mental Health Support:** There is a critical need for mental health policies that address the specific needs of migrant families, especially for women from marginalized groups.

## SESSION 2.4 POPULATION PROJECTION AND DEMOGRAPHIC DYNAMICS

**Session Theme:** Population Dynamics, Demographic Transition, and Population Ageing

**Session Chair(s):** Padma Prasad Khatiwada

### I. Session Overview

This session delved into the intricacies of population projections and their implications for Asia's future, examining the influence of education on demographic trends, comparative demographic trajectories of India and China, advancements in sub-national population projections, and evolving family structures in West Bengal.

## II. Presentations Summaries

### 1. Updating Population and Human Capital Projections for Asia to 2100 Trends and Insights

**Presenter(s):** Anne Goujon, Samir KC

**Affiliation:** IIASA/Wittgenstein Centre for Demography and Global Human Capital

#### Abstract

We examine the changes in population projections for Asia up to 2100 between the 2013 and 2023 rounds of the Wittgenstein Centre projections, aiming to provide explanations for these shifts. The initial set of population projections, aligned with the Shared Socioeconomic Pathways (SSPs), was developed in 2013 and gained widespread use within the environmental community. In 2021, the SSP community requested an update: 2020 became the reference year, and the short-term assumptions were modified based on recent observed changes. Overall, the projected population of Asia in 2100 remains relatively stable between the 2013 and 2023 projection rounds, standing at 4.37 billion and 4.48 billion, respectively, according to the SSP2 scenario (i.e., medium variant). Similar stability is observed in terms of educational levels, with the mean years of schooling for the population aged 25+ projected to be 12.7 years in 2013 vs 13.3 years in 2023. However, variations become more pronounced at the country level. For example, projections show an increase in the population of Bangladesh, China, Indonesia, Pakistan, and the Philippines compared to previous estimates, while India experiences a decrease. These differences are attributed in part to the long-term consequences of short-term trends in fertility, mortality, and migration.

#### Primary Insights

- Updated population and human capital projections for Asia were presented, focusing on Shared Socioeconomic Pathways (SSPs).
- Global population will peak around 2080-85 and then decline slightly. Growth is concentrated in Sub-Saharan Africa, while East and Southeast Asia will experience population decline.
- Education significantly influences population growth. Higher education levels (SSP1, SSP5) lead to reduced population growth across regions.
- South Asia's population growth is highly sensitive to educational investments.
  - High education scenarios could lead to a population below 2 billion by 2100.
  - Limited education could result in a population exceeding 3 billion.

### 2. Comparative Demographic Trajectories of India and China A 21st Century Perspective

**Presenter(s):** Guillaume Marois, Wolfgang Lutz, Stuart Basten-Gietel, Jesus Crespo Cuaresma, Jakob Zellmann, Claudia Reiter

**Affiliation:** Asian Demographic Research Institute, School of Sociology and Political Sciences, Shanghai University, Shanghai, China. International Institute for Applied Systems Analysis, Wittgenstein Centre for Demography and Global Human Capital (IIASA, OeAW, University of Vienna), Laxenburg, Austria. The Hong Kong University of Science and Technology, Hong Kong, China. Department of Economics, Vienna University of Economics and Business (WU), Vienna, Austria. Education and Employment research group, Institute for Advanced Studies (IHS), Vienna, Austria



## Abstract

India surpassed China last year and will remain the most populous country of the world for the rest of this century and beyond. But for many of the social and economic consequences of demographic change, changing structures in terms of labor force participation and education matter more than changing size. In this communication, we compare the population forecast of India and China up to 2100 under 4 analytical dimensions, the total population size, the working-age population (20-64), the labor force size, and the productivity-weighted labor force size (PWLF). The PWLF summarizes a population's productive capacity and human capital heterogeneity in a single metric, enabling comparisons across countries and over time. Results show that China is likely to remain the dominant economic power for the coming decades due to more favorable demographic structures. Specifically, China's higher human capital, higher labor force participation rates, and a still sizable working-age population mean China will maintain a much larger productivity-weighted labor force over the next 50 years. Boosting female education and labor force participation will be critical in determining when India can catch up to China economically.

## Primary Insights

- India's population has surpassed China's, due to a delayed decline in fertility rates, creating a potential advantage in future labor force expansion.
- The productivity-weighted labor force (PWLF) is a crucial metric that considers labor force participation, education, and skill quality. India could potentially surpass China in PWLF size by 2040-2050, contingent on significant improvements in education and gender equality.
- India faces challenges, including low female labor force participation and educational disparities, particularly among women.
- China benefits from sustained investments in universal education, maintaining a strong PWLF despite its aging population.

## 3. Review of Sub-national Population Projections in South Asia The Way Forward

**Presenter(s):** Dr. Samir KC

**Affiliation:** International Institute for Applied Systems Analysis (IIASA). PSR Hub, Lalitpur, Nepal

## Abstract

Population projection is crucial for understanding future demographic trends. Dimensions such as age and sex are fundamental, and sub-national units, including rural-urban projections, are typically undertaken by national statistical offices as routine thematic reports (official projections) after each census. In this paper, we will examine how population projections were conducted in India, Nepal, Pakistan, and Bangladesh. We will explore the development of scenarios and compare them with empirical results, while also reviewing the methodologies used in each projection. The entire country relies on these official projections for future planning until the next census, underscoring the importance of high-quality census data and projections for informing policies, planning, implementation, monitoring, and evaluation. In Nepal, the Department of Health Services requires annual ward-level projections (6743) for over 40 health policy-related target populations. These projections often rely on the official projections, usually at a higher administrative level, and are crucial for logistics management, monitoring, and evaluating health services.

We will present our methods and results for projecting such populations and plan to compare past projections with empirically collected data on service delivery to enhance future projections. Incorporating

feedback into our model is expected to improve future population projections, thereby optimizing health service delivery.

#### Primary Insights

- Sub-national population projections in South Asia require a multi-dimensional approach. Traditional methods relying solely on age and sex are insufficient.
- The MHiDeM model offers a more accurate approach by incorporating factors like education, labor force participation, marital status, fertility, and health.
- In India, incorporating education and rural/urban dimensions into projections highlighted the significant impact of geographic heterogeneity. States with lower development and education levels showed higher population growth.

#### 4. Family Structure of West Bengal, India Trends and Patterns in Last Three Decades

**Theme:** Family Formation and Dissolution, Family and Kinship

**Presenter(s):** Sourav Mondal, Manas Ranjan Pradhan

**Affiliation:** PhD Research Scholar, International Institute for Population Sciences (IIPS), Mumbai, India

#### Abstract

Family is a crucial social institution and is universally presented. The family structure has undergone noteworthy changes due to the rise in education levels, the emergence of individualism, increased population mobility, urbanization, the initiation of demographic transition, and a growing occupational diversity. The available evidence regarding trends and patterns of family structure in West Bengal, India, either relies on small-scale studies or up to the year 2000, failing to reflect recent developments. The current study examines the evolution of family structure in West Bengal, with representative data from National Family Health Surveys (NFHS) spanning the past three decades (1992/93-2019/21), keeping the family structure as the dependent variable and several socio-economic characteristics as independent variables. Univariate and bivariate analyses were performed using Stata software. The study found structural changes in family composition in West Bengal in the last three decades. The proportion of single-person families, broken nuclear families, lineally extended families, lineally broken extended families, and nuclear pair families had increased. In contrast, the proportion of nuclear families, supplemented nuclear families, and collaterally extended families had declined.

#### Primary Insights

- Family structures in West Bengal are evolving. A shift is observed from joint to nuclear families, with a notable increase in single-person households.
- Nuclear families remain dominant, but the rise of single-person households, largely comprising older women, is significant.
- Factors driving these changes include economic migration, the rise of individualism, and the decline of traditional childcare roles within joint families.
- Policy interventions are crucial to address the specific needs of aging populations and single-person households, particularly women, in the context of these evolving family structures.

#### II. Analysis of Floor Questions Cross-Cutting Themes

- **Education and Demographics** Education plays a crucial role in shaping population growth and labor force dynamics. Investing in education, especially in regions like South Asia, is key to harnessing demographic dividends and achieving sustainable development.

- **Geographic Heterogeneity** Recognizing and addressing geographic variations within countries is crucial for effective population projections and policies. Sub-national differences require tailored approaches.
- **Evolving Family Structures** The rise of nuclear families and single-person households necessitates a policy shift to address the needs of aging populations, particularly those living alone, and provide adequate social security and support systems.

#### IV. Audience Engagement and Session Dynamics

##### Engagement Patterns

- The session attracted substantial audience participation, with lively discussions surrounding the implications of population projections for policymaking, particularly in the realms of education, healthcare, and social welfare.

##### Noteworthy Discussions

- The audience actively engaged in conversations about harnessing the demographic dividend in South Asia, the role of education in empowering women, and the challenges of providing healthcare and social security to aging populations in the context of changing family structures.

#### V. Session Conclusion

The session provided a comprehensive overview of the key trends and challenges shaping population dynamics in Asia, highlighting the importance of incorporating multidimensional factors into projections and policy decisions. The discussions underscored the need for collaborative efforts among researchers, policymakers, and civil society to create effective strategies that address the evolving demographic landscape and promote sustainable development.

#### VI. Key Strategic Implications

1. **Invest in Education:** Prioritize investments in education across all levels, particularly in regions with high population growth, to enhance human capital, reduce fertility rates, and foster economic development.
2. **Address Geographic Disparities:** Develop region-specific policies that account for variations in socio-economic conditions and demographic trends to ensure equitable development and address the unique needs of different communities.
3. **Adapt Social Policies:** Adapt social welfare policies to meet the needs of changing family structures, particularly focusing on the well-being of aging populations and those living alone, ensuring access to healthcare, social security, and community support.

## SESSION 2.5 HEALTH, GENDER, AND SOCIAL DISPARITIES IN NEPAL

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Session Chair(s):** Meeta Sainju Pradhan

#### I. Session Overview

The session critically examined health, gender, and social disparities in Nepal, focusing on three key areas: youth contraception, senior citizen welfare, and women's reproductive agency. Presentations highlighted provincial variations, socioeconomic barriers, and the intersectionality of demographic challenges.

## II. Presentations Summaries

### 1. Provincial Discrepancies in Unmet Need for Contraception among Youth in Nepal

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter(s):** Kamala Devi Lamichhane

**Affiliation:** Central Department of Population Studies, Tribhuvan University

#### Abstract

**Background:** There continues to be a high unmet need for contraceptives among youth in Nepal and varies among provinces. Therefore, this study investigates the magnitude and discrepancies of unmet needs for contraception and its determining factors in seven provinces.

**Methods:** This study has used the 2022 NDHS data and the analysis is based on 2,335 currently married female youth aged 15-24 years. Unmet need is dependent and demographics, socioeconomic, and fertility preference factors are taken as independent variables. Logistic regression is used to assess the net effect of independent variables on dependent variables.

**Results and Conclusions:** The unmet need for contraception is highest in Gandaki and lowest in Bagmati province. Unmet need is higher among youth whose husbands are staying elsewhere. Unmet need decreases with increasing household wealth quintile except for Madhesh province. The stagnancy in the level of contraceptive use among young people could be the result of the increasing proportion of husbands' absence, due to which they stop using it.

**Recommendation:** Family planning program should focus on meeting the contraceptive needs of youth of all provinces with a special insertion on those whose husbands are currently abroad so that they would be able to avoid unintended pregnancy.

#### Primary Insights

- Significant variations in unmet contraception needs across Nepalese provinces
- Madhesh and Gandaki provinces showed the highest unmet contraception needs
- Socioeconomic factors strongly influence youth contraceptive access

### 2. Status of Senior Citizens from the Perspectives of Ageism in Nepal

**Presenter(s):** Manusha Paudel

**Affiliation:** Tribhuvan University, Patan Multiple Campus

#### Abstract

Old age marks the final stage of life cycle, crossed by every individual, yet perceptions and treatment vary widely. Due to the improvement of demographic indicators, Nepal moved into an aging society. Study examines aging trends and societal ageism, based on the 2011 and 2021 census data from Nepal and relevant literature review.

Study reveals a rapid increase in Nepal's ageing population (60 years +), comprising over a tenth population in 2021, with slightly higher representation among females (10.3%) than males (10.1%). While urban areas encompass two-thirds of the total population, rural areas cover a greater proportion of seniors. Gandaki

province exhibits the highest percentage (13.3%) of seniors, contrasting with Karnali Province's lowest (8%). Disability among seniors increased to 2.2% in 2021 from 1.2% in 2011, with males experiencing higher. Seniors encounter prejudices, stereotypes, and discrimination across various domains. The prevalence of informal jobs (80.8%) poses heightened risks of ageism and social isolation, compounded by mandatory retirement, reflecting structural ageism.

In conclusion, Nepal's transition to an aging society underscores the urgency to address societal ageism through concerted efforts across diverse perceptions and global contexts. Inclusive policies and social support systems are vital to mitigate the challenges faced by Nepal's elderly population.

#### **Primary Insights**

- Elderly population comprises over 10% of Nepal's total population
- Significant ageism challenges, particularly in informal job sectors
- Gender and rural-urban disparities in senior citizen experiences

### **3. Determinants of Women's Agency in Family Planning Among Marginalized and Non-Marginalized Groups in Nepal**

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Presenter(s):** Rita Devi Karki

**Affiliation:** Tribhuvan University

#### **Abstract**

Women's agency in family planning is vital for sexual and reproductive health and rights. This study examined the prevalence and influence factors of women's agencies in family planning, using a disaggregated approach that considered ethnic categorization in marginalized and non-marginalized groups. Based on Nepal Demographic and Health Survey data 2022, the study analyses 4,769 aged 15-49 currently married women (3,357 marginalized and 1,412 non-marginalized groups), focusing on modern contraception users. Bivariate and multivariate logistic regression analyses identified factors influencing women's family planning agency. Disparities existed between marginalized (66%) and non-marginalized (79%) women, with lower rates among the former. Higher education was strongly linked to increase agency in family planning in both marginalized [AOR: 19.411 (95% CI: 2.606-144.5868)] and non-marginalized [AOR: 4.396 (95% CI: 2.027–9.530)] groups. The other determining variables such as age, caste, wealth index, and mobile/telephone ownership were significant for the marginalized group, while occupation and pressure from husband or family members were specific determinants for the non-marginalized group. To reduce these disparities, there need a targeted intervention focusing on education and other particular determining factors. Therefore, to delve into these issues, there is a need for qualitative research based on intersectional

#### **Primary Insights**

- Disparities in family planning agency between marginalized (66%) and non-marginalized (79%) groups
- Education, caste, wealth, and occupation as key determinants of women's reproductive decision-making

### **III. Analysis of Floor Questions Cross-Cutting Themes**

#### **Demographic Challenges**

- Need for province-specific policy interventions

- Importance of addressing intersectionality in health and social services

#### **Policy and Social Dynamics**

- Critical role of education in improving agency
- Challenges of marginalization across different population groups

#### **IV. Audience Engagement and Session Dynamics**

##### **High-Engagement Presentations**

- Women's Agency Research Generated significant discussion on reproductive rights
- Youth Contraception Study Sparked debate on provincial variations

##### **V. Session Conclusion**

The session underscored the critical need for

- Targeted interventions addressing provincial and group-specific challenges
- Comprehensive approaches to reproductive health and social equity
- Policies that recognize intersectionality of gender, age, and socioeconomic status

##### **VI. Key Strategic Implications**

1. **Inclusive Policy Development:** Creating nuanced, context-specific interventions that address the unique needs of marginalized populations in Nepal.
2. **Social Equity Advancement:** Developing comprehensive strategies to improve reproductive health, reduce ageism, and enhance women's agencies across different social groups.

##### **Key Audience Observations**

Participants demonstrated a keen interest in

- ✓ Strong focus on evidence-based policy recommendations
- ✓ Emphasis on understanding complex social determinants of health

### **SESSION 3.1 DEATH REGISTRATION SYSTEMS AND SURVEYS**

**Session Theme:** Population Census/Survey, Vital Registration, and Big Data

**Session Chair(s):** Sula Sarkar

#### **I. Session Overview**

The session explored the challenges and innovations in death registration systems, focusing on improving data collection methods, addressing registration disparities, and integrating traditional and emerging data technologies.

#### **II. Presentations Summaries**

##### **1. Differentials, barriers, and enablers of death registration in Nepal Evidence from the Civil Registration and Vital Statistics (CRVS) Survey**

**Presenter(s):** Surender Pandey, Hafizur Rahman Chowdhury, Tim Adair

**Affiliation** University of Melbourne, Melbourne, Australia; CDC Foundation, Atlanta, USA

## Abstract

The Civil Registration and Vital Statistics (CRVS) system is only partially functioning in Nepal. However, Nepal has committed to strengthening the national CRVS system, and for this many initiatives have been taken. Conduction of the nationally representative CRVS survey in 2015/16 is one of them. The survey was administered among both service recipients (households) and service providers (Local Registrars) and it sought to elicit information about civil registration status and the major barriers to effective CRVS interventions in Nepal. We analysed CRVS survey data using logistic regression to understand the differentials in death registration likelihood in Nepal and reasons for registration and non-registration of deaths and identify the possible ways for enhancing death registration coverage and making registration more convenient, from both household and service provider perspectives. We find a wide variation in the likelihood of death registration and non-registration in Nepal by socio-economic and geographic characteristics.

### Primary Insights

- Lower registration rates for younger individuals and females
- 70% of non-registrations due to perceived lack of necessity
- Potential solutions include mobile registration camps and online platforms
- Significant impact of social norms on registration processes

## 2. Unveiling Methodological Nuances A Comparative Study on Design Effect and Intra-Class Correlation in NFHS and LASI

**Presenter(s):** Somnath Jana

**Affiliation:** International Institute for population Science, Mumbai, India

### Abstract

**Background:** DHS surveys utilize discrete sampling zones with a similar design to the full sample, resulting in regional design effects comparable to total sample design effects. It's difficult to say whether the estimate is more accurate. Still, the research seeks to explain why estimates differ in surveys by looking at the design for potential sampling and non-sampling errors.

**Objective:** This study seeks to explain if there is a substantial variation in estimate owing to two alternative stratification structures for survey design and to emphasize the loss in precision and the net gain in the intra-class correlation between the two studies.

**Methods:** Two methods for estimating standard errors were tested. **Bootstrap variance** for the ratio approach and **design-based asymptotic variances** for multilevel structure. Also, we estimate the **design effect** and gain in precision to compare two different multilevel studies using Complex multilevel models.

### Primary Insights

- Comparative analysis of NFHS and LASI survey methodologies
- Variations in precision and design effects across survey approaches
- Urban areas show higher health prevalence metrics
- Challenges in rural domain stratification

## 3. Completeness of Death Registration Differentials in India

**Presenter(s):** Chandan kumar, Suryakant Yadav

**Affiliation** International Institute for Population Sciences (IIPS), Mumbai, India

## Abstract

Reliable and timely mortality data from the civil registration and vital statistics (CRVS) system are crucial for generating policy evidence and monitoring national progress. This study investigates the national and subnational level disparity and socioeconomic disparity in death registration in India from 2016-20. We estimated death registration completeness by sex, place of residence, and age group from the RGI projected population, GBD population, and UN-WPP population based on the SRS death rate and unit level from NFHS 2019-21. We did SRS and NFHS death rates to examine death registration differentials in all age groups at the national level from each data source. Death registration at the national level is substantially increasing in all data sources. Based on the RGI projected population, death registration in India was 99.95 percent in 2020. There was a considerable difference in the death registration level by sex (male-100% and female-91%) and by place of residence (rural-82% and urban-100%) in 2020. Population death differences were higher when the NFHS death rate was used than the SRS death rate. We suggest periodic awareness programs on death registration procedures and facilitating easy access to death registration offices in lower-performing states and areas among marginalized population groups.

## Primary Insights

- Significant improvement in death registration from 66.5% to 99.5% (2009-2020)
- Persistent gender disparities in registration
- Over-reporting of male deaths
- Urban areas near complete registration, rural areas lagging

## III. Analysis of Floor Questions Cross-Cutting Themes Thematic Discussions

- **Registration Equity:** Addressing systemic barriers to comprehensive death registration
- **Technological Integration:** Exploring innovative solutions for improving registration processes
- **Data Quality:** Examining methodological challenges in demographic data collection

## IV. Audience Engagement and Session Dynamics Engagement Patterns

- **High-Interaction Presentations:**  
Nepal's registration barriers study generated significant discussion o India's registration progress sparked debates about data accuracy
- **Limited Engagement Areas:**  
Methodological nuances received more technical than general interest

## V. Session Conclusion

The session provided a comprehensive examination of death registration challenges, revealing complex systemic barriers, technological opportunities, and the critical importance of accurate vital statistics in population management.

## VI. Key Strategic Implications

1. **Comprehensive Registration Strategies:** Develop integrated approaches that address gender disparities, technological barriers, and social norms impeding death registration.
2. **Technological and Social Innovation:** Implement context-specific solutions combining mobile technologies, community engagement, and targeted awareness campaigns to improve registration completeness and accuracy.



## SESSION 3.2 Health and Social Impacts of Migration

**Session Chair(s):** Premchand Dommaraju

### I. Session Overview

The session explored the health and social equity challenges associated with migration, focusing on vulnerable groups such as migrant workers, elderly migrants, and children left behind. Presentations shed light on systemic barriers, cultural practices, and the socio-economic implications of migration.

### II. Presentations Summaries

#### 1. Temporary Childbirth Migration in India Decision-Making, Decision-Makers, and Influencing Factors

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Presenter(s):** Alison El Ayadi, Dhiraj Agarwal, Rutuja Patil, Rachel Murro, Shivani Khadikar, Kajal Tonde, Sanjay Juvekar, Nadia Diamond-Smith

**Affiliation:** University of California San Francisco, San Francisco, USA. KEM Hospital Research Centre, Pune, India.

#### Abstract

Returning to the natal home during pregnancy, childbirth, or postpartum, “temporary childbirth migration” (TCM), is common across South Asia and may impact perinatal care continuity and social support. Understanding TCM decision-making (e.g., reasons and decision-makers) is important for delineating processes and consequences. We characterized TCM decision-making among 1,242 postpartum Indian women and evaluated sociodemographic characteristics, TCM, reasons and decision-makers. Most migrated (80%); main reasons were better care at the natal home (93.4%) or of culture/tradition (47.7%). Non-migrants reported sufficient marital home support (55.5%) or healthcare concerns (14.5%). Migration and non-migration reasons differed by sociodemographic characteristics. TCM decision-makers were parents (46.2%), self (23.0%), husband (18.3%), and in-laws (11.8%); reasons differed by decision-maker. Understanding TCM push/pull factors and decision-makers can situate this practice within migration theory, delineate potential risk or protective factors of TCM, and identify how to best support those migrating (or not) through adapting clinical and social care models.

#### Primary Insights

- Women migrate to natal homes during pregnancy for emotional and social support, often disrupting consistent medical care.
- Family members significantly influence decisions, with parents prioritizing rest and husbands focusing on medical care.
- The lack of continuity between natal and marital healthcare poses risks to maternal and neonatal outcomes.

#### 2. Exploring the Determinant of Healthcare Utilization and Socio-Economic Gradient among Middle-aged and older Migrants A Revised Andersen's Model Approach

**Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Amar Bharti, Suraj Maiti

**Affiliation:** International Institute for Population Sciences, Mumbai- 400088, Mumbai, India.

### Abstract

Complex factors affect middle-aged and elderly migrants' healthcare use. Understanding migrants' healthcare utilization determinants and socioeconomic inequality is imperative. This is the first ever study that employs migrant information from the nationally representative Longitudinal Ageing Study of India (LASI) survey, 2017-18 to examine migrant healthcare socioeconomic inequality in Indian context. Using a stepwise logistic regression model, a modified version of Andersen's Health Behavior Model was utilized to identify healthcare use determinants. Socioeconomic inequality in inpatient and outpatient healthcare utilization was examined using concentration indices and curves. Females (0.75, 95% CI 0.57, 0.98) have lower odds of using outpatient care among middle-aged and older migrants. Schedule tribes are less likely than scheduled castes to seek outpatient care (0.72 95% CI 0.60, 0.84). These indicate that vulnerable migrants utilize healthcare less. Socio-economic factors like consumption quintiles, health insurance coverage, and working status, and need factors like self-reported health state and presence of morbidities, influence migrant healthcare utilization. Erreygers' Concentration indices indicate pro-rich (outpatient: 0.06, 95% CI 0.012, 0.013; inpatient: 0.04, 95% CI 0.025, 0.072) inequality in healthcare utilization, with variations across regions of India. For egalitarian healthcare and universal health coverage in India, disadvantaged elderly migrants must have access to affordable healthcare.

### Primary Insights

- Low income, social isolation, and poor health insurance coverage are significant barriers to healthcare access.
- Out-of-pocket expenses disproportionately burden elderly migrants, exacerbating health inequities.
- Gender, caste, and marital status play critical roles in healthcare utilization.

### 3. Parental Migration and Mental Health Status of Children Left-behind

**Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Min Raj Adhikari, Ramesh Adhikari

**Affiliation** Tribhuvan University, Kathmandu, Nepal

### Abstract

**Aim:** This study aims to investigate the factors associated with the mental health status of children left behind

**Methods:** The study employed a cross-sectional quantitative approach with 560 child respondents from migrant and non-migrant households, utilizing multistage sampling techniques. Data were collected using Goodman's Strengths and Difficulties Questionnaire (SDQ) and analyzed through univariate, bivariate, and multivariate analyses.

**Results:** About 8 percent of children had poor psychological well-being, predominantly from migrant households (11%) compared to non-migrant households (5%). Abnormal mental health was primarily associated with Dalit caste/ethnicity (17%), non-mother caregivers (24%), and household responsibilities

(14%). Logistic regression indicated migrant children were 2.3-2.7 times more likely to exhibit abnormal behavior. Additionally, Dalit children and those cared for by non-mothers were 3.4 and 8 times more likely to have abnormal behavior, respectively.

**Conclusion:** Abnormal mental health in children was significantly linked to parental migration ( $p < 0.01$ ). Mental health was influenced by various factors, with most affected children associated with caste/ethnicity, caregivers, and household support. Urgent implementation of psychosocial counseling services in schools is recommended, particularly targeting left-behind children of the Dalit caste/ethnic group, those cared for by individuals other than their mothers, and those with household responsibilities.

#### Primary Insights

- Left-behind children experience higher emotional and behavioral difficulties.
- Alternative caregiving arrangements and household support mitigate but do not eliminate risks.
- School-based psychosocial interventions are underutilized despite significant needs.

#### 4. Issues Faced by the Migrant Workers under the Kafala System

**Presenter(s):** Sunethra Parera , Wathsala Anuradhi

**Affiliation:** University of Colombo, Colombo, Sri Lanka

#### Abstract

The oil boom of Gulf Cooperation Countries (GCC) attracts a sizeable number of migrant workers from various countries. Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE), and the Arab states of Jordan and Lebanon have become populous destinations for migrant workers. The kafala system is the legal framework that establishes a contractual relationship between employers and employees for a specific duration in these countries. However, it can be noted that the kafala system often gives unpleasant experiences to migrant workers. As a result of that, the kafala system is named the modern form of slavery (Sinha, 2021). Therefore, the present study aims to examine the issues faced by migrant workers under the kafala system. The study was done by using comprehensive desk research gathering 40 literature sources including reports, journal articles, websites, policy briefs, and books. The literature was analyzed thematically and findings related to diverse issues faced by migrant workers were comprised of five themes such as discrimination, harassment, isolation, exploitation, and poor living conditions of migrants. Based on the results, the study highlights the necessity for improved working conditions and rights for migrant workers to promote decent work for this vulnerable population.

#### Primary Insights

- Workers face exploitation, poor living conditions, and excessive employer control.
- Female workers and low-skilled laborers are particularly vulnerable to abuse.
- Systemic legal barriers exacerbate their inability to assert rights.

#### III. Analysis of Floor Questions Cross-Cutting Themes

##### Migration and Vulnerability

- Emphasized the role of cultural practices in shaping healthcare dynamics.
- Discussed systemic exploitation and its mental health implications on migrants.

##### Policy and Social Equity

- Participants underscored the critical need for labor reforms and inclusive health policies.

- The importance of engaging families and communities in creating support systems was highlighted.

#### IV. Audience Engagement and Session Dynamics

##### High-Engagement Presentations

- *Parental Migration and Mental Health* sparked significant interest, with discussions on mitigating mental health risks for left-behind children.
- *Kafala System Challenges* prompted debates on the role of international organizations in enforcing migrant worker protections.

##### V. Session Conclusion

The session concluded by emphasizing the pressing need for nuanced and inclusive policies to address the multifaceted health and social impacts of migration. Discussions underscored the importance of culturally sensitive interventions, particularly in maternal health and psychosocial support for vulnerable groups such as children and elderly migrants. The exploitation of migrant workers under systems like Kafala highlighted the urgency of global collaboration to ensure equitable labor rights and human dignity. Presentations effectively connected migration-related challenges with broader themes of social equity, mental health, and systemic reform, stressing the necessity of fostering sustainable development and safeguarding the rights of all affected populations. The session's insights provided a strong foundation for future research and policymaking to mitigate migration-induced vulnerabilities while promoting health, security, and inclusivity.

##### VI. Key Strategic Implications

1. **Integrated Health Interventions** Develop culturally sensitive healthcare models that address both the medical and social needs of migrants and their families.
2. **Policy Reforms for Migrant Rights** Advocate for systemic reforms, particularly in exploitative systems like Kafala, to ensure equitable treatment of migrant workers.
3. **Mental Health Support Systems** Invest in school-based psychosocial interventions and family-focused programs to support left-behind children.

## SESSION 3.3 ENVIRONMENTAL IMPACTS ON HEALTH AND FOOD SECURITY

**Session Theme:** Population and Environment, Climate Change, and Sustainable Development

**Session Chair(s):** Cristabel Rose Parcon

### I. Session Overview

This session addressed critical regional challenges related to climate change and food security across South Asia. Presentations integrated data-driven insights with policy implications, highlighting the complex relationship between climate, food systems, and public health. Discussions focused on the vulnerabilities of food security in the face of climate-induced disasters like droughts and cyclones, and the need for climate-resilient approaches to disaster preparedness and food systems.

### II. Presentation Summaries

#### 1. The impact of Monsoon weather on food security in Pakistan

**Presenter(s):** Risto Conte Keivabu, Rumi Chunara

**Affiliation:** Max Planck Institute for Demographic Research, Rostock, Germany. School of Global Public Health, New York University, New York, USA

### **Abstract**

Climate change led intensification in Monsoon season anomalies pose significant challenges to food security in the South East Asian region. In this paper we focus on Pakistan, to understand how Monsoon weather affects food security. More precisely, we use an established indicator of droughts, the SPEI index, to explore how a drier Monsoon season affects self-assessed food security. For this purpose, we leverage Pakistan Social and Living Standards Measurement Survey (PSLM) data for 2019-2020 on about 148 thousand households and combine it with fine grained ERA-5 meteorological data provided by the Copernicus Data Store. Our findings highlight a dry Monsoon season to increase mild to moderate food insecurity, but not more severe types of food insecurity. Importantly, the increased unpredictability of Monsoon seasons could worsen food security in Pakistan with dire implications for the local population.

### **Primary Insights**

- Dry monsoons are a significant threat to food security in Pakistan, reducing crop yields and increasing food prices.
- The study utilized data from 147,934 households, showing that droughts are linked to lower food quality and limited food variety.
- The research emphasizes the need for drought-resilient agricultural practices to mitigate the effects of climate change on food systems.

## **2. Cyclone Vulnerability Assessment A Case Study of Coastal Odisha, India**

**Presenter(s):** Sibabrata Das Suryaprava Das,

**Affiliation:** Department of Geography, Ravenshaw University

### **Abstract**

Odisha, an eastern state in India, is frequently hit by tropical cyclones because it borders the Bay of Bengal on its eastern side. The present study seeks to construct an integrated coastal risk assessment index for coastal Odisha, taking into account select physical, demographic and socioeconomic attributes both at district as well as sub-district (block) level. Ten parameters were chosen based on the criteria of physical and social vulnerability. A vulnerability map is created to identify zones with very low, low, moderate, and high risk based on the weights and scores obtained using the Analytic Hierarchy Process (AHP). Findings reveal that around 32% of the whole study area, which amounts to 9820 sq. km, is classified as the very vulnerable zone. The majority of the blocks are classified as the moderately vulnerable zone, accounting for 48% of the total area. The area with the lowest danger, which covers only 235 square kilometres (0.78% of the total), is classified as a very low- or no-risk zone. The findings support the idea that communities living in vulnerable areas should be provided with interventions that target the reduction of susceptibility and the adoption of appropriate adaptive strategies for achieving socio-economic and environmental sustainability.

### **Primary Insights**

- Coastal Odisha faces an increasing frequency of cyclones, with vulnerable districts being those with high population densities and low altitudes.

- Case studies of cyclones Phailin (2013) and Fani (2019) illustrate the destructive effects of these events.
- Proposed solutions include ecological preservation (mangrove restoration) and enhancing community preparedness and cyclone-resistant infrastructure.

### 3. Assessment of Determinants and Effectiveness of ICDS Services A Study on Bihar

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Rohit Kumar, Saif Nihal, Anjali Sharma

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

**Introduction:** The study explores the Integrated Child Development Services (ICDS) program's impact on child nutrition in Bihar, India. Highlighting Bihar's high undernutrition rates, the research assesses ICDS utilization patterns, determinants, and effects on the nutritional status of children under 5 years age group.

**Methods:** Leveraging National Family Health Survey data (NFHS-4, NFHS-5), the study explores India's demographics, health, and nutrition. Employing regression, CIAF, and DID, it assesses ICDS impact on Bihar's child nutrition.

**Results:** ICDS coverage reveals disparities: independent supplementary food coverage at 39%, rising to 56% conditionally. Immunization coverage increases from 48% to 91% conditionally. Logistic regression identifies demographic factors influencing ICDS utilization, emphasizing targeted interventions. Difference-in-differences (DID) analysis indicates a small yet significant negative impact on undernutrition rates.

**Conclusion:** The study underscores the inadequacies in the effectiveness of ICDS services in Bihar, emphasizing the need for a targeted and improved implementation strategy, especially in the backward regions. The analysis reveals a mere 1.8% decline in undernutrition over four years, indicating limited impact and signaling areas for program enhancement. Comprehensive analysis offers valuable insights for policymakers and stakeholders working towards child welfare in Bihar.

#### Primary Insights

- Despite positive outcomes, the Integrated Child Development Scheme (ICDS) faces significant gaps in addressing child undernutrition in Bihar.
- 67% of children in ICDS programs experience suboptimal nutrition.
- Recommendations focus on improving service delivery, worker training, and expanding data collection for stronger policy recommendations.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Climate Change and Food Security:** There was a strong focus on understanding how changes in climate (such as erratic monsoons and cyclones) are impacting agricultural production and food access. Questions from the floor emphasized the need for localized climate adaptation strategies.
- **Vulnerability and Resilience:** Attendees raised concerns about how vulnerable populations can be better prepared for climate disasters. The discussion touched on the role of infrastructure, ecological restoration, and community-based resilience strategies.

- **Nutrition and Health** Several questions linked the climate-related challenges to child health outcomes, particularly undernutrition, with a call for integrating climate resilience into health programs like ICDS.

#### IV. Audience Engagement and Session Dynamics

- The audience actively engaged with the Presenter(s): on the technical aspects of vulnerability mapping, with specific focus on how socioeconomic factors can be incorporated into assessments.
- Many participants expressed interest in discussing the role of local communities in disaster preparedness and resilience, particularly in cyclone-prone areas.
- There was a notable curiosity about integrating digital tools in enhancing the delivery of services, such as improving data collection for ICDS programs.

#### V. Session Conclusion

The session concluded with a strong emphasis on the interconnectedness of climate change, food security, and health outcomes. The discussions highlighted the need for an integrated approach to tackling these challenges, with a focus on both mitigation and adaptation strategies. There was broad consensus that addressing food insecurity and health risks from climate change requires policy shifts, enhanced community engagement, and investment in resilient infrastructure and agricultural practices.

#### VI. Key Strategic Implications

- **Policy Integration:** It is crucial to integrate climate change resilience into food security and public health policies to address the immediate and long-term impacts of climate-induced disasters.
- **Localized Interventions:** Vulnerability assessments must account for local contexts, including socioeconomic factors, to design more effective and equitable climate adaptation strategies.
- **Data-Driven Decision Making:** Strengthening data collection and using digital technologies can improve the efficiency and reach of programs like ICDS, helping to better track food security and nutrition outcomes.
- **Community-Based Resilience** A focus on community preparedness and resilience is key, especially in high-risk areas vulnerable to cyclones and droughts.

## SESSION 3.4 ECONOMIC TRANSITIONS AND DEMOGRAPHIC DYNAMICS

**Session Chair(s):** Peng Du

### I. Session Overview

The session explored the complex interplay between economic transitions and demographic dynamics, examining the impact of internal migration on Japan's economy, the role of remittances in agricultural development in India, and the progress of demographic transitions across different states in India. Additionally, it examined the changing patterns of household consumption expenditure in India and its implications for inequality.

### II. Presentations Summaries

#### 1. Economic Effects of Internal Migration on Japan's Receiving Prefectures

**Theme:** Population and Economy, Demographic Dividend, and Labor Market

**Presenter(s):** Xiaofei Wang, Jiehua Lu

**Affiliation:** School of International Organizations, Beijing Foreign Studies University, Beijing, China.  
Department of Sociology, Peking University, Beijing, China

### Abstract

Japan is now experiencing a complex situation of accelerated population aging coupled with large-scale migration of the labor force, and new features of changes in the burden of social dependency caused by the migrants have attracted much attention. In this paper, we use prefecture data from the National Bureau of Statistics of Japan to estimate the differences in labor productivity implied by differences in age structure and education attainment. Furthermore, we construct an innovative indicator named productivity weighted labor force dependency ratio (PWLFDR) to reflect the burden posed by migrants on the receiving areas. Results show youth (aged from 20 to 29) and adult population (aged from 30 to 39) with higher labor productivity are the main variables determining the burden of migration on receiving areas. For more economically developed areas, the productivity weighted labor force dependency ratio (PWLFDR) of migrants is lower than that of the conventional dependency ratio, which only considers the share of overall working-age population. In this regard, the dependency ratio of the destination can be lessened to some extent by the higher productivity of migrants. This method provides a new perspective to see the effects of migration, dependency burden, and mediating roles played by labor productivity.

### Primary Insights

- Examined the economic impacts of internal migration on receiving prefectures in Japan, considering the varying productivity of different migrant groups.
- Introduced the Productivity Weighted Labor Force Dependency Ratio (PWLFDR), which accounts for age and education in assessing the economic contribution of migrants.
- Found that prefectures attracting younger, skilled migrants tend to have lower PWLFDRs, suggesting positive economic benefits.
- Highlighted the need for policies that attract skilled young workers and support highly productive older individuals.

## 2. Examining the Influence of Socio-economic, Demographic and Migration Factors on Utilization of Remittances in the Agricultural Sector in a High Out-migrating Region in India.

**Theme:** Population and Economy, Demographic Dividend, and Labor Market

**Presenter(s):** Shankar Sarkar

**Affiliation** International Institute for Population Sciences (IIPS), Mumbai, India

**Co-Author** Dr. Reshmi R.S., Department of Migration & Urban Studies

### Abstract

Remittances serve as substantial income stream for rural households, empowering them to invest in farming activities and enhance their overall quality of life. This study focuses on investigating remittance utilization in agriculture and its determinants in the Middle Ganga Plain region in India, using data from the Middle Ganga Plain migration survey (2021) conducted by IIPS, Mumbai. With the help of Bivariate analysis, the study explores the relationship between socio-economic and migration characteristics with utilization of remittances in the agricultural sector. The Chi-Square test validates the findings and Binomial Logistic Regression for further analysis. The study reveals that marginalized social groups are more inclined



to use remittances for agriculture. Furthermore, households with larger landholdings demonstrate an increased likelihood of remittance utilization across all agricultural sectors. Additionally, it was observed that use of remittances in agriculture was more among female headed households. Moreover, parents who are recipients of remittances tend to allocate their funds to agricultural activities. Along with other important factors, this study provides valuable insights into remittance utilization patterns and associated factors in the agricultural sector, highlighting the need for targeted policies and interventions to enhance the efficient and effective use of remittances in agriculture.

### Primary Insights

- Socio-economic factors significantly influence how remittances are used in agriculture in India's Middle Ganga Plain.
- Older individuals, larger landholders, female-headed households, and marginalized castes are more likely to invest remittances in agricultural activities.
- Remittances are used for crucial inputs such as labor, seeds, fertilizers, and irrigation.
- International migrant households and wives of migrants play a vital role in agricultural investment decisions.
- Policy recommendations include promoting financial literacy for female remittance receivers, improving credit access for marginalized farmers, and enhancing technical assistance for smallholders.

### 3. Demographic Transition status at the national and sub-national level over the past and contemporary period in India

**Theme:** Population Dynamics, Demographic Transition, and Population Ageing

**Presenter(s):** Mahadevrao Bramhankar, Murali Dhar

**Affiliation:** International Institute for Population Sciences (IIPS), Mumbai, India

#### Abstract

Present study aims to assess and compare fertility, mortality and demographic transition across states of India. Data collated from Sample-Registration-Systems (SRS) and SRS abridge lifetable. Based on TFR and LEB for 1990 to 2020. Study estimated Indexes: Fertility-Transition (FTI), Mortality-Transition (MTI), and Demographic-Transition (DTI). These indices were used for comparing fertility, mortality and demographic transition over the period and across the states. India achieved advance-Fertility Transition, almost 85% in 2020, whereas it was just at the stage of middle-FT 62% in 1990. MTI also significantly declined up-to 70% high-MT stage from middle-MT in 2020. DTI reflects low-DT (54%) in 1990 to high-DT (77%) in 2020. Among all states, Kerala was the only state at the high DT level in 1990; however, it has shifted to advance-DT since 2000. While most western states (Maharashtra and Gujarat), southern (Tamil-Nadu, Andhra-Pradesh, Telangana, and Karnataka) northern (Punjab, Himachal-Pradesh, J&K, and Haryana) were found High-DT in 2010. Entire India, with ongoing family-planning programmes and policies for fertility, mortality and the demographic transition, has performed well. Only special focus should be given to the most populous states, Uttar Pradesh and Bihar, which are still lagging behind in decades in terms of fertility and mortality transition.

#### Primary Insights

- India's demographic transition over four decades was assessed, focusing on fertility, mortality, and overall progress.

- Using FTI, MTI, and DTI, the analysis showed India has achieved below-replacement fertility and is nearing the peak of its demographic dividend.
- Significant disparities exist between states. Coastal and southern states generally perform better than central and northern states.
- Targeted interventions are crucial in lagging states, particularly in healthcare and family planning programs.

#### 4. From Cereals to Durables Goods: Tracing the Shift in India's Household Consumption Expenditure Landscape

**Presenter(s):** Nilesh J. Yadav, Dr. Suryakant Yadav

**Affiliation:** Department of Biostatistics and Epidemiology, International Institute for Population Sciences (IIPS), Mumbai, India

##### Abstract

India's household consumption expenditure has undergone significant changes from 1993-94 to 2011-12, reflecting the nation's evolving socio-economic fabric. This study, analyzing NSSO data, examines the rural-urban disparities in consumption patterns and their implications for inequality. Findings reveal that while national food expenditure increased marginally by 0.71%, there was a substantial rise in non-food (90.82%), education (149.19%), and health (75.19%) expenditures. Rural areas experienced a decrease in food expenditure by -2.57%, contrasting with urban areas where food expenditure rose by 2.67%. The study utilizes the Gini coefficient to assess consumption inequality. It highlights an increase in education expenditure inequality (Gini coefficient rising to 0.8478) and a surge in durable goods spending, signaling a shift in consumer priorities. Rural regions saw a significant growth in education (185.42%) and health (67.41%) spending, while urban areas experienced a more pronounced increase in non-food (102.02%) and health (82.95%) expenditures. This shift from necessities to discretionary spending underlines a deepening economic divide, especially in urban settings. The analysis underscores the need for targeted policies to address these disparities, suggesting that altering spending patterns could effectively reduce consumption inequality. These insights are crucial for fostering equitable growth and enhancing the overall well-being in India's diverse landscape.

##### Primary Insights

- Household consumption inequality in India has evolved over four decades.
- Shift in expenditure from food to non-food items like rent and durables, driving increased inequality.
- Rising inequality in health and education Despite modest expenditure increases in these sectors.
- Urban areas consistently exhibit higher inequality compared to rural areas.
- Policy recommendations Focus on universal access to education and healthcare, affordable housing solutions, and rural infrastructure development to address this inequality.

#### III. Analysis of Floor Questions Cross-Cutting Themes

- **Demographics & Economy** Interplay between demographic trends and economic growth. Harnessing demographic dividends while addressing aging populations. Policies for human capital development, skilled workers, and productivity.

- **Regional Disparities** Recognizing regional variations in demographics and economics. Tailored interventions for different regions. Improved healthcare, education, and essential services in lagging areas.
- **Socioeconomic Factors** Influence of socioeconomic factors on demographics and development. Mitigating inequalities and promoting inclusive growth. Policies for quality education, healthcare, and affordable housing.

#### IV. Audience Engagement and Session Dynamics

##### Engagement Patterns

- The session attracted a highly engaged audience, with participants actively participating in discussions and sharing insights on various aspects of economic transitions and demographic dynamics.

##### Noteworthy Discussions

- Discussions revolved around policy interventions to promote sustainable and inclusive growth, addressing regional disparities in economic development and demographic indicators, and strategies to mitigate the economic impacts of aging populations.

#### V. Session Conclusion

The session provided valuable insights into the complex relationship between economic transitions and demographic dynamics, highlighting the need for integrated policies that address both economic and demographic challenges. The presentations and discussions emphasized the importance of investing in human capital, promoting equitable access to resources and opportunities, and addressing regional disparities to achieve sustainable development goals.

#### VI. Key Strategic Implications

1. **Invest in Human Capital** Enhance human capital through education, healthcare, and skills development. Prioritize equity in access.
2. **Address Regional Disparities** Reduce regional disparities by supporting lagging areas with infrastructure, education, healthcare, and economic opportunities.
3. **Promote Inclusive Growth** Foster inclusive economic growth that benefits all. Reduce inequality, improve access to services, and empower vulnerable groups.

## SESSION 3.5 CHILD NUTRITION AND DEVELOPMENT

**Session Theme:** Addressing Child Nutrition and Development Challenges in South Asia

**Session Chair (s):** Mengjun Tang

### I. Session Overview

The session critically examined child nutrition and development challenges in South Asia, focusing on socio-economic determinants, maternal practices, and systemic inequalities affecting child health outcomes across different regions of India and Nepal.

### II. Presentations Summaries

#### 1. Socio-economic Determinants of Early Childhood Development in a Poor Rural Setting Empirical Evidence from Nepal

**Presenter(s):** Florence Arestoff, Olivia Bertelli, Elodie Djemai, Dirgha Ghimire, Uttam Sharma

**Affiliation:** Paris Dauphine University, PSL University, Paris, France. University of Michigan, Ann Arbor, USA. Institute for Social and Environmental Research-Nepal, Chitwan, Nepal. Institute for Social and Environmental Research- Nepal, Chitwan, Nepal

### **Abstract**

This study investigates the socio-economic determinants of early childhood development (ECD) in a rural Nepalese setting, drawing from data collected in Gajuri municipality in 2022. With a focus on the critical first 1000 days, the study encompasses 1012 households and employs the CDC Milestone Checklists to measure ECD across socio-emotional, language/communication, cognitive, and motor dimensions. Descriptive statistics reveal notable disparities in ECD outcomes based on factors such as household wealth, parental education, caste, and group membership, with children from historically disadvantaged ethnic groups such as Dalit and Chepang exhibiting significantly lower success rates. The research aims to deepen understanding through further analyses, exploring direct relationships and mediating effects, while also considering variations based on gender and socioeconomic disadvantages. These findings hold implications for targeted interventions to address socio-economic and ethnic disparities, aligning with the broader goal of achieving universal access to quality early childhood development outlined in the Sustainable Development Goals.

### **Primary Insights**

- Significant disparities in early childhood development outcomes based on household characteristics
- Children from historically disadvantaged groups (Dalit and Chepang) showed lower developmental milestone success rates
- Importance of parental education and household wealth in child development

## **2. Crop Production Diversity and Child Nutrition in India**

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Shalem Balla

**Affiliation** Indian Institute of Technology, Mandi, India

### **Abstract**

India's Global Hunger Index rank slipped to 107th out of 121 countries and child malnourishment worsened in many states during the last decade. The dismal state of food and nutrition security in India is examined through many pathways, of which agriculture maintained a ubiquitous relationship. This study aims to investigate the relationship between crop production diversity and child undernutrition in India over the period of 2016–2021, using data triangulation from varied sources. Data from two rounds of India Demographic Health Survey is taken for child anthropometric failures. The Shannon crop production diversity is calculated using crop production data sourced from the ICRISAT district-level database for 526 districts across 20 major states in India. We modelled panel data regression to assess the association between Crop production diversity and child nutritional status. The robust checks are carried out using Quintile regression. The results of the study show a discernible pattern of higher prevalence of undernourishment among the districts with lesser crop production diversity. Further, a strong significant negative association is found between child undernutrition and crop diversity, maternal education, and

maternal nutrition. Robust decentralized policy efforts incentivizing small and marginal farmers to encourage diverse agricultural production needs to be concerted.

#### Primary Insights

- Negative correlation between low crop production diversity and child under nutrition
- India's declining Global Hunger Index ranking (107th out of 121 countries)
- Maternal education and nutrition significantly impact child nutrition outcomes

### 3. Assessment of Knowledge, Attitude, and Practice of Mothers on Infant and Young Child Feeding Practices in the Chakhesang Naga Tribe of Northeast India

**Presenter(s):** Vekutulu Chiero, Hemkothang Lhungdim

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

**Introduction:** Adequate nutrition for children is crucial for sound physical and mental development. Nevertheless, evidence indicates that children in developing nations lack optimal feeding, undermining their capacity to grow to their full potential. Hence, in this study, we assessed the knowledge, attitude, and practice of the mothers on infant and young child feeding (IYCF) practice.

**Methods:** A cross-sectional study was carried out among 445 mothers in 9 villages from the Chakhesang tribe in the Phek district of Nagaland. Data was collected using a structured questionnaire with different sets of questionnaires administered to mothers of children 0 to 5, 6 to 23, and 24 to 59 months.

**Results:** Around 1/3 of women with children aged 0 to 5 months have good knowledge and good practices towards IYCF, and 2/3 have positive attitudes. Furthermore, 19% and 28% of women with children aged 6 to 23 months have good knowledge and practices, and 60% women have positive attitudes. Whereas 80% of women with children aged 24 to 59 months have good knowledge and practices towards diets of pre-school children and 55% have positive attitudes.

**Conclusion:** Nutrition programs should prioritize equipping mothers with knowledge about recommended guidelines for feeding infants and young children.

#### Primary Insights

- Limited knowledge of infant and young child feeding practices among Chakhesang tribe mothers
- Only 19-33% of mothers demonstrated good nutritional knowledge
- Prevalence of poor breastfeeding practices in the studied community

### 4. Horizontal and Vertical Inequalities in Nutritional Status among Children in India, 1992-2021

**Presenter(s):** Divyanshi Verma

**Affiliation:** International Institute for Population Sciences, Mumbai

#### Abstract

Using the pooled dataset from successive rounds of NFHS (1992-2021), an attempt is made to estimate horizontal and vertical inequality in childhood malnutrition based on the economic status of household. The study has used three types of inequality indices, namely the Gini Index, Group Gini index, and Wagstaff concentration indices, for measuring the level of Vertical and Horizontal inequality in child under nutrition:

stunting, wasting and underweight. Further, we decomposed the grouped Gini index into Horizontal (Between Group), Vertical (Within Group across the Individuals) and overlapping part of between and within inequalities. The horizontal inequality estimates reveal that child undernutrition is more concentrated among the children belonging from poor economic stratum, while the vertical inequality analysis shows that there are significant differences in the individual-to-individual inequality across the economic groups, maximum in poor. Overall, vertical inequality contributes to maximum to overall inequality in child undernutrition prevalence. In conclusion, we believe that a majority of health care policies address horizontal inequalities, but the presence of vertical inequality may trigger further pro-rich inequality in nutritional status if not supported by any targeted policy. Thus, addressing both horizontal and vertical inequalities are critical for reducing inequalities in child nutrition in India.

#### **Primary Insights**

- Higher child undernutrition rates among economically disadvantaged groups
- Vertical inequality (within-group differences) most significant in nutritional disparities
- Longitudinal analysis revealing persistent nutritional challenges

### **III. Analysis of Floor Questions Cross-Cutting Themes**

#### **Demographic Challenges**

- Need for targeted interventions addressing socio-economic disparities
- Importance of understanding intersectionality in child nutrition

#### **Policy and Social Dynamics**

- Critical role of maternal education and household wealth
- Challenges of addressing nutritional inequalities across different social groups

### **IV. Audience Engagement and Session Dynamics**

#### **High-Engagement Presentations**

- Crop Diversity and Nutrition Study Generated significant discussion on agricultural interventions
- Early Childhood Development Research Sparked debate on social determinants of child health

### **V. Session Conclusion**

The session provided a comprehensive exploration of child nutrition and development challenges in South Asia, revealing the complex interplay of social, economic, and cultural factors that impact child health outcomes. By highlighting the persistent disparities across different regions and social groups, the presentations underscored the urgent need for targeted, multifaceted interventions that address the root causes of malnutrition and developmental challenges. The research emphasized the critical importance of holistic approaches that integrate education, agricultural policy, maternal support, and community-based strategies to improve child nutrition and development.

### **VI. Key Strategic Implications**

- **Nutritional Equity:** Developing nuanced, context-specific interventions to address child nutrition disparities.
- **Holistic Development:** Creating comprehensive strategies to improve child health outcomes across different social and economic contexts.

## **SESSION 4.1 METHODS IN DEMOGRAPHIC AND HEALTH RESEARCH**

**Session Chair(s):** Michaela Potancokova

## I. Session Overview

The session explored innovative research methodologies in demographic and health studies, focusing on critical issues including malnutrition, dementia, healthcare access, and changing social dynamics across Asian contexts.

### 1. Estimating malnutrition in India using Composite Index of Anthropometric Failure, evidence from the last 3 rounds NFHS NFHS 3,4,5

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Diksha Rani, Hemkothang Lhungdim

**Affiliation** International Institute for Population Sciences, Mumbai, Mumbai, India (e.g., university, NGO, government agency)

#### Abstract

This research investigates anthropometric failure among under-5 children in India using the Composite Index for Anthropometric Failure (CIAF) based on height, weight, and age data from the 5th round of NFHS (2019-21). The study estimates CIAF values for India using various modifications and tracks changes across NFHS rounds. It identifies associations between maternal and child anthropometry, revealing that mothers with low height and thin BMI are at higher risk. Social group disparities are explored, showcasing differences in maternal anthropometry among various groups.

Geographical variations are highlighted, with state-wise CIAF values aiding targeted resource allocation. Age-specific patterns reveal nuances, such as "wasting only" being higher in the first 9 months. The research emphasizes the irreversible and intergenerational nature of stunting, calling for interventions during the early stages.

Policy implications include the need for differentiated approaches to address stunting, wasting, and underweight, and the urgency of interventions. The conclusion underscores the state-wise burden of undernourished children and advocates for future research, particularly in cost analysis, to aid policymakers in efficient resource allocation and planning. Overall, this research provides a comprehensive understanding of anthropometric failure, contributing valuable insights for evidence-based policymaking in India's fight against child malnutrition.

#### Primary Insights

- Over 50% of children under 5 suffer from anthropometric failure
- Significant regional disparities in malnutrition rates
- Stunting and underweight as primary malnutrition forms
- Highest wasting prevalence in the first 9 months of life

### 2. Design and Methodology of Population-Based Dementia Assessment in Nepal The Chitwan Valley Family Study- Study on Cognition and Aging in Nepal (CVFS-SCAN)

**Theme:** Population Dynamics, Demographic Transition, and Population Ageing

**Presenter(s):** Dirgha Ghimire, Carlos Mendes de Leon, Emily Briceño, Kenneth Langa, Colter Mitchell, Brady West, Uttam Sharma, Abha Sharma, Usha Dhakal, Nabin Adhikari

**Affiliation:** University of Michigan, Ann Arbor, USA. Institute for Social and Environmental Research, Chitwan, Nepal/ Georgetown University, Washington, USA

### **Abstract**

Compared to the high-income countries, the population in low- and middle-income countries is aging faster, along with a significant rise in anticipated number of dementia cases. For Nepal, the situation is comparable with no population-based data on older people's cognitive health.

The main objective of this study is to build capacity to conduct systematic population research in Alzheimer Disease and Related Dementia (ADRD) and develop longitudinal study of ADRD and other aging related changes in health in older adults in Nepal.

This study will use a longitudinal cohort design. Study will be carried out among 4000 surviving older adults from Chitwan Valley Family Study (CVFS) aged  $\geq 50$  years of age. CVFS is a 26-year panel study. Harmonized Cognitive Assessment Protocol (HCAP) cognitive battery will be used for cognitive assessments of respondents. In-depth interviews of respondents along with a venous blood sample will be drawn for DNA extraction. Each respondent will also designate an informant who will also receive a brief interview about respondent's cognitive health. After two years, there will be a follow-up interview.

This study will estimate the prevalence and incidence of ADRD and its primary clinical features, and test associations between important risk factors and ADRD and cognitive impairment.

### **Primary Insights**

- Projected elderly population to reach 17.9% by 2050
- Development of culturally adapted cognitive assessment tools
- Critical gaps in dementia research infrastructure in low-income countries
- Urgent need for systematic Alzheimer's and dementia studies

### **3. Trend estimation of child undernutrition indicator at micro-level administrative units in Bangladesh using remote-sensed data**

**Theme:** Population Census/Survey, Vital Registration, and Big Data

**Presenter(s):** Sumonmkanti Das, Syed Abdul Basher, Bernard Baffour, Penny Godwin, Alice Richardson, Salim Rashid

**Affiliation:** Australian National University, Canberra, Australia. East West University, Dhaka, Bangladesh/ University of Illinois, Urbana-Champaign, USA

### **Abstract**

This study aims to estimate trends in chronic undernutrition (stunting) among children under five years old in Bangladesh at micro-level administrative domains, encompassing sixty-four districts and five hundred forty four sub-districts. Our analysis incorporates data from six rounds of the Bangladesh Demographic and Health Survey (BDHS) spanning the period from 2000-2018, which provides geographic coordinates of the sampled clusters, and utilizes remote-sensed data to capture both socio-economic and environmental influences of childhood stunting. Bayesian multi-level time series models are then developed, which leverage cross-sectional, temporal, and spatial relationships, to provide reliable small area estimates of stunting for both survey and non-survey periods. Results show that the national-level trend in stunting has experienced a steep decline over the period, decreasing from approximately 50% in



2000 to about 30% in 2018. The trends at the district level reveal that some districts with higher stunting levels over the last two decades exhibit consistently higher vulnerability, while others demonstrate more variability. At the sub-district level, the direct estimates, which were highly volatile and left 30-50% of domains unobserved in all surveys, are significantly improved through the use of multilevel time-series modeling.

#### Primary Insights

- Correlation between antenatal care and night-time light intensity
- High maternal mortality rate (170 per 100,000 live births)
- Significant subnational variations in healthcare access
- Innovative use of remote-sensed data in demographic research

#### 4. Decomposition of Differences of the Proportion ever married and Single Life Expectancy of Chinese Women Based on Gross Nuptiality Tables over Periods and Cohorts

**Theme:** Future Challenges of Asian Population Dynamics

**Presenter(s):** Weiyi Tan, Quanbao Jiang

**Affiliation:** The Institute for Population and Development Studies, Xi'an, China

#### Abstract

There has been a clear trend towards first marriage delay of Chinese women, with differences between urban and rural household and levels of educational attainment. With data from National Population Census of China and 2017 China Fertility Survey, we decompose the changes of proportion ever married and single life expectancy into the effect of age-specific probability of staying single based on stepwise replacement and then decomposed recent gaps between urban and rural areas and the level of education in single life expectancy with Contour decomposition into the age-specific initial component and trend contributions. We find that changes in the probability of staying single between age 15 and 27 is the main cause of changes in single life expectancy compared to earlier periods and cohorts. We also find differences in single life expectancy between urban and rural areas and levels of education are mainly due to differences in the probability of first marriage at young ages. Between cohorts, urban women aged 20-25 have experienced a greater decline in first marriage levels than rural women, so that though they had higher levels of first marriage in 1951 cohort, they attained lower levels of first marriage in 1976 cohort compared to 1951 cohort.

#### Primary Insights

- Growing trend of delayed marriage among women
- Significant urban-rural disparities in marriage patterns
- Impact of urbanization and higher education on marriage timing
- Changing family structures and nuptiality dynamics

#### III. Analysis of Floor Questions Cross-Cutting Themes Thematic Discussions

- **Methodological Innovations** Exploring advanced research techniques
- **Regional Disparities** Examining variations in health and social outcomes
- **Policy Integration** Connecting research findings to actionable interventions

#### IV. Audience Engagement and Session Dynamics Engagement Patterns

- **High-Interaction Presentations**

India's malnutrition study generated significant discussion of Dementia research sparked debates about healthcare infrastructure.

- **Limited Engagement Areas**  
Methodological details received more technical interest.

## V. Session Conclusion

The session provided a comprehensive examination of innovative demographic research methods, revealing complex intersections between health, social dynamics, and regional variations across Asian contexts.

## VI Key Strategic Implications

1. **Methodological Advancement** Develop and integrate innovative research approaches that combine quantitative methods, cultural sensitivity, and technological innovations.
2. **Comprehensive Policy Framework** Create holistic interventions that address regional disparities, leveraging advanced research methodologies to inform targeted health and social policies.

## SESSION 4.2 CHILD HEALTH DISPARITIES AND MORTALITY

**Session Chair(s):** Jeofrey Abalos

### I. Session Overview

The session explored the persistent disparities in child health and mortality across South Asia, with a particular focus on India. Presentations covered severe acute malnutrition (SAM), neonatal mortality, under-five mortality, and infant death clustering. The session emphasized socio-economic factors, policy inefficiencies, and the critical role of maternal health services in addressing child health disparities.

### II. Presentations Summaries

#### 1. Severe Acute Malnourished (SAM) coverage under the Integrated Child Development Service (ICDS) in India evidence from the National Family Health Survey

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Ritankar Chakraborty

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

**Background:** The last three rounds of the National Family Health Survey in India show an increase in the prevalence of Severe Acute Malnourishment (SAM) among Under-five children. Given the specific mandates under the Integrated Child Development Service (ICDS) for SAM children, it is important to validate the coverage efficiency of ICDS on SAM children. This study therefore attempts to identify the determinants of SAM coverage under ICDS in India.

**Methodology:** The study uses data from the fifth round of the National Family Health Survey in India. Descriptive statistics, multilevel logistic regression, and Variance Partitioning Coefficient (VPC) were used to fulfill the objectives.

**Results:** The burden of SAM is more among older children (3+ age). Age had a significant relationship with the outcome variable. SAM children living in rural areas were more likely to be covered under the ICDS than their urban counterparts. Mothers accessing ICDS services during pregnancy and breastfeeding were significant determinants of SAM coverage under ICDS.

**Conclusion:** There is no evidence that ICDS is more efficient in identifying and covering SAM children than other non-SAM children. Despite special provisioning in place for SAM children, they do not receive special attention as they should, given their high mortality risks.

### Primary Insights

- Despite ICDS initiatives, SAM prevalence remains high among children under five, with varying levels of effectiveness across different states.
- The coverage gap in addressing SAM is evident in rural areas, where access to services is limited and the service delivery system is under-resourced.
- Socio-economic factors, such as the wealth of the household and geographic location, play a significant role in the utilization of ICDS services.
- Variability in ICDS implementation across states has led to unequal outcomes in child nutrition, with some areas showing much higher rates of SAM than others.

## 2. Continuum of Care and Neonatal Mortality Identifying the Missing Opportunity for Intervention

**Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Presenter(s):** Rimjhim Bajapi, Abhishek Singh

**Affiliation** Population Council Consulting, Noida, India

### Abstract

A seamless provision of a comprehensive range of health services throughout the stages of pregnancy, childbirth, and postnatal period is essential for the Continuum of Care (CoC) in maternal and child healthcare (MNCH). Utilizing the latest two rounds of National Family Health Surveys, this study considers Early Antenatal Care (ANC), at least four ANC visits (4+ANC), institutional delivery, and Postnatal Care (PNC) of mothers to examine the CoC for neonatal mortality. Over the period, CoC coverage has increased from 30.7 percent to 40.6 percent, though significant disparities exist across the socioeconomic gradients and states. At the national level, there was a difference of more than double in NMR with women who were covered by all selected services than those who received none of them. NMR has been systematically reduced with increasing MNCH services in the matrix of CoC. Among women receiving CoC, NMR decreased from 12 to 10.8 points, while for those not receiving CoC, NMR decreased from 21.5 to 20.2 per 1000 children. The primary gap contributing to low CoC is identified in the initial stages, particularly in Early ANC and subsequent completion of 4+ANC. Targeting missed opportunities along with addressing disparities is critical for achieving Sustainable Development Goals

### Primary Insights

- There has been significant progress in implementing Continuum of Care (CoC) in maternal and neonatal health services, particularly among lower wealth quintiles.
- A stronger adherence to CoC is linked to a reduction in neonatal mortality, with notable decreases in states with better coverage.
- However, disparities in CoC implementation remain, particularly in rural and underserved areas, where healthcare access is limited and fragmented.
- Wealth inequalities and regional disparities contribute to uneven CoC coverage, with states like Bihar and Nagaland lagging behind in meeting the CoC standards.
- Socioeconomic inequities prevent certain populations from benefiting fully from CoC, highlighting the need for more targeted and inclusive interventions.

### 3. Representational Inequities in Under-five Mortality in South Asian Countries An Illustration of Relative Disadvantage Index

**Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Presenter(s):** Sourav Dey, Udaya S Mishra

**Affiliation** International Institute for Population Sciences, Mumbai, India

#### Abstract

**Background:** With the progress in the reduction of under-five mortality in keeping with the SDG targets, its characteristic inequities remain an overlooked dimension; while socioeconomic characteristic differences in child mortality are widely discussed, the inequity derivative of such differences needs measurement to qualify an ideal progress made as regard reduction in under-five mortality among the South Asian countries.

**Methods:** Examination of such inequality can be based on a principle and a purpose. Here, we adopt a representation principle to make an exposition of such inequality with the help of a Relative disadvantage index (RDI), as well as demonstrate a contrast between the prevailing and desirable distribution of this outcome across characteristic categories.

**Findings:** The finding indicates a differential pattern of characteristic disadvantage in this outcome across countries that enables a comparative valuation of attainment in this parameter. Further wealth quintiles depict the biggest gap in the prevailing and desirable distribution of this outcome.

**Interpretation:** This exposition informs on the redistribution of this adversity across characteristic groups and an intercountry comparison of prevailing inequality in this outcome considering a range of characteristics.

#### Primary Insights

- The study reveals significant under-five mortality disparities across South Asia, driven by socio-economic and demographic factors, particularly maternal education and wealth.
- Wealthier households and more educated mothers experience lower rates of under-five mortality, while disadvantaged groups suffer disproportionately high mortality rates.
- Despite global commitments to reduce child mortality, the findings indicate that significant inequalities remain within and across South Asian countries.
- The use of the Relative Disadvantage Index (RDI) in the study highlights how wealth and education gaps contribute to the unequal distribution of child mortality outcomes.
- The disparities persist even in regions with better overall child health outcomes, underscoring the complexity of achieving health equity in South Asia.

### 4. Temporal Patterns in Infant Death Clustering Among Families Findings from India

**Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Presenter:** Ronak Paul

**Affiliation** International Institute for Population Sciences, Mumbai, India

#### Abstract

**Background:** Despite considerable research about the determinants of infant mortality, majority of the children are unable to survive their first birthday. While evidence shows that the risk of dying is never shared equally among the population, some families have a greater risk of infant mortality than others. The present study examined the unequal risk of infant deaths among Indian families.

**Methods:** We used the pooled birth history of mothers from the India Human Development Survey round-I (2004-05) and round-II (2011-12). We performed bivariate analysis and estimated random-intercept dynamic regression models to complete the study objectives. Dynamic models allow us to account for the index child's mortality risk depending on the mortality risk of preceding children. Further, using two-level random-intercept models allows us to account for the variation in the risk of infant mortality due to unobserved characteristics at the family level.

**Expected findings:** From preliminary analysis, clustering of infant deaths was observed among children born to the same families. Further, the risk of infant deaths of index children was correlated with the mortality risk of the preceding child. Additionally, the results showed that the effect of death scarring stayed consistent over the birth cohort of children.

### Primary Insights

- The study highlights the persistence of infant death clustering, where families experience multiple instances of infant mortality, which is not fully explained by broader national trends in infant mortality rates.
- Despite improvements in overall infant mortality, the "death scarring" effect leads to higher mortality risk in subsequent pregnancies within families that have previously experienced infant deaths.
- Clusters of infant deaths tend to occur in low-income and rural families, where socio-economic conditions exacerbate health risks and reduce access to quality care.
- Family-level factors, including maternal health, nutrition, and previous reproductive history, contribute significantly to the persistence of infant death clustering.
- The study suggests that focusing on high-risk mothers, particularly those with previous infant deaths, could reduce the clustering effect and improve child survival rates.

## III. Analysis of Floor Questions Cross-Cutting Themes

### Demographic Challenges

- Socio-economic factors, such as maternal education and wealth, were repeatedly highlighted as crucial in understanding child health disparities. The impact of these factors on mortality and nutrition outcomes was discussed in depth.
- Audience members emphasized the need for targeted interventions to address these disparities, especially in rural and underserved areas, where access to quality healthcare is limited.

### Policy and Social Dynamics

- The session underscored the importance of creating inclusive policies that account for socio-economic differences in healthcare access and outcomes.
- Discussions also pointed out the gaps in the healthcare system, particularly in rural and remote regions, where service delivery is fragmented and under-resourced.

## IV. Audience Engagement and Session Dynamics

### High-Engagement Presentations

- **SAM Coverage and ICDS** The audience engaged actively in discussions around improving ICDS coverage and addressing service delivery gaps, especially in rural areas.
- **Neonatal Mortality and CoC** The audience raised concerns about the uneven implementation of the Continuum of Care and how socio-economic factors hinder its effectiveness in certain regions.

### Discussion Dynamics

- There was a strong focus on addressing the root causes of child health disparities, particularly socio-economic inequalities that prevent marginalized groups from accessing essential services.
- Participants also discussed the need for more robust healthcare infrastructure and better service integration to ensure equitable access to care.

### V. Session Conclusion

The session effectively shed light on the ongoing challenges in child health and mortality in South Asia, with a particular focus on the socio-economic determinants that drive disparities. Despite progress in certain areas, significant gaps remain in healthcare access and child survival rates, especially for marginalized populations. The Primary Insights from the presentations highlighted the need for targeted, context-specific interventions that address both the systemic and socio-economic factors contributing to these health inequities.

### VI. Key Strategic Implications

- **Equity in Health Interventions**
  - Addressing socio-economic disparities is crucial for reducing child health disparities. Policies and interventions should be designed to ensure equitable access to healthcare for all children, especially in underserved regions.
- **Strengthening Healthcare Systems**
  - Healthcare systems need to be strengthened, particularly in rural and disadvantaged areas, by improving delivery service, workforce training, and infrastructure to ensure that all populations benefit from maternal and child health services.
- **Focus on Vulnerable Groups**
  - Targeted interventions for high-risk populations, such as mothers with previous infant deaths or children suffering from malnutrition, can have a significant impact on reducing mortality and improving health outcomes.

## SESSION 4.3 NUTRITION AMONG WOMEN AND CHILDREN IN INDIA

**Session Chair(s): Kamala Devi Lammichhane**

### I. Session Overview

The session addressed key public health challenges in India, focusing on the socio-demographic and environmental factors influencing health outcomes, particularly among women and children. The topics covered include adolescent obesity, child diarrhea, economic impacts of cancer, and post-natal care for low birth weight (LBW) babies. Presentations provided data-driven insights into these health issues and proposed strategies for region-specific, policy-based interventions.

### II. Presentation Summaries

#### 1. Socio-Demographic Drivers of Abdominal Obesity among Adolescents in India

**Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Presenter(s):** Bishwajeet Besra

**Affiliation:** International Institute for Population Sciences

**Abstract**

According to the 2017 Global Burden of Disease study, the annual mortality toll attributable to excess weight exceeds four million individuals. Adolescents are overweight and obesity is a growing public health issue with significant health and economic consequences. The data for this study was drawn from the Comprehensive National Nutrition Survey (CNNS). This study aims to find the levels and determinants of adolescent obesity in India. Bivariate and multivariate analysis examined the relationship between socio-demographic factors and adolescent overweight/obesity. The study's findings show that male children had a higher likelihood than female children of being overweight or obese. Additionally linked to being overweight and obesity are social and wealth status and residence in urban areas. Rising rates are linked to the nation's economic development, the availability of a calorie-rich diet, and a decline in physical activity. India is facing two different problems: undernutrition and a growing burden of obesity-related diseases in the future.

**Primary Insights**

- Abdominal obesity is more prevalent among adolescents aged 10-19, particularly in urban areas and higher socio-economic groups.
- Abdominal obesity is linked to higher metabolic risks compared to general obesity.
- Adolescents in higher socio-economic status are more likely to experience abdominal obesity.
- The study utilized CNNS 2016-18 data, with analyses through bivariate and multivariate methods, and mapping via ArcGIS.
- There is a need for targeted health interventions, especially in urban settings, to address the growing issue of abdominal obesity among adolescents.

**2. Factors Associated with Diarrhea among Tribal and Non-Tribal Children of Under-Five Years in Eastern India**

**Presenter(s):** Astapati Hemram, Dipika Subba

**Affiliation:** Cooch Behar Panchanan Barma University, Cooch Bihar, India

**Abstract**

Diarrhea remains one of the leading causes of global mortality for children under age five, and becoming an increasingly prevalent disease in developing countries like India. This study aims to assess the prevalence of diarrhea among children aged 0-5 years in both tribal and non-tribal communities in Eastern India and identify associated risk factors. The study uses data from fifth round of National Family Health Survey. The outcome variable is the prevalence of diarrhea among under-five children and the explanatory variables are socio-demographic and environmental factors. The current study included 41,296 under-five aged children from eastern India. Descriptive statistics, bivariate with chi-square significance test, and binary logistic regression have been employed to identify the factors associated with childhood diarrhea. Among tribal children, maternal employment and poor nutrition emerged as significant factors contributing to diarrhea prevalence. Conversely, among non-tribal children, younger mothers, undernourished mothers, younger children, children with low birth weight, small family size, and poor households were identified as significant factors associated with diarrhea. The findings highlight the diverse risk profiles within tribal and non-tribal communities, emphasizing the need for targeted interventions addressing specific socioeconomic and demographic determinants to mitigate childhood diarrhea effectively in Eastern India.

**Primary Insights**

- Tribal children experience higher rates of diarrhea, largely due to poor living conditions, economic status, and maternal health.
- The study used NFHS 2019-21 data, with bivariate and logistic regression analyses to explore these factors.
- Improving maternal health and child nutrition in tribal areas is crucial to addressing diarrhea prevalence.
- There is debate over whether environmental or socio-economic factors should be prioritized in addressing these health issues.

**3. Understanding the Economic Burden of Cancer in India Using Cost of Illness Approach****Presenter(s):** Ananya K. V.**Affiliation:** International Institute for Population Sciences (IIPS), Mumbai, India**Abstract**

Cancer is a leading cause of death globally. In India, with recent demographic and epidemiological transitions, cancer emerges as a significant public health crisis, accompanied by escalating financial strains. This study investigates the economic repercussions for individuals and households following a cancer diagnosis. Utilizing data from the National Sample Survey-75th round, cancer hospitalization prevalence and distribution across various socio-economic strata is calculated in this study. Employing a cost-of-illness framework, the direct and indirect expenses linked to cancer hospitalization are assessed, considering perspectives at daily, episodic, individual, and household levels.

Findings reveal a self-reported cancer hospitalization prevalence of 210 per 100,000 persons, notably higher among 35-59 age groups, urban residents, females, and affluent households. People rely more on private healthcare facilities, although the expense there is almost triple that in public/govt hospitals. Socio-economic disparities persist, with affluent groups facing higher hospitalization costs while the poor endure income losses. Daily expenditure for a hospitalized individual is, on average, around nine thousand Indian rupees, with the financial burden escalating as analysis shifts from episodes to households. Hence, this study emphasizes the urgent need to prioritize safeguarding households from financial hardships in cancer treatment, necessitating increased public health investments in cancer treatment facilities.

**Primary Insights**

- Cancer treatment imposes a significant financial burden, with private healthcare costs being three times higher than public care.
- The prevalence of cancer-related hospitalization is 210 per 100,000 people.
- The study utilized NSS 75th round data and the cost of illness framework to assess these financial impacts.
- There is a call for increased public investment in cancer care and further research on socio-economic disparities in access to cancer treatment.

**4. Effects of Post-Natal Care Delivered to Low Birth Weight Babies on Nutrition Outcomes in the First Five Years of Life in India****Presenter:** Kajori Banerjee, Ph.D., Assistant Professor**Affiliation:** Anil Surendra Modi School of Commerce, SVKM's Narsee Monjee Institute of Management Studies (NMIMS), Mumbai, India



## Abstract

Utilizing National Family Health Survey (NFHS)-5, 2019-20, the research endeavors to assess the mitigating effects of postnatal care on development of symptoms of malnourishment among low-birth-weight babies up to the age of five years. In India, where 18% of newborns are affected by low birth weight, these infants are at elevated risk of malnourishment during the initial five years of their lives. Logistic regression highlights the reduction in risk of being malnourished among low birth weight babies with postnatal care. Propensity score matching will be conducted to evaluate the disparity in malnutrition incidence between low-birth-weight infants who receive postnatal care and those who do not. Micro-level analysis reveals postnatal care, especially within two days of delivery and Kangaroo Mother Care, has a potential to reduce risk of malnutrition in low-birth-weight infants during their first five years of life.

## Primary Insights

- Post-natal care (PNC) and Kangaroo Mother Care (KMC) significantly reduce stunting among low birth weight (LBW) babies.
- 47% of LBW babies received KMC/PNC, while only 18% are born with LBW.
- The study used NFHS-5 data (2019-20), employing logistic regression and propensity score matching.
- There is a strong call to scale KMC across both public and private health systems, with a particular focus on overcoming challenges in rural areas.

## III. Analysis of Floor Questions Cross-Cutting Themes

- **Socio-Demographic and Economic Drivers:** Several floor questions focused on understanding how socio-economic status influences health outcomes, with particular emphasis on tribal populations and urban adolescents.
- **Health Disparities** Participants raised concerns about disparities in healthcare access, especially in rural and tribal areas, and the financial burden of diseases like cancer.
- **Maternal and Child Health** Questions also centered on improving maternal health, specifically around post-natal care, and how to scale up practices like Kangaroo Mother Care to reduce stunting and improve nutrition outcomes for LBW babies.

## IV. Audience Engagement and Audience Dynamic

- The audience actively engaged with the Presenter(s): on issues related to socio-economic disparities in health, especially the challenges faced by tribal populations in accessing healthcare services.
- There was particular interest in understanding the economic burden of diseases, such as cancer, and the strategies needed to make healthcare more accessible and affordable.
- The scalability of interventions, particularly Kangaroo Mother Care, was a major point of discussion, with calls for a more nuanced approach to scaling in rural regions.

## V. Session Conclusion

The session concluded with a call for more region-specific and evidence-based policy interventions that address the socio-demographic and environmental factors contributing to health disparities. The discussions underscored the importance of focusing on vulnerable groups such as tribal populations and LBW infants and emphasized the need for greater public investment in maternal and child health, as well as cancer care.

## VI. Key Strategic Implications

- **Policy Integration** There is a pressing need to integrate socio-economic and environmental considerations into public health policies, especially in addressing issues like obesity, diarrhea, and cancer care.
- **Targeted Interventions** Policies should be tailored to address the unique needs of urban, rural, and tribal communities, with a focus on reducing health disparities.
- **Investing in Maternal and Child Health** Strengthening post-natal care, particularly Kangaroo Mother Care, is crucial for improving nutrition outcomes in LBW babies, and such programs should be scaled across both public and private sectors.
- **Economic Burden of Diseases** More research and policy focus are needed to alleviate the financial burden of diseases like cancer, particularly through increased public healthcare investment and reduced reliance on private healthcare.

## SESSION 4.4 NEW FORMS AND DYNAMICS OF MIGRATION

**Session Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Session Chair(s):** Yogendra B Gurung

### I. Session Overview

The session explored contemporary migration patterns, from the rise of digital nomadism to the health impacts of temporary childbirth migration. It examined the demographic compositions of migration flows, the socio-economic consequences of digital nomadism, and the implications of temporary childbirth migration for maternal and newborn health. The session highlighted the need for policy interventions and further research to address the challenges and opportunities presented by these evolving migration trends.

### II. Presentation Summaries

#### 1. “Digital nomads” as a new form of international mobility: socio-demographic structure and migration policy trends

**Presenter(s):** Sergey Ryazantsev, Nikita Ryazantsev

**Affiliation** Institute for Population and Social Research, Mahidol University, Thailand

#### Abstract

The international migration of digital nomads began to boom during the COVID-19 pandemic. Sources of information on “digital nomads” are still few and are represented by surveys and statistics on special websites and internet portals. National statistics on visas issued to this category of migrants have also started to be compiled. This study uses data from eight in-depth interviews with experts and digital nomads in Brazil, Argentina, Portugal, and Thailand in 2022-2023. The largest numbers of digital nomads come from the USA (48%), the UK (7%), Russia (5%), Canada (4%), Germany (3%). Data from the Nomand List internet portal (April 2023) allows us to describe the socio-demographic profile of digital nomads. “Digital nomads” are mostly highly qualified professionals for whom not only high incomes are very important, but also the most comfortable living, working and recreational conditions, favourable climatic and environmental conditions, and they are oriented towards freedom of movement. The spread of mobile lifestyles, the increase in the number of online professions, and the expansion of the number of

countries opening their doors to digital nomads will gradually lead to a relaxation of visa conditions and competition between national economies to attract digital nomads as desired migrants.

### Primary Insights

- COVID-19 accelerated the rise of digital nomads – skilled professionals working remotely from various locations.
- Typically young, mobile, middle-class, predominantly male, with high education levels. Common professions include IT, consulting, and entrepreneurship.
- 35 countries offer digital nomad visas, with examples like Cyprus, Brazil, and Kazakhstan.
- Contribute to local economies, rejuvenate populations, and boost tourism and investment, particularly in Latin America and Southeast Asia.
- Face issues like dual taxation, short visa durations, and financial transfer complications.

## 2. Variation in Temporary Childbirth Migration Across India A Multi-Site Assessment of Practices and Predictors

**Presenter(s):** Rutuja Patil, Alison M. El Ayadi, Abhishek Raut, Ashwini Kalantri, Dhiraj Agarwal, Sanghmitra Pati, Subrata Palo, Temsunaro Chandola, Nidhi Goyal, Piyush Bansal, Rachel Murro, Bharat Choudary, Sanjay Juvekar, Nadia G. Diamond-Smith

**Affiliation:** Vadu Rural Health Program, KEM Hospital Research Centre, Pune, India. Department of Obstetrics Gynecology, and Reproductive Sciences, University of California San Francisco, San Francisco, USA. Department of Epidemiology and Biostatistics, University of California San Francisco, San Francisco, USA. Department of Community Medicine, Mahatma Gandhi Institute of Medical Sciences Sevagram, Nagpur, India. Indian Council of Medical Research-Regional Medical Research Centre, Bhubaneshwar, India. Society for Applied Studies, Delhi, India. Institute for Global Health Sciences, University of California San Francisco, San Francisco, USA

### Abstract

**Introduction:** Temporary childbirth migration (TCM), a prevalent traditional practice in India, involves returning to one's natal home during pregnancy or childbirth. Understanding its extent, timing, determinants, and variations across regions is crucial for comprehending its implications. This study aims to explore TCM patterns across India.

**Methods:** Data were collected from March 2023 to January 2024 in four sites of Indian Health and Demographic Surveillance Systems (HDSS) Network: Vadu (n=2,039; KEMHRC Pune), Sevagram (n=1,661; MGIMS Wardha), DEESHA (n=652; SAS Delhi), and DISHA Tigris (n=713; RMRC Bhubaneshwar). We examined TCM timing and duration by site and assessed its sociodemographic correlates using chi-square tests.

**Results:** Prevalence of TCM varied across sites: 8.5% in RMRC, 16.9% in SAS, 52.8% in Sevagram and 75.3% in Vadu (p<0.001). Migration timing differed; most (70.0%) migrated during the third trimester, with 20% postpartum. Most women (43.9%) migrated for a duration of 1-2 months. TCM increased with parity, maternal education, and intergenerational households (p<0.001), with timing differing by parity and education (p<0.01).

**Conclusion:** Migration could interrupt care continuity or facilitate greater support, resulting in better health outcomes. Regional and sociodemographic variation in TCM practices may differentially impact health outcomes and should be evaluated.

**Primary Insights**

- Temporary Childbirth Migration (TCM) involves pregnant women migrating temporarily, often to natal homes, impacting maternal and newborn health.
- TCM prevalence varies widely (8.5% to 75%), influenced by maternal education and household structure. It is linked to disrupted care continuity and health risks like preterm births.
- Policy recommendations for Nepal include implementing Health and Demographic Surveillance Systems (HDSS), raising awareness about TCM risks, and improving access to maternal care and education

**3. Demographic Compositions of Migration Flows****Presenter(s):** Dilek Yildiz, Guy Abel**Affiliation:** International Institute for Applied Systems Analysis, Austria. The University of Hong Kong**Abstract**

In Global North where fertility and mortality rates have been declining and the population growth is stabilized, migration plays a key role in the change of population size, structure, and characteristics. Especially, due to the refugee crises and escalating climate migration, the past decade has seen a growing interest in quantitative research estimating and predicting migration flows. Considering the significant differentials in fertility and mortality, when projecting future population size and structure, it is important to consider the age and education breakdown of migration flows. However, quantifying migration is complicated and there is a lack of global, comparative, and good quality migration flow data stratified by age and education. Most research on the characteristics of migrants has been restricted to migrant stocks which are easier to collect than flows. Availability of migration flows broken down by age are limited to high income and only available for the recent years. Therefore, a formal modelling approach is required to produce global estimates. We propose a methodology to estimate the proportions of age and education specific migration flows. We employ random forest models and Rogers Castro migration age schedules to predict the proportions, and we validate our estimates with available data

**Primary Insights**

- Analysis using machine learning revealed that migrants across 38 countries increasingly have secondary or post-secondary education.
- Implications for Nepal include improving migration data, aligning education policies with global migration trends, and strengthening migration management systems to meet the demand for skilled labor.

**4. Migration and Religiosity of Neighbors and Kin Who Stay Behind****Presenter(s):** Emma Labovitz, Lisa Pearce, Jacqueline Hagan**Affiliation:** University of North Carolina at Chapel Hill, NC, USA**Abstract**

Research is paying increasing attention to the consequences of migration for family members and neighbors that stay behind, yet the focus has primarily been on economic outcomes or health and well-being. Religion is a cultural institution that may be shaped by migration. We examine how the religiosity of non-migrants is affected by the migration of those around them. Using survey data from the Chitwan Valley Family Study (CVFS), we test whether household or community levels of migration in Nepal between 1996 and 2008 change the religiosity of non-migrants across that same period. We also explore whether the relationship between migration and the religiosity of non-migrants is gendered. Our preliminary

results suggest shifts in religiosity for non-migrants related to the household and neighborhood migration context, and this relationship differs by gender.

#### Primary Insights

- Labor migration impacts the religiosity of mothers in Nepal, specifically those whose sons migrate, finding small changes in religious practices<sup>5</sup>.
- While migration didn't drastically alter religious beliefs, some mothers increased devotional practices like praying at home, potentially due to coping mechanisms or remittances.
- Future research will refine findings using more detailed data

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Evolving Migration Patterns** The emergence of new migration patterns, such as digital nomadism, requires flexible research and policy frameworks.
- **Impacts on Sending & Receiving Countries** Migration has multifaceted impacts on both sending and receiving countries. Comprehensive assessments are needed to understand these impacts and inform policy.
- **Policy Responses** Policy interventions are crucial to address challenges and harness opportunities presented by migration. This includes facilitating skilled migration, managing the impacts of temporary migration on health systems, and creating frameworks for emerging forms of migration.

### IV Audience Engagement and Session Dynamic

#### High-Interaction Presentations

- **Digital Nomads** Expect intense debate on ethics, sustainability, local impact, and government regulation.
- **Temporary Childbirth Migration (TCM)** Focus on risks, cultural norms, policy effectiveness. Expect lively discussion with personal anecdotes.

#### Noteworthy Discussions

- **Policy Implications** Regulating digital nomads, ensuring migrant well-being, managing skilled migration flows.
- **Socio-cultural Factors** How family, culture, and opportunity shape migration decisions.

### V. Session Conclusion

The session provided a nuanced view of contemporary migration patterns, revealing the diversity of migratory experiences and their implications for policy and future research. It emphasized the need for a holistic approach to migration studies, considering economic, social, demographic, and health dimensions.

### VI. Key Strategic Implications

1. **Adapt policies** Respond to changing migration (skilled, temporary, digital nomads).
2. **Strengthen research** Understand evolving patterns, impacts, policy effectiveness.
3. **Collaborate** Cross-sectoral & international cooperation for effective solutions.

## SESSION 4.5 GENDER INEQUALITY AND EMPOWERMENT

**Session Theme:** Gender and Development

**Session Chair(s):** Jean Yeung

## I. Session Overview

The session critically examined gender inequality challenges in India, focusing on property ownership, health insurance, financial freedom, and gender-based violence. Presentations highlighted systemic and structural barriers faced by women and proposed evidence-based policy interventions to address these challenges.

## II. Presentations Summaries

### 1. Who won the House in India? Gender Inequalities in Housing Ownership in India

**Presenter(s):** Pradeep Salve

**Affiliation** International Institute for Population Sciences, Mumbai, India

#### Abstract

Housing is a basic entitlement. The existing evidence globally suggests individuals own houses significantly less in women than men; this hypothesis has not been tested so far in India. Ownership of the house contributes significantly in defining women's empowerment, autonomy and gender equality. In this study, by analysing the data from National Family Health Surveys-5 (2019-21) of India, we report stark inequality in ownership of houses where only 14% of females have owned homes in India compared to 84% of male counterparts. The relative inequality measure highlights that males have six times higher ownership of houses than females at the national level. Compared to females, the higher-educated males have nine times higher ownership of housing. The gender differences are sustained after controlling for the socioeconomic characteristics of individuals. The multivariate analyses suggest that ownership of housing for females significantly varies by their education, religion and place of residence state.

#### Primary Insights

- Only 14% of women own houses compared to 84% of men
- Wider disparities among highly educated individuals
- Persistent gender differences across socioeconomic characteristics

### 2. Are Insured Women Truly Insured: Analyzing the Trend in Health Insurance Coverage, Out of Pocket Health Expenditure, Financial Distress in India

**Presenter(s):** Abhay Tiwari, Chitra Saroj

**Affiliation** Banaras Hindu University, Varanasi, India

#### Abstract

**Introduction:** Health insurance coverage has been incredibly low and uneven in India. Individuals with lower insurance coverage are typically those who work informally, reside in rural regions, are older, female, have less education, and are poorer. Even though the number of individuals with health insurance has increased and social and geographical inequities have diminished due to various health insurance systems, not everyone, especially the poor, is covered.

**Data and Method:** The analysis in this study used NFHS data that was made available to the public. Employer-funded plans, government-funded plans, and private plans make up the three main categories of insurance systems. Regression analysis is used in this study to determine the trend in India's health insurance coverage. The concentration coverage inequality for various demographic factors is presented

using the concentration curve (CC) and concentration index (CI). This study looks at the distress finance and out-of-pocket expenses associated with cesarean deliveries in India.

**Result:** It is discovered that having health insurance is a significant factor in determining India's healthcare system. There are notable differences between various health insurance plans. Women who are insured under any of the privately funded insurance schemes opted for the highest number of C-section deliveries

#### Primary Insights

- Uneven health insurance coverage across women's demographics
- High caesarean delivery rates among insured women
- Significant out-of-pocket health expenditures

### 3. Enabling Environment for Gender Justice through Community-Based Women's Organizations

**Presenter(s):** Neelanjana Pandey

**Affiliation** Population Council Consulting Pvt Ltd, New Delhi, India

#### Abstract

**Context:** This paper investigates the effectiveness of a pilot program in Bihar, India, aimed at integrating gender awareness within Community-Based Organizations (CBOs). The program aimed to empower CBOs to address gender inequality and support survivors of gender-based violence (GBV).

**Data and Methods:** The study surveyed 700 CBO women members, assessing their: gender role attitudes, views on domestic violence and awareness of support services.

**Findings:** The study revealed limited gender awareness among CBO members, evidenced by both progressive and traditional views on gender roles, including condoning violence in certain situations. Most members lacked knowledge of legal aid, the Domestic Violence Act, and available support systems for GBV victims. The program identified placing a gender desk at CBO office and providing them gender training has impact on reducing stereotyped gender role attitudes among them and empower them with potential information, and these CBO members serve as facilitators for accessing formal support mechanisms.

**Conclusions:** Focused interventions are needed to address existing gender norms and empower CBO members. Raising awareness about available support services for GBV and other gender issues among CBOs and communities is crucial. Leveraging existing government initiatives and fostering community mobilization holds potential for scaling up and creating a sustainable solution.

#### Primary Insights

- Limited progress in changing gender role attitudes
- Increased awareness of gender-based violence (GBV) support services
- Minimal behavioral changes among male community members

### 4. Financial Freedom among Indian Married Women: A State-Level Analysis

**Presenter(s):** Sefali Verma

**Affiliation** International Institute for Population Sciences, Mumbai, India

## Abstract

The Indian economy is acknowledged as one of the most rapidly growing economies in the world, however, women's contribution to its GDP remains low at 18%. The financial freedom of women is a very crucial aspect of women's contribution to the economy and the overall development of a nation. Therefore, using data from India's National Family Health Survey, this study examines the extent of Indian married women's financial freedom. We develop a composite financial freedom Index (FFI) to measure Indian married women's economic agency, autonomy, and control over resources. FFI contains nine indicators under four dimensions. All the indicators used in the index show good internal reliability. Overall, FFI is low in India but varies with different dimensions. FFI also presents state-wise variation. Meghalaya and Arunachal Pradesh show the highest scores reflecting the high financial freedom enjoyed by married women compared to other states. The present index has incorporated different aspects of the economic empowerment of women, previously which were rarely used. Therefore, FFI can be utilized to track women's progress on the economic front and find areas where they lag behind. Our results demonstrate the need for the financial inclusion of women in India to increase their economic activities.

### Primary Insights

- Low Financial Freedom Index (FFI) for married women
- Significant state-level variations
- Disproportionate engagement in informal and unpaid work

## III. Analysis of Floor Questions Cross-Cutting Themes

### Demographic Challenges

- Persistent patriarchal norms limiting women's economic opportunities
- Regional variations in gender equality indicators
- Intersectionality of gender, socioeconomic status, and regional disparities

### Policy and Social Dynamics

- Role of community-based organizations in addressing gender inequalities
- Legal and systemic barriers to women's empowerment
- Importance of targeted interventions

## IV. Audience Engagement and Session Dynamics

### High-Engagement Presentations

- Housing Ownership Research Generated significant discussion on property rights
- Financial Freedom Study Sparked debate on economic barriers for women

## V. Session Conclusion

The session provided a comprehensive exploration of gender inequality challenges in India, revealing the complex interplay of social, economic, and cultural factors that impede women's empowerment. By highlighting persistent disparities across property ownership, healthcare, financial freedom, and community engagement, the presentations underscored the urgent need for holistic, intersectional approaches to addressing gender inequalities and promoting women's rights.

## VI. Key Strategic Implications

1. **Gender Equity:** Developing nuanced, context-specific interventions to address systemic barriers to women's empowerment.
2. **Comprehensive Approach:** Creating integrated strategies to promote women's economic, social, and legal rights across different contexts in India.



## PANEL DISCUSSION REPORT

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### UNFPA-APA SESSION ON DEMOGRAPHIC EDUCATION

**Chair:** Reiko Hayashi

**Topic:** *Advancing Demographic Education in the Asia-Pacific Adapting Teaching and Training to Mega Trends and Demographic Changes*

#### I. Panelists and Key Contributions

##### 1. Aris Ananta

**Institution** Centre for Advanced Research, Universiti Brunei Darussalam, Brunei

**Topic** *Results of the Survey on Advancing Demographic Education in the Asia-Pacific*

##### Key Insights

- Master's programs dominate demographic education in the region.
- Need to address *mega trends* like aging populations and urbanization.
- Graduates often trained for academic and qualitative research roles.

##### Challenges

- Funding constraints and lack of updated curricula.

##### Recommendations

- Encourage cross-institutional collaboration via workshops and joint seminars.

##### 2. Washana Wei Mei

**Institution** United Nations Population Fund (UNFPA)

**Topic** *The Need for Balance in Demographic Teaching*

##### Key Messages

- Balance formal demography and applied population studies to remain relevant.
- Integration of demographic studies with broader social science research.

##### Challenges

- Gaps between demographic theory and real-world applications.

##### Suggestions

- Revise curricula to foster interdisciplinary collaboration.

##### 3. Yogendra B. Gurung

**Institution** Central Department of Population Studies (CDPS), Tribhuvan University, Nepal

**Topic** *Introduction of the New Course Plan at Tribhuvan University*

##### New Developments

- Inclusion of courses on population-development linkages and demographic techniques.
- Training in computer-based research tools such as MS Excel and Kobo tools.
- Electives added on population development and computational demography.

##### 4. Fatemeh Torabi

**Institution** Department of Demography, University of Tehran, Iran

**Topic** *Current Trends and Challenges in Demographic Education*

##### Current Focus

- Fertility, aging, and climate change, but less on practical policy and SRHR.

### Challenges

- Limited funding and collaboration opportunities.

### Recommendations

- Enhance hands-on training and policy-oriented demographic studies.

### 5. Bernard Baffour

**Institution** School of Demography, Australian National University, Australia

**Topic** *Advancing Demographic Education in the Asia-Pacific*

#### Challenges

- Declining PhD funding and disconnect between training and job market needs.

#### Opportunities

- Aligning demographic studies with global challenges like urbanization and public health.

### 6. Wei-Jun Jean Yeung

**Institution** National University of Singapore, Singapore

**Topic** *Advancing Demographic Education and Family Studies*

#### Focus Areas

- Marriage migration and family planning.
- Plans to introduce specialized demography programs in partnership with UNFPA.

### 7. Bhubate Samutachak

**Institution** Institute for Population and Social Research, Mahidol University, Thailand

**Topic** *Trends and Shifts in Demographic Education at Mahidol University*

#### Key Highlights

- Strong focus on applied research and policy implications.
- Successful history of PhD graduates with over 33 years of programs in demographic education.

## II. Q&A Session Highlights

- **Collaboration and Networking** Emphasis on inter-institutional partnerships to address funding and curriculum development gaps.
- **Updating Education for Mega Trends** Climate change, migration, and urbanization must be core topics in demographic programs.
- **Employment Challenges for Graduates** Demography graduates face reduced job opportunities, necessitating a pivot toward market-relevant skills.
- **Regional Focus** Asia's unique demographic transitions (e.g., rapid aging, migration) demand localized educational strategies.

## III. Suggestions and Recommendations (Audience Reflection)

1. **Align Curricula with Market Needs** Incorporate practical skills like data analytics and policymaking into academic programs.
2. **Strengthen Research and Communication** Foster collaborations between demographers and policymakers to address real-world challenges effectively.
3. **Promote Student Engagement in Research** Encourage publications and participation in international conferences to build visibility.
4. **Focus on Interdisciplinary Approaches** Merge demography with public health, urban planning, and climate change research.

5. **Adapt to Mega Trends** Ensure demographic education addresses global and regional trends, including population aging and fertility transitions.

## PLENARY SESSION I

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### FERTILITY AND FAMILY TRANSFORMATION IN ASIA-PACIFIC RENEWING COMMITMENTS TO ICPD PRINCIPLES

**Session Chair:** K S James

#### I. Overview of Session Themes

The session explored the transformation of fertility and family structures in the Asia-Pacific region through the framework of the International Conference on Population and Development (ICPD) principles. The discussions covered demographic transitions, marriage patterns, gender equity, migration, and policies addressing fertility-related challenges in the region.

#### II. Panelist Contributions

##### 1. Premchand Varma Dommaraju (Nanyang Technological University, Singapore)

**Topic** *Changing Families in South and Southeast Asia*

- Focused on the evolving nature of marriage and family structures, emphasizing delayed marriages, rising divorce rates, and migration trends.
- Identified the demographic challenges posed by declining fertility and the emergence of childless couples.
- Advocated for gender-inclusive family policies to foster equity and promote societal well-being, while addressing misconceptions around demographic policies post-ICPD.

##### 2. Wassana IM-EM (UNFPA, Thailand)

**Topic** *Marriage Migrants and Cross-National Families in Asia*

- Addressed the socio-economic dynamics of marriage migration and its impact on family structures, particularly for low-income migrant women.
- Highlighted social inequalities, lack of support, and the challenges faced by migrant women in host countries.
- Advocated for gender-sensitive immigration policies, including financial aid and social network support for migrant families.

##### 3. James Raymo (Princeton University, USA)

**Topic** *Low Fertility, Gender Equity, and Employment An Alternative Perspective on Gender Equity Theory*

- Analyzed Japan's policy efforts to combat low fertility through gender-equity reforms and family support initiatives.
- Discussed cultural and economic barriers to policy success, particularly persistent gender-inegalitarian norms.
- Suggested that aligning family policies with labor market dynamics can better support work-life balance and improve childcare provisions.

##### 3. Wei-Jun Jean Yeung (National University of Singapore, Singapore)

**Topic** *Marriage Migration and Cross-Border Families in Asia*

- Examined the impact of demographic shifts on marriage migration, including commodification of marriage and challenges in cross-border families.
- Discussed the socio-economic status of marriage migrants and the traditional gender roles that hinder their integration.
- Advocated for policies to improve migrant women's well-being, with a focus on their children's intergenerational development.

#### **4. Vegard Skirbekk (Norwegian Institute of Public Health, Oslo/Columbia University, USA)**

##### **Topic** *Health and Dependency Ratios in an Aging Population*

- Proposed using a health-adjusted dependency ratio (HADR) instead of age alone to better measure societal dependency.
- Highlighted the social investment implications of low fertility, particularly in terms of health and education.
- Urged a shift in focus towards health as a key determinant of societal dependency.

### **III. Key Panel Discussion Themes**

- **Gender Equity and Fertility**
  - Persistent gender inequities in East Asia are major barriers to family formation and low fertility rates.
  - Empowering women through equitable labor markets and household roles could address challenges related to low fertility.
- **Marriage Patterns and Family Policies**
  - Changing family dynamics, such as late marriages, single-parent households, and blended families, reflect societal transformations.
  - Policies should focus on addressing challenges in the marriage market, including commodification and cultural shifts.
- **Migration and Family Dynamics**
  - Migration plays a significant role in reshaping family structures and requires targeted support for cross-national families.
  - Policies should prioritize the well-being of migrant families, including integrating gender-sensitive approaches.

### **IV. Session Chair's Conclusions and Recommendations**

1. **Renewed Commitment to ICPD Principles** Emphasized the need for continued dedication to the ICPD principles, particularly gender equity, reproductive rights, and sustainable family policies.
2. **Collaborative Regional Efforts** Urged stronger collaboration across countries to address the challenges of fertility and family transformations in the Asia-Pacific region.
3. **Research and Policy Development** Stressed the importance of comprehensive research to inform policies that address the social implications of demographic transitions, including aging populations and low fertility rates.

#### **Takeaways for Nepal:**

1. **Adapting Regional Lessons:** Nepal can learn from the fertility and demographic challenges faced by other countries in the Asia-Pacific region, adapting successful policies to local contexts.
2. **Focus on Gender Equity:** It is critical to prioritize gender equity in education and labor markets to support family formation in Nepal.

3. **Migration Trends and Policy Development:** As migration impacts family dynamics in Nepal, there is a need for policies that support cross-national families, particularly in terms of migrant women's integration and welfare.

## SESSION 5.1 CHALLENGES OF POPULATION AGING

**Session Theme:** Population Dynamics, Demographic Transition, and Population Ageing

**Session Chair** Samir K.C

### I. Session Overview

This session explored the critical challenges related to aging populations, declining fertility rates, and the mental health of older adults in Asia. Presentations focused on the demographic shifts in India, East Asia, and Thailand, analyzing how these regions are addressing population aging through policies and strategies.

### II. Presentations Summaries

#### 1. Understanding the Dynamics of Depression among Older Adults in India Psychometric Analysis of CES-D scale using LASI Wave- 1

**Presenter(s):** Harshita Chari, Abhishek Anand, Anjali Radkar,

**Affiliation:** Gokhale Institute of Politics and Economics, Pune, India; International Institute for Population Sciences, Mumbai, India

#### Abstract

The study aims to use Item Response Theory (IRT) techniques and network analysis to examine the propensity of endorsing each individual CES-D depression symptom and create a sub-scale that will provide a better measure of depression for individuals aged 60 years and older in India. The first wave of the Longitudinal Ageing Study in India (LASI) (2017-18) has been used in this study which employed the CES-D scale to assess depression among older adults. The reliability was assessed using split-half correlation and Cronbach's Alpha. Item Response Theory and network analysis was used to identify central symptoms of depression which were "being bothered by things", "feeling afraid of something", "feeling depressed", "feeling alone", and "having trouble concentrating". Confirmatory factor analysis was used to compare and validate the subscale, and Receiver Operating Characteristics (ROC) determined the optimal cut-off scores for distinguishing non-depressed and depressed groups. Identifying the key signs of depression is crucial for detecting and diagnosing the condition in older adults which has been put forth together as a sub-scale to effectively assess the depressive mood among the older adults in India.

#### Primary Insights

- Developed a culturally sensitive version of the CES-D scale for depression screening among older adults in India.
- Found a significant gap in mental health care access, primarily due to stigma and inadequate screening tools.
- Policy implications include incorporating culturally sensitive depression screening into mental health surveys and reducing stigma through community-based awareness campaigns.

## 2. Negative Population Growth and Population Aging in East Asia.

**Presenter(s):** Peng Du, Institute of Gerontology

**Affiliation:** Renmin University of China, Beijing, China

### Abstract

In 2022, China entered its first period of negative population growth in recent history, and it declines further in 2023. Negative population growth becomes a common dynamic in China, Japan and Korea. Both sustained low fertility rates and increasing lifespans have led to an increase in the average age in East Asian countries and the number of elderly people. Since the older the population becomes, the lower the fertility rate, which is negative reinforcement. East Asia has been predicted to have the fastest negatively growing and fastest aging populations in the world in the coming decades. As the population born during the “baby boom” in the 1950s and 1960s enters old age, many scholars believe that the Aged Boom will enter the “fast track” of size growth from 2020 to 2035 and will continue to grow until the late 2050s. Some scholars even predict that the proportion of the elderly population in East Asia will continue until the end of the 21st century. This paper will compare the population dynamics in East Asian countries, analyze the key determinants and consequences, and summarize the policy response to meet the challenges.

### Primary Insights

- Negative population growth and aging populations in China, Japan, and South Korea present social and economic challenges.
- Each country has implemented strategies like childbearing incentives and eldercare reforms to address these challenges.
- Policy implications focus on integrated policies supporting fertility, enhancing healthcare and eldercare systems, and fostering international cooperation among East Asian countries

## 3. Comparative Analysis of Birth Promotion and Active Aging Policies Implications for Thailand's Aging Population.

**Presenter(s):** Manasigan Kanchanachitra, Teerawut Sripinit

**Affiliation:** Mahidol University, Nakhon Pathom, Thailand. Thammasat University, Bangkok, Thailand

### Abstract

As Thailand faces the challenges posed by its rapidly aging population, policy makers are exploring options to mitigate the anticipated negative impacts. This paper compares the effectiveness of birth promotion and active aging policies in addressing the demographic shift, using the dependency ratio as the key indicator. Analysis of the UN Population Division data shows that birth promotion policy will result in increased dependency ratio for approximately 30 years before showing signs of decline. Conversely, active aging policies result in more immediate and substantial reductions in dependency ratio. While the dependency ratio provides a basic overview of age distribution, it overlooks variations in consumption, production, and savings across different age groups. This paper takes into consideration the National Transfer Accounts to determine the effective dependency ratio. We find that birth promotion policies incur even greater expenses and lead to an extended period of heightened dependency ratio lasting approximately 40 years. By this time, Thailand would have nearly reached its peak in terms of dependency ratio if no policy were implemented. Our findings suggest Thailand to prioritize resources and focus on implementing active aging initiative to effectively address the challenges of its aging population.

### Primary Insights

- Thailand has adopted birth promotion strategies and policies encouraging workforce participation among older adults to mitigate the impact of declining fertility rates.
- Active aging and financial literacy policies aim to reduce long-term dependency.
- Policy implications include enhancing workforce participation among older adults and creating policies that balance birth promotion with active aging.

### III. Analysis of Floor Questions Cross-cutting themes

- **Mental Health in India** Questions centered on the need for better mental health care and culturally sensitive depression screening for older adults, emphasizing the importance of training fieldworkers and reducing stigma.
- **Aging and Population Decline in East Asia** Questions focused on the effectiveness of fertility and eldercare policies, with an emphasis on international collaboration among East Asian countries to share best practices.
- **Thailand's Approach to Aging** The floor raised concerns about balancing birth promotion policies with the economic needs of an aging population and the role of financial literacy in fostering long-term sustainability.

### IV. Audience Engagement and Session Dynamics

- Active discussions on mental health care for older adults and societal aging impacts
- Strong audience interest in adapting successful aging policies to South Asian contexts
- Emphasized need for comprehensive, multifaceted strategies addressing aging and fertility challenges

### V. Session Conclusion

The session concluded with a call for integrated, region-specific policy approaches to tackle the interconnected issues of aging, declining fertility, and mental health care for older adults. It was emphasized that policies should focus not only on birth promotion and eldercare but also on supporting the economic participation of older adults and reducing social stigma related to aging and mental health.

### VI. Key Strategic Implications

1. **Integrated Policy Approaches** There is a need for cohesive, region-specific strategies that address both fertility challenges and aging issues, with a focus on eldercare, workforce participation, and mental health.
2. **Cross-Regional Collaboration** East Asian and South Asian countries should work together to exchange strategies and address demographic challenges through shared experiences and best practices.
3. **Social Protection and Stigma Reduction** Policies must prioritize social protection systems for older adults and focus on reducing the stigma associated with aging and mental health issues, encouraging older adults to seek necessary care and support.

## SESSION 5.2 Marriage and Childbirth Among Youth

**Session Chair(s):** Chi-Tsun Chiu

## 1. Session Overview

This session explored the factors influencing marriage and childbirth among youth populations. It examined socio-economic, cultural, and policy influences that shape youth decisions about marriage and fertility. Key discussions revolved around early marriage implications, the role of education and economic stability in delaying marriage, and regional disparities in marriage, fertility, and spousal violence. The session also emphasized the need for policies that address these issues, particularly among marginalized youth populations.

## II. Presentation Summaries

### 1. Which Month to Give a Birth? The Analysis on Birth Seasonality of China

**Theme:** Historical Demography

**Presenter Name(s)** Cuiling Zhang, Danin wang, Xuying Zhang,

**Affiliations:** China population and development research center, Beijing, China

#### Abstract

This study takes an indepth look at the seasonal fluctuations in China's births since 1960 and investigates the effects on seasonality of several key factors such as parity, type of residence, and changes to fertility policies. Traditionally, winter has been the peak season of births in China, while spring and summer have been lean seasons, a pattern which is quite different than patterns in Europe and the United States. After 1990, the sweeping implementation of one-child policy and the wider use of modern contraceptives among Chinese women prompted a fundamental shift in the seasonality of births, with the deviation of births from month to month gradually diminishing over time. People's self-control may serve as a key determinant accounting for such seasonal changes. First births exhibit pronounced and steady seasonality, while second and subsequent births follow a vague seasonal pattern, suggesting that later births are more likely affected by self-choice and self-intervention. The analysis also reveals that the monthly distribution pattern of second births experienced a dramatic change following the roll-out of the selective-two-child policy and the Universal Two-child Policy in 2014 and 2016, changes that reflect the adjustments people made to achieve their fertility plans under the new policy

#### Primary Insights

- Births in China peak from October to December and dip from April to June.
- Seasonal deviations in birth patterns have become more pronounced since the 1990s due to policy shifts and cultural changes.
- There are notable differences in birth seasonality between urban and rural areas, as well as across ethnic groups.
- Policy changes, especially the two-child policy, have influenced birth seasonality patterns.

### 2. What "Qualifies" Young Cohorts to be Married in China?

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter Name(s)** Kevin Yu- Ching Hsieh, Rikiya Matsukura, Nihon

**Affiliations:** University Population Research Institute, Tokyo, Japan



## Abstract

China's total population has decreased continuously for two years since 2022, and the number of newborns last year was only 9.02 million individuals. Although the Chinese government has changed its family plan since 2016, fertility rates have not improved. Because China has a strict household registration system that does not allow children to be born out of wedlock. The main reason for the rapid drop in the number of newborns can be attributed to the increase in late marriage and less marriage among young cohorts. There are many factors that influence the trend after China has experienced more than forty years of economic reform. Instead of single or cohabitant couples, this study focuses on the married people why they were able to marry successfully in the highly competitive marriage market. We separate the respondents to two groups based on their cohorts and contract a logit model to explore what are the socioeconomic characteristics of them and analyze the effects of changes in culture and the influences of values regarding marriage and family life among younger generations over the last decade by using the Chinese General Social Survey (CGSS) data.

### Primary Insights

- Higher educational attainment, particularly among women, is associated with increased rates of childlessness.
- Economic factors like job stability and homeownership, along with cultural shifts, delay marriages.
- Traditional gender roles and economic expectations significantly influence marriage decisions among youth.

## 3. Early Marriage and Spousal Violence Among the Young Women in India

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter Name(s)** Pratima Barman, DR. Harihar Sahoo

**Affiliations:** International Institute for Population Sciences (IIPS) , Mumbai, India

### Abstract

In India, nearly one-fourth of women aged 20-24 were married before age 18 and around 25 % have been subjected to spousal violence. The study aims to explore the association of child marriage and spousal violence among young women in India. Utilizing the data from National Family Health Survey 5, the result revealed that women aged 18-24, married before age 18 are more exposed to spousal violence (30.1%) than who\_married 18+ years (19.4%). Bivariate analysis shows that the spousal violence found high in Karnataka (37.6%), Bihar (29.8%) Uttar Pradesh (29.2%). Child marriage (AOR=1.15, CI:1.01-1.31) is significantly associated with spousal violence both adjusted and unadjusted model. Higher educated (AOR=0.75, CI: 0.57-0.98) and richest women (AOR=0.57, CI:0.42-0.76) have lowest odds of spousal violence. Working women of Central, Eastern, North-eastern and Southern region who had child marriage are significantly more prone to spousal-violence than others. More number of household decision shows lesser odds (AOR=0.74, CI:0.59-0.82) of spousal-violence. Whose husbands drink alcohol (AOR=2.44, CI:2.14-2.78) and exhibit more controlling behaviours (AOR=7.58, CI: 6.31-9.10) are significantly more likely to experience spousal violence. To reduce spousal violence in India, there is a need to abolish early marriage, promote education, empower women, and improve their economic status

### Primary Insights

- Early marriage significantly increases the risk of spousal violence among young women.
- Education and economic empowerment help reduce the likelihood of spousal violence.
- Regional variations show higher violence rates in southern regions, despite higher development.

- Preventing early marriage is crucial in reducing spousal violence and promoting gender equality.

#### 4. Differentials and Determinants of Marriage and First Childbirth among Women in Nepal

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter Name(s):** Ramesh Kafle

**Affiliations:** Central for Population and development (CPAD) , Biratnagar, Nepal

##### Abstract

Declined total fertility rate in Nepal is still characterized by early peak in fertility schedule coupled with a very slow decline and a high fertility in young ages. This paper examines the differentials and determinants of marriage and first childbirth among young women using data from nationally representative sample survey: Nepal DHS 2022. Overall, 45% youth women were ever married and 32.3% already had their first childbirth. The proportion ever married and proportion who had first childbirth among youth women showed a significant differential by age, type of place of residence, ecological region, province, caste, education and household wealth in bivariate analysis. After controlling other factors, type of place of residence, ecological region and caste were not significant predictors of risk of marriage. Household wealth and education showed significantly negative association with the risk of marriage. All the provinces showed significantly higher hazard ratios with reference to Bagmati province. After controlling for other factors, Mountain region showed higher Incidence Risk Ratio (IRR) of cumulative fertility compared to Hill and Gandaki province showed significantly lower IRR compared to Bagmati among youth women. Significant negative association of cumulative fertility of youth women is found with education, household wealth and age at marriage.

##### Primary Insights

- Significant provincial differences exist in the risk of early marriage, with women in the Madhesh region at higher risk.
- Education and wealth are negatively correlated with the risk of early marriage.
- Early marriage and childbirth are strongly linked to higher fertility rates among youth in Nepal.

#### III. Analysis of Floor Questions Cross-Cutting Themes

- **Policy Impact** A recurring theme in the floor questions was the role of policies in influencing youth marriage and fertility behaviors. Participants discussed the varying impacts of national policies, such as the two-child policy in China and marriage age laws in India, on delaying or accelerating marriage and childbearing.
- **Cultural Shifts** Many questions revolved around the cultural shifts observed in marriage and childbearing trends. Participants were curious about how globalization, modernization, and urbanization were altering traditional marriage and childbirth practices, especially among rural and marginalized youth.
- **Education and Economic Empowerment** Several questions centered on the relationship between education, economic stability, and marriage timing. The role of education in delaying marriage and reducing childlessness, particularly for women, was highlighted in multiple discussions.

#### IV. Audience Engagement Audience Dynamics

##### Active Audience Engagement

- Presentations on mental health care for older adults and the societal impact of aging populations sparked lively discussions.

**Focus on Regional Policy Effectiveness**

- Strong interest in understanding how successful aging policies in different regions can be adapted to South Asian contexts.

**Emphasis on Comprehensive Approaches**

- Discussions highlighted the need for multifaceted strategies to address aging populations and declining fertility rates.

**V. Session Conclusion**

The session effectively illuminated the interplay of socio-economic, cultural, and policy factors shaping marriage and childbirth among youth. It emphasized the critical role of education and economic empowerment in delaying marriage and reducing associated risks like spousal violence. A key takeaway was the pressing need for region-specific and culturally sensitive policies to address the diverse challenges faced by youth across different communities. The discussions underscored the importance of holistic approaches in crafting effective interventions.

**VI. Key Strategic Implications**

1. **Policy Recommendations** Policymakers should focus on strengthening educational opportunities, particularly for women, to delay marriage and reduce childlessness.
2. **Economic Empowerment** Promoting job stability and homeownership among youth, especially women, can help delay marriage and childbearing.
3. **Regional Focus** Tailored policies that consider regional variations in marriage and fertility patterns are essential, especially in rural and marginalized areas.
4. **Prevention Programs** Efforts to prevent early marriage and associated risks, such as spousal violence, should be prioritized, especially in high-risk regions.

**SESSION 5.3 MODELLING, ESTIMATION, AND DATA ANALYSIS**

**Chair (s):** Sibabrata Das

**I. Session Overview**

This session showcased innovative applications of data analysis and modelling in diverse healthcare and demographic contexts. It explored the potential of machine learning in mental health risk prediction, the use of spatial heat maps for resource allocation in low- and middle-income countries (LMICs), and the development of a statistical index for fertility control. The session highlighted the importance of data-driven approaches to inform decision-making and address complex challenges in healthcare and population dynamics.

**II. Presentations Summaries**

**Theme:** Digital Technology for Demographic Analysis

**1. Predictive Modelling of Mental Health Risks Among Elderly NCD Patients in India**

**Presenter(s):** Kanchan Yadav

**Affiliation:** Sikkim Manipal Institute of Medical Sciences (SMIMS)/ Sikkim Manipal University (SMU), Gangtok, Skkim

## Abstract

**Objective:** Mental illness is still a major concern in India, even after policies aimed at addressing mental health issues among older adults were put into place. To create prognostic models, machine learning techniques evaluate risks to mental health among older patients with NCDs. Finding hidden causes of mental health risks and putting in place a system for prompt detection and intervention are the goals.

**Method:** This study uses data from the Longitudinal Ageing Study in India Wave 1 (2017–2018) including 65,562 elderly population (35,083 women and 30,479 men), aged 45 years and older. Machine learning algorithms like decision tree, random forest, SVM, feature selection and ensemble methods are used to validate models across a range of samples, ensuring their robustness and generalizability.

**Results:** The study found that certain NCDs, socioeconomic, behavioral factors were significant contributors to development of highly accurate prediction models for mental health risks among elderly NCDs patients. Models stressed the significance of predictors in predicting outcomes related to mental health.

**Conclusion:** In a nutshell, to provide tailored care and targeted interventions, machine learning models are useful tool for early identification of high risk older NCDs patients, predictive modeling advancement, and proactive mental health management.

### Primary Insights

- This study employed machine learning (ML) techniques to predict depression among elderly patients with non-communicable diseases (NCDs) using data from LASI Wave 1 (2017–2018)
- BMI, age, poor sleep, diabetes, smoking, education, and urban residence were identified as significant predictors of depression
- The Random Forest algorithm demonstrated the highest accuracy (95%) and a recall of 0.91, suggesting its effectiveness in identifying depression risk
- Decision Tree models also performed well, with AUROC values ranging from 0.91 to 0.92.4
- Traditional logistic regression identified similar predictors but lacked precision compared to the ML models

## 2. Unlocking Insights from Complex Data Leveraging Spatial Heat Maps for Decision-Making in LMICs

**Theme:** Digital Technology for Demographic Analysis

**Presenter(s):** Professor Adnan Khan, Muhammad Ibrahim, Olan Naz, Amal Mohiuddin, Habib Ur Rehman

**Affiliation:** Research and Development Solutions (RADS), Islamabad, Pakistan

### Abstract

Limited funding and inadequate infrastructure in LMICs create barriers to accessing essential services, causing resource misallocation and health disparities. Untapped data assessments offer a solution to these gaps by optimizing resource allocation.

This study advocates using visualization methods, particularly bi-variate spatial heat maps, to interpret complex data in LMICs, focusing on supply and demand of contraceptive and vaccine in Pakistan's districts. Utilized data from the National Contraceptive and Vaccine Logistics Management Information System (cLMIS and vLMIS) we demonstrate the effectiveness of this approach. For contraceptives, maps were assessed by stock availability per 100,000 MWRA and proportion of stock consumption for three commodities: Condoms, Injections, and Intrauterine Devices (IUDs). Additionally, data from the vLMIS

were analyzed to assess outreach and dropout rates for essential vaccines; Bacille Calmette-Guérin (BCG), Measles-Rubella, and Pentavalent across Sindh.

Findings reveal urban areas have higher commodity availability than rural ones. Short-term methods are better stocked compared long-term methods. The analysis also highlights high outreach coverage along with high dropout rates.

Embedding such analysis into databases or dashboards using APIs allows decision-makers to generate heat maps with minimal expertise. These visualization tools are crucial for identifying over or understocked areas, optimizing resource allocation, and enhancing health outcomes in LMICs.

#### **Primary Insights**

- The presentation focused on the use of spatial heat maps to optimize resource allocation for healthcare services like contraceptives and immunization in LMICs.
- It highlighted challenges faced by LMICs, including limited funding, analytic capacity, and infrastructure, leading to underutilization of existing datasets.
- Innovations discussed included heat maps to visualize supply-demand mismatches, tri-variable heat maps combining indicators like stock, consumption, and outreach, and automated analysis tools to streamline data interpretation

### **3. Developing an Index of Fertility Control and Its Application in India**

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Presenter(s):** Brijesh P. Singh

**Affiliation** Department of Statistics, Institute of Science, Banaras Hindu University

#### **Abstract**

To study the aggregate demographic measures in Indian settings is a challenging task due to extremely heterogeneous society in terms of family formation patterns. The health problems of society with low fertility are probably more easily tackled and solved than society with high fertility. Fertility in India is observed to decline gradually towards below replacement levels in some states of India. During the analysis of a phenomenon, an indicator or index plays an important role in exploring its trend. In this study, an attempt has been made to develop an index to measure the degree of fertility control in a region or group. Most recent closed birth interval and open birth interval are used to develop the index of fertility control and for further analysis. For the analysis purpose first and fourth round of National Family Health Survey data in India have been used. It is observed that the fertility control situation is well indicated by this index is various groups and regions cross-sectional and longitudinally. The higher value of the index indicates better controlled fertility and vice-versa.

#### **Primary Insights**

- Proposed a new statistical measure of fertility control using mathematical models and Indian demographic data.
- The model, based on age at last birth and birth intervals, demonstrated robust performance despite data limitations.
- Observed a consistent rise in fertility control across urban/rural areas and socio-economic groups in India. Application to Nepal Emphasized the need for localized fertility measures to address regional disparities, such as those between Terai and mountain regions in Nepal.

### **III. Analysis of Floor Questions Cross-Cutting Themes**

**Data-Driven Decision-Making in Healthcare**

- Increased emphasis on data analytics and modeling in healthcare, particularly for mental health risk prediction and resource allocation.
- Ethical considerations of ML in healthcare, data privacy and security, and integration of models into clinical practice.

**Data Challenges in LMICs**

- Strategies to overcome data infrastructure limitations, build analytical capacity, and ensure data quality and reliability in LMICs.

**Methodological Innovations in Fertility Research**

- Development and application of new statistical measures to monitor demographic transitions.
- Robustness of the proposed fertility control index, its applicability across contexts, and its potential to inform family planning policies.

**IV. Audience Engagement & Session Dynamics**

- **High-Interaction** Mental health, spatial heat maps, fertility control index presentations sparked discussion.
- **Key Themes**
  - Invest in data infrastructure & analytics.
  - Collaborate between researchers & policymakers.
  - Address data reliability, regional disparities, clinical validation.

**V. Session Conclusion**

The session showcased the transformative potential of data analysis, modelling, and innovative statistical techniques in advancing healthcare and demographic research. It underscored the need for robust methodologies, data infrastructure, and interdisciplinary collaborations to effectively address complex health and population challenges.

**VI. Key Strategic Implications**

1. **Data-Driven Decision Making** Promote data analytics and modeling in healthcare & demography.
2. **Invest in Data Infrastructure** Build capacity in LMICs for data management & analysis.
3. **Foster Collaboration** Bridge research-policy gap for actionable strategies.
4. **Address Data Challenges** Ensure data reliability, ethical use, and context-specific approaches.

**SESSION 5.4 Education, Aspirations, and Social Change**

**Chair (s): Antonio Tamayao**

**I. Session Overview**

The session critically examined education, gender, and social change dynamics, focusing on three key areas: female education's impact on gender norms, intergenerational educational mobility, community aspirations, and socio-political challenges in marginalized regions.

**II. Presentations Summaries****1. Examining the Role of Female Education on Son Preference among Nepalese Women**

**Theme:** Nepal Special Sessions (Topics relevant to Nepal)

**Presenter(s):** Saroja Adhikari, Pawan Lamsal

**Affiliations:** International Institute for Applied System Analysis, Luxemburg, Austria. Wittgenstein Centre for Demography and Global Human Capital, Vienna, Austria. University Of Vienna, Vienna, Austria

### Abstract

This study examines the influence of female education on son preferences in Nepal, analyzing trends from 1996 to 2022 using data from the Nepal Demographic and Health Surveys (NDHS). Employing multivariate and multilevel regression, it investigates the roles of individual and contextual education in shaping son preferences. A unique contribution of this paper is the identification of a compositional effect of education on these preferences. Additionally, the research explores the joint effect of women's and their partner's education on son preference, investigating whether partner education impacts son preferences in children.

The findings reveal a positive association between the compositional effect of higher education and reduced son preference, highlighting the importance of prioritizing female education in policymaking. The study emphasizes the necessity for future research to look into how both individual and compositional effects of education impact the sex ratio at birth. This insight is crucial for informed decision-making, advocating for the incorporation of these compositional effects in addition to individual educational effects in population projection models.

### Primary Insights

- Trends from 1996–2022 show increased female education reduces son preference
- Higher female education levels positively associated with challenging gender norms
- Persistent illegal practices like sex-selective abortions despite educational advances

## 2. Education Policies and Intergenerational Educational Mobility in China: New Evidence for the 1986-95 Birth Cohort

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Jiawei Wu, Guillaume Marois

**Affiliations:** Asian Demographic Research Institute, Shanghai University, Shanghai, China. International Institute for Applied Systems Analysis (IIASA), Luxemburg, Austria

### Abstract

Research on educational mobility for Chinese born in or before 1976-85 abounds. Although the 1986 Compulsory Education Law and higher education expansion introduced in 1999 changed Chinese millennials' educational achievements, little is known about 1986-95 birth cohort's educational mobility and where it stands in the long-term trends. Drawing on census and China General Social Survey data, we documented 1986-95 birth cohort's educational mobility and its position in the long-term trends, and explored the role played by offspring's hukou origin (urban/rural) and ethnicity (Han or ethnic minorities). In the 1986-95 birth cohort, women's educational percentile ranks for secondary/tertiary levels were lower than men's, suggesting a higher percentage of well-educated women. From 1976-85 to 1986-95 birth cohorts, parent-child rank-rank correlation in education remained stable in all parent-child dyads. Educational persistence was constantly higher for offspring with urban hukou origin. Educational mobility continued to decline for men and women of urban hukou origin, but it increased for women of rural hukou origin. We did not find ethnicity differences. Our finding supports the reversal of women's disadvantage in education. Educational policies introduced around the 1990s may have contributed to greater educational mobility for women of rural hukou origin who were historically disadvantaged.

### **Primary Insights**

- Women surpassed men in secondary and tertiary education levels
- Educational persistence higher among urban hukou origins
- Increased mobility for rural women, decreased mobility for urban populations

### **3. Aging Fishers' Aspirations for their Children and Families in the Philippines**

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Cristabel Rose Parcon, Miah Maye Pormon, Rhodella Ibabao

**Affiliations:** University of the Philippines Visayas, Miagao, Iloilo, Philippines. Clemson University, South Carolina, USA

### **Abstract**

The fishers in the Philippines are aging (DS-PRDP, 2021) and poor (PSA, 2023) with one in ten belonging to food-poor households. Aside from demographics and poverty, fishers face additional challenges such as climate change, illegal fishing, and capital constraints, threatening their livelihoods and household well-being. This study investigates the aspirations of rural Filipino fishers and the barriers and opportunities influencing their aspirations. Understanding these aspirations informs targeted policy interventions, as the former shapes agricultural activities and investments. Drawing from Nandi and Neduram's (2021) framework, aspirations are viewed as influenced by societal, economic, and institutional factors. This study is based on a 2018 national survey. Among the salient findings of this study are: (1) fishers aspired for their children to pursue higher education and careers outside fishing, (2) have a weak capacity to aspire as about 2 in 3 of them only aspired to have a simple and comfortable life, and not very confident that they would be able to achieve such desired life status; and (3) majority (67%) desire to shift to another means of livelihood or find other income sources. Empowering fishers through capital enhancement and climate-resilient fishing programs is essential for sustaining their livelihoods

### **Primary Insights**

- Fishers aspire for children's education outside traditional fishing careers
- Two-thirds seek "simple and comfortable life" with low achievement confidence
- Strong desire for alternative livelihoods and supplemental income

### **4. Recent Advancements, Obstacles, and the Impact of Left-Wing Extremism in Odisha's Tribal Areas**

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Sandesh Bandhu, Nishant Kumar Singh, Dr. Vishwambhar Nath Sharma

**Affiliations:** Banaras Hindu University, Varanasi, India

### **Abstract**

Left-wing extremism (LWE) is one of the biggest internal security threats facing the country today. It is a form of armed insurgency against the state, motivated by leftist ideologies. Left-wing extremists are also known as Maoists globally and as Naxalites in India. It is mainly concentrated in the Tribal belt of India and is also called the Red Corridor. The tribal youths engage in the Naxalite movement consider this as a fight for self-respect, resources, land rights, etc. The objective of this study is to explain the Naxal problem in Odisha state, where almost 23% of the population belongs to Scheduled Tribes. To highlight the recent improvements in this issue, its impact, and future challenges with this problem. This study is based on secondary data which has been collected from various official sources like the South Asian Terrorism Portal



(S.A.T.P.), Ministry of Home Affairs, and other sources. The number of Naxal-affected districts has reduced significantly, from approximately 23 in 2005 to 10 in 2023, but still, this problem has not been completely solved. Unless this problem is solved, these states will not be able to develop like other states. Naxalism has also greatly affected the tourism industry of Odisha.

#### **Primary Insights**

- Reduced Left-Wing Extremism (LWE) activity
- Persistent challenges in poverty and land rights
- Adverse impact on regional economic development and tourism

### **III. Analysis of Floor Questions Cross-Cutting Themes**

#### **Demographic Challenges**

- Role of education in transforming social norms
- Persistent urban-rural educational disparities
- Intersectionality of gender, education, and economic mobility

#### **Policy and Social Dynamics**

- Critical importance of targeted educational interventions
- Challenges facing marginalized communities
- Need for comprehensive approaches to social change

### **IV. Audience Engagement and Session Dynamics**

#### **High-Engagement Presentations**

- Female Education Research Generated significant discussion on gender norm transformation
- Fishers' Aspirations Study Sparked debate on economic resilience strategies

### **V. Session Conclusion**

The session highlighted the urgent need for a multi-pronged approach to address the complex challenges of social mobility. This approach must encompass targeted interventions that directly address educational and economic disparities faced by marginalized groups. Furthermore, a comprehensive framework is crucial, considering the interconnected nature of social, economic, and educational factors. Finally, policies must acknowledge the intersectionality of gender, education, and economic opportunities, recognizing how these factors interact to shape individual experiences and outcomes.

### **VI. Key Strategic Implications**

1. **Educational Equity:** Creating nuanced, context-specific interventions addressing unique challenges in education and social mobility.
2. **Social Transformation:** Developing comprehensive strategies to enhance educational opportunities and economic resilience across diverse communities.

## POSTER PRESENTATION- DAY 2

### REFLECTIONS ON THE INTERDISCIPLINARY INSIGHTS FROM POSTER PRESENTATIONS

*"The poster presentation session showcased a compelling range of social, demographic, and public health issues. Each presentation, characterized by clear visuals and engaging explanations, effectively communicated complex concepts. Notably, Nepali Sah's analysis of demographic transitions and dowry practices in Nepal, Sula Sarkar's mapping of caregiver spatial patterns in Vietnam, and Sulochana Pednekar's assessment of WASH infrastructure's impact on school dropouts in India presented insightful findings. Bo Yang's exploration of family stress among migrant workers in rural China stood out for its strong integration of theory and empirical data.*

*The session emphasized the importance of evidence-based approaches in addressing global challenges. Active participant engagement fostered deeper discussions on regional variations, potential policy interventions, and methodological advancements. Overall, the session highlighted the crucial role of interdisciplinary research in informing policies and promoting social change."*

#### 1. Migration, Economic Engagement, and Family Dynamics

This theme explores the impact of migration on families, economic engagement, and how migrants contribute to their home economies. The presentations also look into changes in family dynamics as a result of migration patterns.

##### Presentations

- *Jeetendra D. Soni Return Migrants from Gulf Countries and Their Economic Engagement A Case Study of Sikar District (Rajasthan, India)*
- *Somnath Jana Mapping the Evolution of Sampling Design A Comprehensive Systematic Analysis of Global Trends, Methodological Dynamics, and Journal Impact in Survey Research and Data Science (methodological dynamics in migration surveys)*
- *Sula Sarkar, Lara Cleveland Spatial concentration of family caregivers A case study of ageing and cognitive difficulty in Vietnam*

#### 2. Gender, Class, and Social Change

This theme addresses how gender, social class, and cultural factors influence social change, particularly in terms of family structures, courtship, and marital quality.

##### Presentations

- *Dirgha Ghimire Social Change, Courtship Processes and Marital Quality in a Non-Western Setting*
- *Md Tazvir Amin, Md Mahabubur Rahman, Md Moinuddin Haider, Nurul Alam, Stephane Helleringer Reliability of Parental Survival History Data Collected Using Mobile Phone Survey A Validation Study from Bangladesh (gendered perspectives in survey data)*

#### 3. Family and Health

This theme focuses on the intersection of family structures, caregiving roles, health, and the quality of life, with a particular emphasis on caregiving for individuals with health issues, such as cognitive difficulties or cerebral palsy.

##### Presentations

- *Piyasa Mal, Nandita Saikia Traditional Health Practices And Women's Health Issues A Qualitative Exploration Among Indigenous Garo Tribes*
- *Daisy Saikia, Manas Ranjan Pradhan Quality of life of caregivers of children with cerebral palsy Evidence from Assam, India*
- *Sourav Mondal, Manas Ranjan Pradhan, Prasenjit De Predictors of Continuum of care in maternal healthcare service utilization in India*

- *Vikas Kamble, Dr. Murali Dhar Prediction Of Hypertension Among Elderly In India Using Machine Learning Technique Evidence From LASI Wave-1*

#### 4. Education and Social Mobility

Presentations under this theme explore the role of education in enhancing social mobility, addressing child nutrition, and improving health outcomes.

##### Presentations

- *Prem Pandit Teacher satisfaction with their job and its association with student learning performance among secondary schools in western Chitwan, Nepal*
- *Amrit Jose John, Udaya Shankar Mishra, Sekher T V When Mortality Differentials Lead to Unequal Ageing Experience An Indian Exploration*
- *Bharti Singh, S.K. Singh Can Strengthening Women's Status Enhance Child Nutrition in India?*
- *Sourav Dey, Udaya S Mishra Assessing the Childhood Nutritional Differential in India an illustration using Foster Greer Thorbecke criterion*

#### 5. Aging, Health, and Socioeconomic Conditions

This theme examines the challenges and determinants of aging populations, such as health risks, intimate partner violence, and socioeconomic factors.

##### Presentations

- *Suresh Jungari Long-term dynamics of changing determinants of Intimate Partner Violence in India Evidence from National Family Health Survey 2005-06 to 2019-21*
- *Shreyantika Nandi Association of cultural capital and well-being An empirical application of Bourdieusian theory of cultural capital in understanding the overall well-being among Older Adults in India through propensity score matching analysis*
- *Neelanjana Pandey Harnessing India's Demographic Dividend Impact of Manzil Project on vocational training for Girls*
- *Saraswati Kerketta Is Period Poverty a Critical Barrier to Gender Equality in Education Among Rural Adolescent Girls?*

#### 6. Environmental Health and Climate Change

This theme focuses on the links between environmental factors, climate change, and health, particularly regarding its impact on older populations and vulnerable communities.

##### Presentations

- *Megha Paul, Aparajita Chattopadhyay Role of the AMRUT scheme in drinking water accessibility for urban development across states in India*

#### 7. Family Caregiving and Multimorbidity

Focusing on family caregiving roles and the burden on caregivers, this theme examines issues like multimorbidity among the elderly and the distribution of caregiving responsibilities.

##### Presentations

- *Barsharani Maharana An assessment of Poor and Non-poor Gap in Child Malnutrition in India A Blinder-Oaxaca Decomposition Approach*
- *Tita Tabije Estimating Fertility and Mortality of Australia's Capital Cities Using Population Census Data A Bayesian Approach*
- *Vekutulu Chiero, Hemkothang Lungdim Assessment of Knowledge, Attitude, and Practice of Mothers on Infant and Young Child Feeding Practices in the Chakhesang Naga Tribe of Northeast India*

## 8. Social Media, Technology, and Youth

This theme explores the impact of modern technology, such as social media, on youth, education, and social mobility.

### Presentations

- *Anandi Shukla Internet and social media Impact on students age 20-25 years in Kanpur (UP, India)*
- *Rajesh Kumari Access to Higher Education with Availability of Institutions in Haryana (India)*

## 9. Reproductive Health and Gender Dynamics

This theme focuses on issues related to reproductive health, gender dynamics in healthcare utilization, and related challenges.

### Presentations

- *Amit Kumar Raja Unveiling Intersectionality Caste and Gender Dynamics in Maternal Healthcare Utilization Across Caste Groups in India - Insights from NFHS-4 and NFHS-5*
- *Rahul Mondal, Udaya Mishra "Halfway Life" as a Marker of Aging in a Finite Stationary Population A New Outlook on Sustainable Population*
- *Sourav Dey, Udaya S Mishra Assessing the Childhood Nutritional Differential in India an illustration using Foster Greer Thorbecke criterion*

## SESSION 6.1 CULTURAL NORMS AND MARRIAGE DYNAMICS

**Session Theme:** Family Formation and Dissolution, Family and Kinship

**Session Chair(s):** Mahesh Puri

### I. Session Overview

The session explored the complex landscape of marriage dynamics across Asia, examining how cultural norms, socioeconomic factors, and gender roles intersect to shape contemporary marriage patterns.

### II. Presentations Summaries

#### 1. Does marriage make people more traditional? Examining life course trajectories in Japan

**Presenter(s):** Haruki Sugimoto, James Raymo

**Affiliations:** University of Tokyo, Tokyo, Japan. Princeton University, Princeton, NJ, USA

### Abstract

In societies where marriage is a transformative life event that reshapes people's behaviors and life trajectories, there is good theoretical reason to expect that marriage contributes to the reinforcement of gender inequality through the traditionalization of gender role attitudes. To our knowledge, this possibility has not been directly examined in the context of highly gender-inegalitarian societies in East Asia. In this study, we focus on changes in gender role attitudes following marriage in Japan, employing growth curve analysis to evaluate alternative hypotheses about both immediate changes in attitudes (intercept shifts) and longer-term changes (slope shifts). We are particularly interested in examining attitudinal trajectories consistent with adaptation to marriage as a gendered institution and those consistent with increasingly egalitarian attitudes that may reflect disillusionment with highly gender-asymmetric marriage. We use data from the Japanese Life-Course Panel Survey that follows a nationally representative sample of 20-40

year-old men and women annually from 2007 to 2018. Very preliminary examination of the data suggests that for most men and women, marriage is associated with an initial increase in gender egalitarian attitudes followed by a slow reversion to more “traditional” attitudes

#### **Primary Insights**

- Marriage does not necessarily reinforce traditional gender roles
- Societal and structural barriers to gender equity persist
- Potential for challenging entrenched gender norms through marriage
- Complex relationship between marital status and gender role attitudes
- Importance of work-life balance in transforming gender dynamics

## **2. Remarriages in South and Southeast Asia**

**Presenter(s):** Premchand Dommaraju, Shantini Rajasingam,

**Affiliations:** Nanyang Technological University, Singapore, Singapore.

#### **Abstract**

With increasing rates of marital dissolution across countries in South and Southeast Asia, the pool of people available for remarriage has expanded. The countries in the two regions have seen structural changes and ideational shifts in recent decades. The implications of these changes for remarriages have yet to be examined. This article systematically investigates demographic aspects of remarriages in 12 countries in the two regions using DHS and MICS data. The main focus of the study is to a) estimate comparable remarriage rates across countries and b) investigate differentials in remarriage by women’s education. The results will be discussed by highlighting common trends across countries in the two regions and situating the remarriage patterns within the contexts of different societies. The article will provide a detailed demographic examination of recent remarriages in South and Southeast Asia.

#### **Primary Insights**

- Significant variations in remarriage patterns across regions
- Southeast Asia demonstrates more fluid remarriage dynamics
- South Asian patriarchal norms limit women's remarriage opportunities
- Economic conditions heavily influence remarriage decisions
- Gender inequalities deeply embedded in remarriage practices
- Cultural stigma as a significant barrier for women's remarriage

## **3. Halal Love? Islam, romance, and transition to marriage in post-*Reformasi* Indonesia**

**Presenter(s):** Ariane Utomo, Evi Eliyanah

**Affiliations:** The University of Melbourne, Melbourne, Australia. Universitas Negeri Malang, Malang, Indonesia

#### **Abstract**

As demographers, we know relatively little about how global religious revivalism is shaping transition to adulthood in the Majority World. Amidst growing literature on Islamisation in Indonesia, this paper examines how "deepening Islamic piety" influences the formation of intimate relationships. We use data from in-depth interviews with 28 individuals in Malang, East Java in 2019. We explore how digital spaces shape representations of Islamic identities in fostering and mediating intimate relationships and marriage.

Alongside conventional markers like class, family background, ethnicity, and religion, markers of religiosity gain significance in how respondents present themselves in online and offline dating and marriage markets. We highlight the tensions or parallels between pious family formation ideals and aspirations for self-improvement, autonomy, consumption, and social mobility. Our discussion situates diverse halal love narratives within broader courtship norms, delayed entry into first marriage, and small family norms among Indonesian young adults. We argue that halal love does not necessarily equate to early marriage, nor does it imply a lack of autonomy for our participants, and is compatible with small family norms. Insights on the rising traction of halal love hold theoretical implications for the global understanding of the increasingly protracted, complex, and precarious transition to adulthood.

#### Primary Insights

- Deepening Islamic piety reshaping intimate relationships
- Digital spaces playing crucial role in marriage negotiations
- 'Halal love' narratives challenge traditional marriage expectations
- Increased personal autonomy in partner selection
- Religious ideals coexisting with modern relationship approaches
- Complex interplay between religiosity and individual choice

#### 4. Marriage Squeeze and Age at First Marriage in China

**Presenter(s):** Wei Chen, Baihui Ouyang, Jinju Liu

**Affiliations:** Renmin University of China, Beijing, China. Beijing City University, Beijing, China

#### Abstract

China had skewed sex ratios at birth under the one-child policy since the early 1990s, and these birth cohorts were entering marriage since the early 2010s. Coincidentally age at first marriage in China was postponing at a more rapid pace in the 2010s than in the previous decade. Thus, we hypothesize that marriage squeeze resulting from gender imbalance had significant impact on the intensified marriage postponement in China. The current studies, however, predominantly emphasize the importance of higher education expansion since 2000 in the speeding marriage delay. Using China's population census and sampling survey data, we first examined patterns of marriage squeeze measured by matching sex ratio by province, then we test the marriage squeeze hypothesis at provincial-level using multilevel survival analysis, and sure enough provincial-level marriage squeeze level had significant negative impacts on individual risk of first marriage for both sexes. However, the influencing mechanism and degree differ by gender. For men, the "surplus" side, marriage squeeze mainly delayed their first marriage by inhibiting the availability and feasibility of marriage. Housing prices played a mediating role. For women, the "shortage" side, marriage squeeze delayed their first marriage by suppressing the desirability of marriage, with education having a moderating effect.

#### Primary Insights

- Significant delays in first marriages due to skewed sex ratios
- Economic factors substantially impact marriage timing
- Educated women and men experiencing prolonged singlehood
- One-child policy's long-term demographic consequences
- Rising housing costs as a critical marriage barrier
- Gender inequalities manifesting in marriage market dynamics

#### 5. The Association Between Human, and Socio-Economic Assets and Transition into the First Marriage Among Iranian Youth

**Presenter(s):** Farideh Khalajabadi Farahani, Marzieh Ebrahimi

**Affiliations:** Islamic Republic of. Shahid Beheshti University, Tehran

### Abstract

Over the past 4 decades, the age at first marriage has increased significantly particularly among women in Iran. There is a controversial debate about whether such a rise is mainly due to socio-economic difficulties or due to ideational marriage changes. We aimed to assess to what extent human, social, and economic assets can determine the age of and transition into first marriage using an Asset Theoretical Model. A secondary analysis of the National Family Survey was conducted (n=2013 youth aged 15-29 years). The survey data was collected employing a two-stage random quota sampling technique and an online questionnaire in 2018. Bivariate and multivariate analyses were employed to compare the mean score of different assets by marriage age and occurrence. The linear regression revealed that human assets such as education (b-coeff: 0.89, P<0.001), healthy lifestyle (b-coeff:0.29, P<0.5), egalitarian gender attitudes (b-coeff: -0.14, <p<0.001), and autonomy (b-coeff:0.048, P<0.05) significantly determine the marriage age, while socio-economic assets appeared insignificant. Interestingly, by the control of age and gender, only education (b-coeff: 0.70, P<0.001) remained in the regression model as the most significant determinant of marriage age. Population policies need to consider these results and make education and marriage more compatible with appropriate strategies

### Primary Insights

- Increasing age of marriage and rising celibacy rates
- Education and socioeconomic challenges delaying marriages
- Pronounced gender disparities in marriage decision-making
- Conflict between pronatalist objectives and youth aspirations
- Socioeconomic assets significantly influence marriage transitions
- Complex interplay of gender norms and economic opportunities

### III. Analysis of Floor Questions Cross-Cutting Themes Thematic Discussions

- **Evolving Marriage Dynamics** Transformation of traditional marriage norms
- **Gender and Autonomy** Changing power structures in relationship formation
- **Socioeconomic Influences** Economic factors shaping marriage patterns

### IV. Audience Engagement and Session Dynamics Engagement Patterns

- **High-Interaction Presentations** Indonesia's 'halal love' study generated significant discussion o China's marriage squeeze sparked extensive debates
- **Limited Engagement Areas** Technical demographic analyses received more specialized interest

### V. Session Conclusion

The session provided a comprehensive examination of marriage dynamics, revealing complex interactions between cultural norms, economic factors, and individual agency across diverse Asian contexts.

### VI Key Strategic Implications

1. **Adaptive Policy Frameworks** Develop nuanced policy approaches that recognize the multifaceted nature of marriage dynamics, addressing gender inequalities and socioeconomic challenges.
2. **Comprehensive Social Support** Create integrated strategies that support diverse marriage and relationship choices, balancing cultural norms with individual autonomy and economic realities.

## SESSION 6.2 CONTRACEPTIVE USE AND ITS IMPACTS

**Session Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Session Chair(s):** Badri Aryal

### I. Session Overview

The session explored critical dimensions of contraceptive use, examining issues of informed choice, menstrual health, post-abortion care, and the impact of contraception on women's empowerment across different regional contexts in Asia.

### II. Presentations Summaries

#### 1. Beyond Side Effects Rethinking the Role of Contraceptive Induced Menstrual Changes in the Measurement of Contraceptive Use and Unmet Need

**Presenter(s):** Melanie Channon

**Affiliation** University of Bath, Bath, United Kingdom

#### Abstract

Contraceptive induced menstrual changes (CIMCs) have been inadequately considered in the context of measuring contraceptive usage and unmet need. Using contraceptives for non-contraceptive purposes is not unusual, though data on prevalence is limited. The studies that do exist show that a large proportion of users employ hormonal contraceptives at least partly for non-contraceptive purposes, particularly to manage menstruation.

Traditionally, CIMCs have been overlooked in the family planning literature, primarily mentioned as unwanted, minor "side effects" of contraceptive usage, if at all. However, CIMCs are not necessarily minor nor "side effects", and they are not universally unwanted; for some, specific CIMCs may constitute the primary motivation for using modern contraceptives. This perspective is absent from prevailing indicators of contraceptive use and unmet need as well as the emerging discourse on redesigning family planning indicators.

In this paper, I show how current survey questions used to measure contraceptive prevalence often ignore the possibility of contraceptive usage for non-contraceptive purposes. I also illustrate that this is a problem for the conceptualization and measurement of unmet need. In particular, the concept of unmet need must grapple not only with both method misalignment and dissatisfaction, but also with the use of contraceptives for non-contraceptive reasons.

#### Primary Insights

- Contraceptive-induced menstrual changes (CIMCs) often overlooked in family planning literature
- CIMCs are key motivators for contraceptive use for some women
- Proposed integrating menstrual health into family planning programs
- Menstrual changes are not minor side effects
- Need for comprehensive approach to understanding contraceptive motivations
- Importance of menstrual health in family planning policies



## 2. Understanding the pattern of modern contraceptive use and informed choice from public and private source in India

**Presenter(s):** Abhishek Kumar, Anchal Purbey, Niranjan Saggurti

**Affiliations:** Population Council Consulting Pvt. Ltd, Noida, India. Population Council, New Delhi, India

### Abstract

Engaging private health sectors in family planning (FP) is seen as an opportunity to increase access of wider range of modern contraceptives and better quality of care. Using multi-rounds of the National Family Health Survey data, this study examines trends in use of modern contraceptives and quality of care in FP services when accessed from public and private health sectors. Method information index (MII) is used as a measure of quality of care in FP. Multinomial and binary logistic regression analysis – were applied in the study. Results indicates that proportion of modern method users in India has increased from 36% in 1992-93 to 56% in 2019-21. Furthermore, the proportion of users obtaining the methods from private health sectors increased from 5% to 14% during the period. Quality of care is significantly lower when contraceptives are obtained from private than public health sectors. For instance, odds ratio of MII was 0.84 (CI: 0.79-0.88) for female sterilization; 0.55 (CI: 0.52-0.58) for modern reversible methods, and 0.73 (CI: 0.70-0.76) for any modern methods. Our findings highlight that there is need for appropriate monitoring of private health sectors service provision to ensure informed choice and reproductive rights of women who need FP services.

### Primary Insights

- Trends in modern contraceptive use across public and private sectors in India
- Private sector use has increased
- Informed choice remains lower in private compared to the public sector
- Growing role of private sector in contraceptive services
- Need for monitoring private sector to ensure informed choices
- Importance of reproductive rights in service provision

## 3. Post-abortion contraceptive use among women in Nepal: Results from a longitudinal cohort study

**Presenter(s):** Sunita Karki, Mahesh C. Puri, Anupama Ale Magar, Diana Greene Foster, Sarah Raifman, Dev Maharjan, Nadia Diamond-Smith

**Affiliation:** Center for Research on Environment, Health and Population Activities (CREHPA), Kathmandu, Nepal. University of California, San Francisco, USA

### Abstract

Though the Government of Nepal has developed strategies to integrate contraceptive services with abortion care to better meet the contraceptive needs of women, data indicate that significant gaps in services remain. This paper assessed post-abortion contraceptive use, trends over 36-month, and factors influencing its usage. Data from this paper came from an ongoing cohort study of 1831 women who sought an abortion from the sampled 22 government-approved health facilities across Nepal. Women were interviewed eight times over 36 months between April 2019 to Dec 2023. Bivariate and multivariate analysis were used to analyze the data. Results showed that after abortion, 52.9% of women used modern contraception, with injection being the most prevalent method, followed by condoms, pills, implants, and IUD. The hazard model showed that discontinuation of modern contraception was significantly higher among women desiring additional children (aHR 0.62) and lower among literate (aHR -0.15) and those

with existing children (aHR -0.30). While women's age, ethnicity, cohabitation with husband, household income and autonomy were not statistically significant. Post-abortion contraceptive uptake is low and has even not increased significantly over time suggesting an overall need to improve post-abortion contraceptive care, particularly among women desiring no more children in Nepal.

#### **Primary Insights**

- 59% of women adopted contraception post-abortion
- 47% using short-acting methods
- Contraceptive use decreases over time
- High discontinuation rates due to side effects or pregnancy desires
- Need to strengthen post-abortion contraceptive care
- Focus on marginalized groups' reproductive health

#### **4. What Contraceptive Mix Tells Us About Contraceptive Choice in Indonesia**

**Presenter(s):** Terence Hull

**Affiliation:** Australian National University, Australia

#### **Abstract**

In 2008 Hull and Mosley were asked by the Indonesian Family Planning Program (BKKBN) and the UNFPA to advise on ways to "revitalise" the contraceptive delivery system across the Indonesian Archipelago. One of the key recommendations of their report was to reduce reliance on injectables in the contraceptive mix. It appeared that perverse incentive structures were causing midwives to promote injectable contraceptives exclusively, irrespective of women's personal preferences, or medical needs. Medical advice pointed toward a more effective "cafeteria" approach less reliant on long term exposure to contraceptive hormones, and with greater access to IUDs and male and female sterilization. This recommendation was accepted by the BKKBN and UNFPA leadership. A decade and a half later we find that injectables are still dominant. There is still a need to improve access to non-hormonal methods, and to educate health professionals to provide more appropriate information to educate women's personal family planning choices.

#### **Primary Insights**

- Injectables remain dominant in Indonesia's contraceptive mix
- Questioned influence of women versus health providers on contraceptive choices
- Need for better education for health professionals
- Importance of access to non-hormonal methods
- Challenges in contraceptive service provision

#### **5. The Power of Contraception Reversible Modern Method and Women's Career and Fertility Intentions in India**

**Presenter(s):** Roni Sikdar, Dhananjay W. Bansod

**Affiliation:** International Institute for Population Sciences, India

#### **Abstract**

India was the first country to launch an official family planning programme in 1952. After that, the government took different initiatives to run this programme. Fertility preferences and goals have shifted over time toward fewer births but with a continuing value on the birth of sons. This study understands the

effects of using contraception and fertility intentions on women's economic empowerment (WEE). The data collected from NFHS 1 to 5. We apply PCA to generate (WEE) score based on 10 indicators. Multivariate regression analyses are used for further analysis. Results show use of modern contraceptive methods in India has steadily increased from 37 in 1992-93 to 56 percent in 2019-21. Though, reversible modern methods are more likely to be associated with WEE [OR: 5.39 CI: 4.47, 6.32]. Furthermore, it shows that WEE are more likely to want children more than two years later [OR: 0.62, CI: -0.89, 2.14]. In disadvantaged rural regions, the availability of contraceptive resources is often insufficient or entirely lacking. Alongside the limited choices and the absence of informed consent, government policies are coercing women into selecting sterilization. Economically empower women are more advantageous to take decision of their fertility preference and using contraceptive methods.

#### Primary Insights

- Modern contraceptive use positively impacts women's economic empowerment
- Increased fertility intentions linked to contraceptive access
- Disadvantaged rural regions lack sufficient contraceptive resources
- Need for targeted funding and policies
- Addressing contraceptive access in rural areas
- Linking contraception to women's economic empowerment

#### III. Analysis of Floor Questions Cross-Cutting Themes

- **Reproductive Autonomy and Choice** Explored the critical intersection between individual agency and healthcare systems, emphasizing the importance of informed decision-making in contraceptive use. This theme highlighted how women's ability to make autonomous choices is fundamental to reproductive health, transcending regional and sectoral boundaries.
- **Gendered Health Infrastructures** Examined how healthcare systems and policies reflect and perpetuate gender dynamics, revealing systemic challenges in delivering equitable reproductive health services across different socio-economic contexts.
- **Methodological Innovations in Reproductive Research** Discussed emerging research methodologies that capture nuanced experiences of contraceptive use, moving beyond traditional quantitative approaches to incorporate qualitative insights and lived experiences.
- **Intersectionality in Reproductive Health** Analyzed how factors like rural-urban divide, socioeconomic status, and cultural contexts significantly influence contraceptive access and usage, underscoring the need for contextualized healthcare strategies.

#### IV. Audience Engagement and Session Dynamics Engagement Patterns

##### High-Interaction Presentations

- Menstrual health insights generated significant discussion
- Women's empowerment research sparked active participation

##### Noteworthy Discussions

- Contraceptive choice mechanisms
- Regional variations in reproductive health services

#### V. Session Conclusion

The session provided comprehensive insights into contraceptive use, revealing complex intersections between reproductive health, women's empowerment, and regional healthcare dynamics.

## VI. Key Strategic Implications

1. **Comprehensive Reproductive Health** Develop holistic approaches integrating menstrual health, informed choice, and women's empowerment.
2. **Policy Development** Create targeted interventions addressing contraceptive access in rural and marginalized communities.
3. **Healthcare Service Improvement** Enhance professional training and service quality in both public and private contraceptive care sectors.

## SESSION 6.3 MIGRATION PATTERNS AND ACCULTURATION

**Session Chair(s):** Masataka Nakagawa

### I. Session Overview

This session explored the dynamic interplay between migration patterns and the process of acculturation. It delved into the factors influencing migration decisions, the impact of acculturation on migrants' settlement intentions, and the demographic shifts shaping Asia's population landscape.<sup>1</sup> The session integrated traditional demographic methods with contemporary big data technologies to enhance data quality and facilitate informed decision-making.

### II. Presentation Summaries

#### 1. Variation in Migration Flows by Duration Intervals

**Theme:** Demographic Theory and Methods (including Demographic Training)

**Presenter(s):** Guy Abel

**Affiliation:** University of Hong Kong, Hong Kong, Hong Kong

#### Abstract

Migration data are often collected at a fixed interval, such as place of residence one year ago. However, migration data users often require measures at different temporal scales that might not be available, such as the place of residence five years ago. Simple conversions of migration measures to shorter or longer values through simple scaling proportional to the length of the duration period used in the migration definition are known to be insufficient. Our research explores which factors related to the region of origin, destination, and migration corridors impact the measure of flow counts over varying duration intervals. We use data from IPUMS International to compare internal origin-destination migration data from multiple intervals across many countries and years. We find that the relationship between the volume of migration flows and the duration interval used in defining migration is non-linear. Multiple factors are related to this variation, for example, longer-distance migration flows decrease at longer duration intervals. To address the practical need for migration data at varying intervals, we develop a predictive model to estimate migration flows for intervals not directly measured, providing an empirical-driven solution to the one-year, five-year migration problem.

#### Primary Insights

- Examined how migration flows change across different time intervals (e.g., one year, five years).
- Migration flows exhibit a non-linear decrease as the duration interval lengthens.
- Factors such as population size, distance, GDP, and geographical characteristics influence these variations.

- Developed a predictive model to estimate migration flows for time intervals lacking data, such as converting five-year data to one-year estimates.
- This model, based on data from 28 countries and over 124 million records, estimated 20.1 million one-year internal migration flows across 17,595 corridors

## **2. Internal Migration and Living Standards A Cross-Country Assessment**

**Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Rodrigo Lovaton, Sula Sarkar

**Affiliation:** IPUMS, University of Minnesota, Minneapolis, USA

### **Abstract**

Migration decisions are often associated to the search for better opportunities and increased well-being. In this study, we examine the role of living standards and inequality prevailing in the place of origin and destination as push or pull factors for internal migration. For this purpose, we use census microdata samples available for the 1990, 2000, and 2010 rounds for various countries around the globe. The analysis benefits from harmonized microdata from IPUMS that include migration variables representing consistent spatial footprints. We construct a living standards index from seven indicators that we can calculate consistently across census datasets. Preliminary results for Indonesia 1990-2005 show that destinations with higher living standards and lower inequality receive higher migration flows, while lower inequality in the origin will push more persons to migrate.

### **Primary Insights**

- Migration decisions are influenced by the desire for better living standards and reduced inequality at destinations.
- Conversely, lower inequality at the origin can also encourage migration as individuals seek improved prospects elsewhere.
- The study employed a Living Standards Index (LSI) constructed using consistent indicators, including access to electricity, sanitation, and education.
- Areas with a higher LSI, particularly urban regions, tend to attract more migrants.
- Migration is more prevalent among individuals with higher education and those aged 18-35.
- Factors such as overpopulation, cost of living, and climate change also contribute to migration patterns.

## **3. What Can We Learn from Asia's Demographic Transition Driving Forces, New Experiences and Theoretical Contributions**

**Theme:** Demographic Theory and Methods (including Demographic Training)

**Presenter(s):** Zhongwei Zhao

**Affiliation:** Australian National University, Canberra, Australia

### **Abstract**

Asia's rapid demographic transition has been one of the most significant events taking place in the world since the end of the WWII. Over 1950-2020, Asia's population (about two-third of the world total) increased its life expectancy from 42 to 74 years and lowered its Total Fertility Rate from 5.7 to 2.0. They greatly changed the age structure of the population and opened the demographic window. Accompanying

these changes, many countries experienced rapid industrialization and modernization. The number of Asian cities with more than one-million people increased from 27 to 320. In 2020, 60 percent of the world's largest urban agglomerations were in Asia. Our knowledge about these changes, especially their process, variations and consequences, has improved greatly in recent decades. Despite that, major gaps in studies of the major driving forces of Asia's demographic transition, its new experiences or characteristics, and their theoretical contributions to a better understanding of the worldwide demographic transition remain. Based on the research conducted in editing *Routledge Handbook of Asian Demography* and elsewhere, this paper further analyses demographic changes taking place in Asia and other parts of the world in recent history and is aiming to fill these gaps.

#### Primary Insights

- Asia's demographic transition from 1950 to 2020 has witnessed a significant rise in life expectancy (from 42 to 74 years) and a decline in total fertility rate (from 5.7 to 2.0).
- Despite population growth from 1.4 billion to 4.7 billion, growth rates have slowed since the mid-1990s.
- This period also saw a rapid increase in urbanization, with the number of cities with over 1 million inhabitants surging from 27 to 320.
- Asia's age range has undergone transformation, a decline in the youth population, an increase in the working-age population, and a growing elderly population.

#### 4. The Impact of Acculturation on Settlement Intention of Chinese Rural-Urban Migrants The Mediating Roles of Socioeconomic Status and Psychological Well-Being

**Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Shuzhuo Li, Zhongshan Yue, Zhixuan Chen

**Affiliation:** Xi'an Jiaotong University, Xi'an, China

#### Abstract

Like their international counterparts, rural-urban migrants in developing countries such as China experience a process of acculturation. The socioeconomic and psychological determinants behind settling in cities among rural-urban migrants have been well explored in existing literature. However, few studies have addressed the impact of acculturation on settlement intention of rural-urban migrants. Using data from a survey of migrant workers, this paper goes beyond examining the link between acculturation and settlement intention and explores mediating roles of SES and psychological well-being. Based on latent class analysis, four categories of acculturation are identified, including two subtypes of integration and two subtypes of separation. The mediating effects of SES and psychological well-being are partially confirmed. Compared with migrants who belonged to subtypes of separation, individuals who adopted two types of integration strategies tend to settle in cities, because integrated migrants generally enjoyed higher levels of SES and psychological well-being than separated ones.

#### Primary Insights

- This study examined how acculturation, the process of adapting to a new culture, influences the settlement intentions of rural-urban migrants in China.
- The research identified four distinct acculturation categories using latent class analysis, including two integration subtypes and two separation subtypes.

- Migrants who successfully integrate into the urban environment generally exhibit higher socioeconomic status and psychological well-being. These factors, in turn, increase their likelihood of settling permanently in the city compared to migrants who remain separated from the dominant culture.

### III. Analysis of Floor Questions Cross-Cutting Themes

#### Demographic Challenges

- Need for province-specific policy interventions
- Importance of addressing intersectionality in health and social services

#### Emerging Research Themes

- Complex relationship between climate change and internal migration
- Age as a critical factor in demographic studies, requiring precise statistical approaches
- Challenges in tracking population movements, especially temporary residents

#### Fertility and Migration Dynamics

- Variations in fertility trends between developing and underdeveloped countries
- Significant role of rural integration in shaping demographic transitions
- Importance of socio-economic factors in family planning and contraceptive use

#### Policy and Social Dynamics

- Critical role of education in improving agency
- Challenges of marginalization across different population groups
- Need for comprehensive approaches that go beyond demographic transitions to include cultural contexts

### IV. Audience Engagement and Session Dynamics

- The Q&A session was highly interactive, exploring complex demographic topics through engaging discussions.
- Participants critically examined key issues including climate-induced migration (using Jakarta as an example), demographic modeling nuances, population tracking challenges, and fertility trends across different socio-economic contexts.
- The session demonstrated intellectual depth, with audience members probing intricate connections between migration, population dynamics, and socio-economic factors.

### IV. Session Conclusion

The session successfully explored the intricacies of migration patterns and acculturation, providing insights into the diverse factors driving migration decisions, the impact of cultural adaptation on settlement intentions, and the demographic shifts shaping populations. It emphasized the need for comprehensive approaches that consider socioeconomic conditions, psychological well-being, and cultural dynamics to fully understand migration phenomena and develop effective policies.

### V Key Strategy Implications

- **Data-Driven Predictive Models:** There is a need for predictive models to better understand migration flows, especially in data-limited intervals.
- **Multifaceted Acculturation Consideration:** Acculturation's complex relationship with socioeconomic status and psychological well-being must be considered in shaping migrant settlement intentions.

- **Integration of Big Data with Demographic Methods:** Combining contemporary big data technologies with traditional demographic methods can enhance data quality, improving decision-making for addressing migration-related challenges.

## SESSION 6.4 HEALTH AND NUTRITION IN CHANGING ENVIRONMENTS

**Session Chair(s):** Abdullah Al Mahmud

### I. Session Overview

The session explored the intricate relationships between health, nutrition, and the environment in the context of changing demographics and socioeconomic conditions. It highlighted the impact of dietary practices, socioeconomic factors, and gender-specific interventions on child health. Researchers presented findings on stunting, anemia, and the effects of migration and environmental quality on health outcomes.

### II. Presentations Summaries

#### 1. Minimum Adequate Diet and Association with Inequality in the Prevalence of Stunting among 6-23 Months Children in India A Decomposition Analysis Across Social Groups

**Theme:** Ethnicity/Race, Religion and Language

**Presenter(s):** Mriganka Dolui

**Affiliation:** Central University of Karnataka, Gulbarga, India

#### Abstract

The gradation of inequality in stunting and the effects of minimum adequate diet (MiAD), including other factors among social groups, have been neglected in India. To fill this significant gap, this study aims to investigate the inequality and factors influencing stunting, including MiAD among children under the age of five years (6-23 months) in social groups in India. The study utilized the data from the National Family Health Survey (NFHS-5), considering 56,522 children aged 6-23 months and categorised them into two social groups (SC-ST and non-SC-ST). We comprehensively utilized descriptive statistics along with bivariate and multivariate analysis to understand the status of MiAD and stunting along with 'fairlie' decomposition model. The findings revealed that the prevalence of stunting was higher among SC-ST at 38.57 per cent and 32.58 per cent among non-SC-ST. There was a gap of 5.99% in stunting between SC-ST and non-SC-ST. The decomposition defined inequality in stunting was primarily explained by wealth index (39.42), Mothers' education (11.87), mothers' BMI (10.12), sanitation facilities (7.06), mode of delivery (3.78), and children's birth order (2.96). The findings underscore the importance of targeted interventions and policy frameworks need to address not only nutritional factors but also other demographic and socioeconomic factors.

#### Primary Insights

- Investigated the association between Minimum Adequate Diet (MiAD) and stunting among children in India
- Examined the stunting gap between social groups (SC-ST vs. non-SC-ST)
- Found a significant stunting gap, with higher prevalence among marginalized communities
- Stunting is significantly affected by MiAD
- Emphasized the importance of addressing socioeconomic inequalities and promoting equitable access to nutrition and healthcare



## **2. Investigating the Alarming Diabetes Scenario among the Younger Population of Two Different States in India A Comparative Study of West Bengal and Kerala**

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter(s):** Ranjan Singha, Dr. Dhananjay W. Bansod

**Affiliation:** International Institute for Population Sciences, Mumbai, India

### **Abstract**

India is facing a substantial burden of diabetes and has taken the second position globally after China. Among the states of India, Kerala has the highest rate of diabetes, while younger-age (15-45 years) diabetes is highest in West Bengal. This study aims to assess, quantify, and compare diabetes at a younger age in these states, considering various risk factors and characteristics. Data on the 15-45 year population was obtained from India's Demographic and Health Survey (2019-2021). About 12.19% and 9.16% of the younger population were diabetic in West Bengal and Kerala, respectively. Both states exhibited higher diabetes rates among those with hypertension, overweight/obesity, tobacco/alcohol use, lower education, and marital disruptions. West Bengal indicated heightened prevalence among severely anemic and affluent individuals, while in Kerala, it was more pronounced among the economically disadvantaged. Common risk factors included hypertension, overweight/obesity, increased waist-to-hip ratio, and advancing age in both regions. In West Bengal, diabetes was more likely in those with moderate/severe anemia, males, divorced/separated/widowed individuals, and the OBC caste, while in Kerala, it inclined towards married individuals. Anemia emerges as a significant factor influencing diabetes, notably impacting West Bengal. The study emphasizes the relevance of gender-specific considerations.

### **Primary Insights**

- Compared diabetes prevalence among younger populations (15-45 years) in West Bengal and Kerala
- Identified risk factors associated with diabetes, including hypertension, body mass index (BMI), waist-to-hip ratio, anemia, socioeconomic status, education level, and marital disruptions
- Found higher diabetes prevalence among younger individuals in West Bengal compared to Kerala
- Highlighted the need for targeted interventions to address the rising burden of diabetes in India

## **3. Exploring the Relationship between Birthweight and Father's International Migration Status in Nepal**

**Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Uttam Sharma, Dirgha Ghimire, Emily Treleaven

**Affiliation:** Institute for Social and Environment Research- Nepal, Chitwan, Nepal. University of Michigan Ann Arbor, USA

### **Abstract**

While extensive research has explored the impact of parental migration on the well-being of young, school-age, and adolescent children left behind in various contexts, there is a paucity of research on the effects at birth, including birthweight. Utilizing individual and household data from the Chitwan Valley Family Study, a panel study conducted in a migrant-sending region in Nepal, this study examines the effects

of fathers' international migration on their children's birthweight in an analytic sample of 2,208 children. Our preliminary analyses reveal a statistically significant and negative correlation between paternal international migration at the time of delivery and low birthweight of their children. This association holds even after accounting for variables such as the child's gender, ethnicity, maternal age at birth, month of birth, parental education, and other indicators reflecting the household's socio-economic status. These findings suggest parents' labor migration affects children's outcomes from the beginning of life.

#### **Primary Insights**

- Examined the relationship between father's international migration status and birthweight of children in Nepal.
- Found a positive association between paternal international migration and birthweight.
- Children of international migrant fathers had a lower prevalence of low birth weight.
- This positive effect was stronger for boys than for girls.
- Highlighted the potential role of remittances in improving maternal nutrition and child health outcomes.

#### **4. Perceived Environmental Quality and Self-Rated Health A Cross-Sectional Study Brunei Darussalam**

**Theme:** Population and Environment, Climate Change, and Sustainable Development

**Presenter(s):** Evi Nurvidya Arifin

**Affiliations:** Centre for Advanced Research, University Brunei Darussalam, Bandar Seri Begawan, Brunei Darussalam

#### **Abstract**

This cross-sectional survey conducted in Belait district, Brunei Darussalam aimed to explore the relationship between individuals' perceptions of environmental quality and self-rated health (SRH), considering socio-economic-demographic and healthy lifestyle factors. Out of 1000 respondents aged 18 years and older, 673 were included. SRH was dichotomized as good health or otherwise. Environmental quality perceptions encompassed natural (air, marine, water, noise, and olfactory pollution) and social (crime) dimensions. Logistic regression analysis revealed that perceiving better air (OR=2.20, p=0.018) and marine quality (OR=1.84, p=0.002) significantly correlated with good SRH. Healthy lifestyle factors, like exercising 3-5 times weekly (OR=3.89, p=0.000) and employment (OR=1.72, p=0.021), were positively associated with good SRH. Interestingly, frequent physical exercise appeared to mitigate the adverse health effects of environmental pollution. These findings underscore the importance of environmental quality in SRH, while also highlighting the compensatory role of a healthy lifestyle, particularly regular physical activity, in buffering against environmental health risks.

#### **Primary Insights**

- Explored the association between perceived environmental quality and self-rated health (SRH) in Brunei.
- Perceptions of marine and air quality were significantly related to SRH.
- Frequent physical exercise was found to mitigate some adverse health effects of environmental pollution.
- Emphasized the importance of considering environmental factors in public health policies.

#### **5. A Review of Extreme Weather Events and Nutritional Outcomes A Bibliometric Analysis**

**Theme:** Population and Environment, Climate Change, and Sustainable Development

**Presenter(s):** Anurag Yadav, Dr. Md. Juel Rana

**Affiliation:** Govind Ballabh Pant Social Science Institute, Prayagraj, India

### **Abstract**

In 2023, daily global mean temperature exceeded the threshold of 1.5<sup>o</sup>centigrade 38 times before September 12. This increase in the mean temperature of the earth is resulting in the increased frequency and severity of extreme weather events (EWE's) which is causing more drought and flooding events. Catastrophic flooding is damaging crop production, causing inaccessibility of safe, sufficient, and nutritious meals among peoples of lower socio-economic class. This review paper aims to shed light on the bibliometric analyses of the relationship between extreme weather events and their far-reaching nutritional outcomes. By fostering interdisciplinary collaborations and knowledge exchange, through the database of ScienceDirect, Google Scholar and Web of Sciences, this review paper seeks to advance our understanding of the multifaceted impacts of extreme weather on human nutrition. The findings show an increasing trend of research in recent decades and USA has been main center for this. Research is still focused on impact analysis and crop yield. Although less research is conducted on nutritional outcomes of increasing extreme weather events. Countries USA and China had done better research in this field, but India's research contribution is not satisfactory, which need to be addressed to have better clarity on this issue.

### **Primary Insights**

- Reviewed the literature on the relationship between extreme weather events (EWEs) and nutritional outcomes.
- Highlighted the increasing frequency and intensity of EWEs globally.
- Emphasized the negative impacts of EWEs on food security and nutrition, particularly in low- and middle-income countries (LMICs).
- Called for more research on the topic, particularly in LMICs.

## **6. Children Health and Living Environment in Urban Slum Areas of Eight Cities in India**

**Presenter(s):** Laxmi Kanta Dwivedi

**Affiliation:** International Institute for Population Sciences

### **Primary Insights**

- Assessed the living conditions and health of children in urban slum areas in India.
- Examined the impact of various dimensions of deprivation on child health.
- Highlighted the disparities in child health outcomes based on socioeconomic and environmental factors.

## **III. Analysis of Floor Questions Cross-Cutting Themes**

- **Socioeconomic Determinants of Health** The presentations highlighted the significant role of socioeconomic factors, such as poverty, education, and access to healthcare, in shaping health and nutrition outcomes. Discussions emphasized the need for policies and interventions that address these underlying inequalities.
- **Environmental Impacts on Health** Several presentations focused on the effects of environmental factors, including pollution, climate change, and access to sanitation, on health. The discussions called for integrated approaches to environmental and public health policy.

- **Child Health and Nutrition** A recurring theme was the importance of investing in child health and nutrition. Presentations discussed the long-term consequences of stunting, malnutrition, and early-life health challenges, emphasizing the need for interventions that target vulnerable populations.

#### IV. Audience Engagement and Session Dynamics

##### Engagement Patterns

- The session elicited moderate audience engagement, with some presentations sparking more discussion than others.

##### Noteworthy Discussions

- The presentation on diabetes sparked a discussion on the regional differences in prevalence and risk factors, prompting questions about potential explanations related to lifestyle, dietary habits, and healthcare access.
- The research on the link between father's migration and child birthweight generated questions about the mechanisms by which remittances might influence health outcomes, with some participants inquiring about the role of improved maternal nutrition and healthcare utilization.
- The study on perceived environmental quality and self-rated health led to a discussion about the complexities of measuring environmental factors at the individual level and the need for more nuanced research on the interplay between social and environmental determinants of health.

#### V. Session Conclusion

The session provided a comprehensive overview of the interconnected challenges and opportunities in health and nutrition in changing environments. It highlighted the need for research-informed policies and interventions that consider the multifaceted influences of socioeconomic factors, environmental conditions, and demographic trends on population health. The session emphasized the importance of addressing health inequalities and promoting equitable access to healthcare and nutritious food for all.

#### VI. Key Strategic Implications

1. **System Strengthening** Comprehensive healthcare development focusing on primary health, maternal care, and disease prevention through integrated, multi-dimensional strategies.
2. **Socioeconomic Resilience** Addressing health challenges by simultaneously tackling inequalities, promoting sustainable environments, and improving access to education and economic opportunities.
3. **Community-Driven Innovation** Prioritizing research, data-driven interventions, and community engagement to create adaptive, participatory, and sustainable health strategies.

### SESSION 7.1 BARRIERS AND EQUITY IN WOMEN'S HEALTHCARE

**Session Chair(s):** Aree Jampaklay

#### I. Session Overview

The session comprehensively examined women's healthcare challenges in India, focusing on multifaceted barriers to healthcare access, reproductive rights, health financing, and systemic inequities affecting women across different socio-economic contexts.

#### II. Presentations Summaries

## 1. Barriers to Women's Healthcare Access Assessing the Individual, household and Community-level Predictors in India

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Manas Pradhan, Prasenjit De.

**Affiliations:** International Institute for population Sciences (IIPS), Mumbai, India

### Abstract

Ensuring comprehensive and quality healthcare accessibility is necessary to promote good health and well-being. This study investigates women's perceived household-level, logistic, and facility-level barriers to healthcare accessibility and its determinants in India. National Family Health Survey (NFHS-5) data with a total sample of 108785 women aged 15-49 has been used. The primary outcome variables were household, logistic, and facility-level barriers to healthcare accessibility. Socio-demographic predictors were assessed using multivariate logistic regression. The study found a considerable proportion of Indian women (84%) with at least one perceived barrier to accessing healthcare, with significant inter-state variations. Facility-level (55%) and logistic barriers (51%) were the predominant obstacles to accessing healthcare. Women aged 35-49, with higher education, exposed to mass media, working in white-collar jobs, access to bank accounts, mobile phones, and rich households had lower odds of perceived household, logistic, and facility-level barriers to healthcare accessibility. A significant percentage of women faced facility-level barriers to healthcare accessibility, such as the unavailability of drugs and healthcare providers. The study suggests enhancing the current health system to ensure sufficient availability of medications and drugs at healthcare facilities, alongside ensuring the presence of medical professionals to alleviate the disparity in healthcare access.

### Primary Insights

- Significant healthcare access disparities linked to education, financial independence, and rural residency
- Facility-level challenges including drug shortages and provider unavailability
- Higher education and media exposure correlate with reduced healthcare barriers
- Demographic differences substantially impact healthcare accessibility

## 2. Second Trimester Abortions in India Associated Factors and Reasons

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Presenter(s):** Chander Shekhar, Harihar Sahoo, Labhita Das

**Affiliations:** International Institute for Population Sciences, Mumbai, India.

### Abstract

In India, as per the last published estimates of induced abortions in 2015, nearly 15.6 million occurred annually. Knowing the access to service provisions, sexual and reproductive health, and legal challenges in seeking second trimester abortions, it becomes imperative to examine the factors affecting and reasons for seeking second trimester abortions. For this, we have analysed the reproductive histories recorded in 60 calendar months in the National Family Health Survey (2019-21). Nearly 14% abortion of all abortions reported were done in the second trimester of pregnancy. Women with no children, rural, non-literate education, and belonging to the Southern region were more likely to report abortion sought in the second trimester than their respective counterparts. The most prominent reason for seeking abortion in the second semester was either the woman's own health or the health of the fetus. If our proportion of second

trimester abortions is applied to the total estimated size in 2015, it would yield a daunting number of second trimester abortions. Hence, the findings of the study suggest that access and quality of abortion services must be provisioned, particularly for marginalized population subgroups that would help in achieving the target 3.7 of the Sustainable Development Goals in India.

#### **Primary Insights**

- High prevalence of second-trimester abortions associated with unplanned pregnancies
- Persistent barriers include social stigma, financial constraints, and delayed pregnancy detection
- Complex legal and social landscape surrounding abortion access
- Need for expanded healthcare services and improved early detection mechanisms

### **3. Equity in Healthcare Financing an Analysis of the Impact of Health Insurance on Out-of-Pocket Expenditure in India**

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Anushree KN

**Affiliations:** Manipal Academy of Higher Education, Bengaluru, India

#### **Abstract**

An equitable health system essentially ensures that utilization of health services is based on the need [equity in delivery] and payments are in accordance with the ability to pay [equity in financing]. The present study aims to analyze if provision of health insurance reduces out of pocket expenditure among the population. National Sample Survey in 2004, 2014 and 2017-18 is used with sample size ranging from 333104 to 555352. The study employs Heckman's two-step model to estimate the determinants of out-of-pocket healthcare expenditure. The Heckman's two-step model to estimate results suggests that individuals utilizing public healthcare facility incurred 80 percent  $((\exp(-1.61)-1))$  less OOP expenditure due to hospitalizations in 2017 compared to those using private healthcare facility. Although overall out of pocket expenditure has declined due to increase in the enrolment of household and subsequent utilisation of health insurance during hospitalization yet differences in the extent of utilisation of health insurance and thereby reduction in OOPE was observed across social groups, place of residence, choice of care and type of illness treated. Policy initiatives aiming to reduce these differences must focus on reorienting programme through increasing overall health insurance coverage to households through increase public investment in health.

#### **Primary Insights**

- Pronounced socioeconomic disparities in out-of-pocket expenditures (OOPE)
- Existing public insurance schemes inadequately address rural population needs
- Significant financial burden disproportionately affecting marginalized communities
- Critical gaps in current healthcare financing models

### **4. The Role of a Constitutional Right to Health in Population Health beyond the Promotion of Universal Health Coverage in Non-emergency and Emergency Situations**

**Theme:** Others (Education, Well-being, and Happiness,

**Presenter(s):** Hiroaki Matsuura

**Affiliations:** Shoin University, Atsugi-shi, Japan

## Abstract

Universal health coverage is an essential component of the right to health, but the scope of this right extends well beyond healthcare access. This paper examines the role of a constitutional right to health in population health beyond the promotion of universal health coverage. We investigate the relationship between various types of health outcomes (infant and under-five mortality rate as well as natural disaster-related deaths and intrastate battle-related deaths) and the UHC service coverage index over time, at the country (and event) level during 2000 to 2019. UHC service coverage index is associated with a reduction in infants and under-five mortality rates in peacetime and intrastate battle-related deaths in emergency. However, such health-improving and health-protection effects are only found in countries with the presence of a constitutional right to health. These results indicate that constitutional right to health plays a crucial role in translating healthcare access into health outcomes.

## Primary Insights

- Constitutional right to health as a pivotal mechanism for strengthening healthcare systems
- Significance during crisis periods
- Potential to protect marginalized groups beyond universal health coverage (UHC) goals
- Legal frameworks as transformative tools for healthcare equity

## 5. Study of postpartum amenorrhea period and its determinants using NFHS data

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Presenter(s):** A.K. Tiwari, Ravi Kant Maurya, Anuj Singh

**Affiliations :** Banaras Hindu University, Varanasi, India

## Abstract

Postpartum amenorrhea, the temporary cessation of menstruation following childbirth, is a crucial parameter that reflects not only the physiological recovery of women post-delivery but also provides insights into broader aspects of fertility, maternal and child health. The return of a woman's menstrual cycle after giving birth is a notable consideration in developing countries marked by high rates of population growth. For this study, we have used multiple rounds of the NFHS, researchers have identified the covariate, which affect the in postpartum amenorrhea in India. Preliminary basic statistics has been used to get the descriptive idea about the covariates of PPA. A hazard ratio is a statistical method used in survival analysis to compare the risk of an event or outcome occurring in different groups or conditions over time.

## Primary Insights

- Complex factors influencing postpartum amenorrhea duration
- Significant variations based on breastfeeding practices, socio-economic status, and healthcare access
- Rural and underprivileged women experiencing prolonged amenorrhea periods
- Intersection of cultural, demographic, and healthcare factors

## III. Analysis of Floor Questions Cross-Cutting Themes

### Thematic Discussions

- **Healthcare Access Equity** Extensive dialogue on systemic barriers preventing comprehensive women's healthcare

- **Reproductive Rights** In-depth exploration of legal, social, and medical challenges surrounding abortion and women's reproductive choices
- **Socio-Economic Determinants** Comprehensive examination of how economic status, education, and geographic location impact healthcare experiences

#### IV. Audience Engagement and Session Dynamics

##### Engagement Patterns

- **High-Interaction Presentations**
  - Healthcare financing presentation sparked significant discussion about economic disparities
  - Second-trimester abortion research generated substantial debate on policy and social norms
- **Limited Engagement Areas**
  - Postpartum amenorrhea research received comparatively less interactive response

#### V. Session Conclusion

The session provided a nuanced exploration of women's healthcare challenges, revealing complex intersections of social, economic, legal, and medical factors. By examining multiple dimensions of healthcare access, the presentations highlighted critical needs for comprehensive, context-specific interventions that recognize and address systemic inequities.

#### VI. Key Strategic Implications

1. **Comprehensive Healthcare Policy Reform** Develop integrated approaches addressing multidimensional barriers to women's healthcare, emphasizing education, financial support, and targeted interventions for marginalized populations.
2. **Rights-Based Healthcare Framework** Strengthen constitutional and legal mechanisms to ensure equitable, accessible healthcare, with particular focus on reproductive rights, financial protection, and universal health coverage.

## SESSION 7.2 FERTILITY PATTERNS AND INFLUENCES

**Session Chair(s):** John Bryant

### I. Session Overview

The session explored complex fertility patterns across different Asian contexts, examining son preference, adolescent pregnancies, non-marital childbearing, assisted reproductive technologies, and policy interventions in reproductive health.

### II. Presentations Summaries

#### 1. Son Preference at the Crossroads A Comparison of Parity Progressions among Birth Cohorts of Women in Middle East, Central and South Asia

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Presenter(s):** Konstantin Kazenin

**Affiliation:** Stockholm University, Stockholm, Sweden



## Abstract

The study considers cross-cohort dynamics of son preference in seven countries where son preference is manifested in a higher probability of transition to the next child for women with no sons or less sons than daughters. Theories of gender preferences in fertility lead us to expect that as fertility decreases from older to younger cohorts, son preference begins to affect transitions to lower parities. At the same time, urbanization, educational expansion for women and growth of their labor force participation are expected to weaken son preference in younger cohorts, irrespective of parity. These expectations were assessed for cohorts of women born in the 1950s-1990s in Bangladesh, Egypt, Jordan, Pakistan, Tajikistan, Turkey, and Uzbekistan on DHS data. Cox regressions were estimated where the cohort variable was interacted with the binary parameter of having at least one son. The analysis has shown that son preference effects became stronger from lower to higher parities and from older to younger cohorts. All the countries considered followed this pattern with striking similarity, although they differed in pace of fertility decrease. The observed cross-cohort tendency has consequences for total fertility and for inequalities between sons and daughters.

### Primary Insights

- Explored son preference dynamics across multiple Asian countries
- Analyzed parity progressions across birth cohorts
- Examined impact of son preference on fertility patterns
- Son preference intensifies as fertility decreases
- Limited impact of urbanization and education on changing gender preferences
- Persistent influence of patrilocal social structures

## 2. Studying the understudied phenomenon Levels, trends, and correlates of under-15 fertility in the Philippines

**Presenter(s):** Maria Paz Marquez & Maria Midea Kabamalan

**Affiliation:** University of the Philippines Population Institute, Quezon City, Philippines

### Abstract

Amidst declining fertility rates among 15-19-year-old women in the Philippines, attention has shifted to very young adolescents (ages 10-14). Vital registration data indicate a troubling twofold increase in births to girls aged 10-14, surging from 1,522 in 2012 to 3,135 in 2022 which has prompted calls for government measures to curtail pregnancies in this age group. However, limited information exists regarding childbearing patterns of Filipino women under 15. Thus, the study intends to establish the levels and trends of under-15 fertility in the Philippines using data from two large-scale surveys—2013, 2017, and 2022 Philippine Demographic and Health Surveys, and the 2013 and 2021 Young Adult Fertility and Sexuality Surveys. Under-15 fertility rates will be calculated following the methodology employed by Pullum, Croft & MacQuarrie (2018). The study will also describe the profile of women giving birth before age 15 and explore sociodemographic correlates of under-15 fertility including the girls' age, marital status, education, region, type of residence, socioeconomic status, and the number of children ever born. By estimating under-15 fertility levels and exploring associated sociodemographic factors, the study aims to provide crucial insights for designing effective sexual and reproductive health interventions tailored to the unique challenges faced by young adolescents.

### Primary Insights

- Investigated troubling increase in births to girls aged 10-14

- Explored links between early pregnancies and socio-economic factors
- Highlighted prevalence of age-disparate relationships
- Correlation between early pregnancies and lower educational attainment
- Concerns about potential sexual abuse and coercion
- Limited data challenges comprehensive analysis

### 3. Nonmarital Childbearing in the Philippines Trends and Correlates

**Presenter(s):** Maria Midea Kabamalan

**Affiliation:** University of the Philippines Population Institute, Quezon City, Philippines

#### Abstract

Birth rates in the Philippines have been declining. While it took 20 years for the 1993 total fertility rate of 4.1 to decline by one child, the decline accelerated in the next 10 years reaching below replacement of 1.9 in 2022. Alongside this decline is the increasing share of nonmarital births over time, reaching 58 percent in 2022, based on the vital statistics data. Cohabitation in the country is likewise increasing.

This paper examines the trends and correlates of nonmarital childbearing in the Philippines using the latest data from the National Demographic and Health Survey. Initial results from the decomposition analysis indicate that the increase of nonmarital births is higher in urban than rural areas, more rapid among women who reached high school level education than those with lower or higher education, and larger among those in the middle wealth quintile. This study will also draw from the Young Adult Fertility and Sexuality Survey to examine attitudes toward marriage and childbearing that may help explain the trends and patterns of nonmarital childbearing in the Philippines. The implications of the results will also be explored.

#### Primary Insights

- Significant decline in fertility and increase in non-marital births
- 58% of births outside marriage by 2022
- Examined trends in cohabitation and marriage patterns
- Influence of education, wealth, and urbanization on non-marital childbearing
- Changing societal perceptions of marriage and childbearing

### 4. Assisted Reproductive Technology in Japan Prevalence and Socioeconomic Differentials

**Presenter(s):** Ester Lazzari, Shohei Yoda, Setsuya Fukuda, James Raymo

**Affiliation:** University of Vienna/ Wittgenstein Centre for Demography and Global Human Capital, Vienna, Austria. National Institute of Population and Social Security Research, Tokyo, Japan. Princeton University, Princeton USA

#### Abstract

In East Asian societies, very low levels of fertility reflect the trend toward later and less marriage. Because non-marital childbearing remains rare in East Asia, the well-established relationship between biological age and fecundity means that later age at marriage and childbearing results in increasing concerns about infertility and increasing use of assisted reproductive technology (ART). To this end, Japan holds the global record for the highest volume of ART activity and the Japanese government now provides some public insurance coverage for fertility treatment as part of its broader policy response to concerns about low

fertility. While ART opens new possibilities for fulfilling childbearing aspirations for infertile couples, it also introduces a potentially new socio-economic divide. Using data collected from five rounds of the nationally representative Japanese National Fertility Survey (JNFS), conducted between 2002 and 2021, this study aims to shed new light on the prevalence of infertility among first-married Japanese couples and explore potential socio-economic disparities in experiencing infertility, using ART, and achieving a birth after having used treatment. We will propose and test multiple hypotheses to examine the mechanisms behind the observed educational gradients that shape new patterns of fertility in Japan.

#### **Primary Insights**

- Japan's global leadership in Assisted Reproductive Technology (ART)
- Public insurance coverage for fertility treatments
- Explored socioeconomic differentials in ART usage
- ART's role in achieving desired family size
- Variations in treatment success by education and socioeconomic status
- Impact of ART on fertility patterns

### **5. Burden of Early Pregnancy and Effectiveness of Janani Suraksha Yojana Scheme**

**Presenter(s):** Anjali Srivastava & Purujit Praharaj

**Affiliation:** India Child Protection Fund

#### **Primary Insights**

- Health risks of early pregnancies among adolescents
- Evaluation of government's institutional delivery scheme
- Low access to healthcare benefits
- 82% of eligible women do not access scheme benefits
- Need for broader inclusion of adolescent pregnancies
- Significant regional variations in healthcare access

### **III. Analysis of Floor Questions Cross-Cutting Themes**

- **Reproductive Autonomy in Transition** Examined how societal structures, economic conditions, and policy interventions shape individual reproductive choices across different cultural contexts. This theme highlighted the complex interplay between personal agency and systemic constraints in fertility decision-making.
- **Intergenerational Reproductive Dynamics** Explored how changing social norms, educational opportunities, and economic conditions influence fertility patterns across generations, revealing the evolving nature of family formation and reproductive health.

### **IV. Audience Engagement and Session Dynamics Engagement Patterns**

#### **High-Interaction Presentations**

- Son preference research sparked intense discussions
- Adolescent pregnancy study generated significant audience interaction

#### **Noteworthy Discussions**

- Policy implications for reproductive health
- Socio-cultural factors influencing fertility choices

## V. Session Conclusion

The session provided comprehensive insights into fertility patterns, revealing complex intersections between social structures, economic conditions, and reproductive health across Asian contexts.

## VI. Key Strategic Implications

1. **Policy Development** Create more nuanced, context-specific reproductive health interventions addressing diverse social and economic realities.
2. **Research Advancement** Develop holistic approaches to understanding fertility patterns that integrate social, economic, and cultural perspectives.
3. **Healthcare Access** Improve targeted interventions for vulnerable populations, particularly adolescents and marginalized communities.

## SESSION 7.3 MIGRATION AND ECONOMIC IMPACTS

**Session Theme: Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Session Chair(s):** Eric Fong

### I. Session Overview

The session delved into the multifaceted economic and social impacts of migration, focusing on internal and international mobility, urbanization, remittance utilization, and skill-building. Presentations also examined the effects of the COVID-19 pandemic on migration patterns and the challenges faced by returnees and low-income migrants.

### II. Presentation Summaries

#### 1. Examining Remittance Impact on Household Consumption Patterns A Case Study in Nadia District, West Bengal, India

**Presenter(s):** Chandrima Paul, Rangasamy Nagarajan

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

This study delves into the consumption patterns of households in the Nadia district of West Bengal, India, focusing on those receiving remittances versus those who do not. Through interviews with household heads, primary data on expenditures within migrant and non-migrant families is gathered, spanning food, health, education, non-durables, durables, and miscellaneous goods over a minimum one-year reference period. Emphasizing households receiving remittances for at least two years, the study explores long-term investments. Employing Propensity Score Matching, a comparative analysis examines the differential impact of remittances on expenditures, particularly in essential areas like food, health, education, and long-term investments.

Results reveal that remittance-receiving households allocate a smaller proportion of their expenditure to food, with positive impacts observed on education and health spending. The study uncovers a statistically significant negative influence on investment spending, coupled with a positive impact on housing and land expenditures. Remittances also positively affect spending on consumable and durable goods. These

findings hold implications for policymakers, development practitioners, and researchers, contributing valuable insights into the nuanced dynamics of remittance influence on household consumption in the specific context of Nadia district, West Bengal, India.

#### **Primary Insights**

- Remittances increase household spending on education, healthcare, and durable goods, enhancing long-term economic stability.
- Migrant experiences positively influence social norms, particularly regarding family planning awareness.
- Migrant households prioritize educational expenditures, signaling aspirations for intergenerational mobility.

### **2. Indonesian Migrant Working Abroad as a Mean of Increasing Investment in Capabilities for Future Work (A Case study in Cilacap District, Central Java)**

**Presenter(s):** Aswatini Anaf, Mita Noveria

**Affiliation:** National Research and Innovation Agency, Jakarta, Indonesia

#### **Abstract**

Migration can be regarded as investment in human capital, since the activity needs public as well as private resources and in return the migrants gain from the movement such as higher income and skill improvement based on work experiences. This study aims to assess whether experiences, skill improvements and widening of views accumulated by Indonesian workers during working abroad can be considered as investment and whether migration benefits are useful in future job seeking in place of origins. Analysis is based on a qualitative study conducted in Cilacap district (Central Jawa) in 2017. The participants were 18 females and 2 males Indonesian returned migrants in three villages, known as important sources of labour migrants, especially female, to work abroad. The result of the study showed that migration can be regarded as investment since it increases Indonesian migrant workers' skills, especially language skills. It also increases other skills related to their specific jobs. However, some skills are country specific that cannot easily transferable when the return migrants intend to work in other countries, even though at the same type of job. It is also rarely supported the economic activity in their home village.

#### **Primary Insights**

- Migrants often acquire limited transferable skills, primarily language proficiency.
- Returnees frequently face barriers to utilizing acquired skills domestically, leading to informal sector employment.
- Migration is driven more by income needs than skill-building opportunities.

### **3. Changing Pattern of Labour Out-Migration from Pre to Post Covid-19 Pandemic A Follow-up Study from Eastern Uttar Pradesh and Bihar in India**

**Presenter(s):** Manoj Paul, Archana K Roy

**Affiliation:** International Institute for Population Sciences, Mumbai, India

## Abstract

The Covid-19 pandemic and ensuing lockdowns caused significant disruptions in migration patterns in India. This study aims to explore the changing migration dynamics from pre to post-pandemic periods, using house listing data of "Causes and Consequence of Out-Migration from Middle-Ganga Plain Survey 2018-19" as a reference point of pre-Covid scenario, a follow-up primary survey (house listing) in 2023-24 encompassing 7,998 households across 16 villages in Eastern Uttar Pradesh and Bihar, conduct to understand post Covid-19 pattern of migration. Findings indicate a change in the core of migration based on pre-existing household social and economic conditions. Respondents suggest that three years after the onset of the Covid-19 pandemic, migration levels have returned to pre-pandemic levels. Notably, post-Covid-19, there is a concentration of migrants among the youth, while middle-aged individuals remain in their villages. Moreover, a significant portion of migrants originates from households with small landholdings, belonging to marginalized communities. Return migrants, particularly those with substantial agricultural land holdings, exhibit a preference for resettling in their native villages. Additionally, the study highlights persistent caste differentials in migration patterns, with marginalized castes engaging in short-distance and temporary migrations, contrasting with upper-caste migrants who pursue longer-term and more structured migration pathways.

## Primary Insights

- Increased internal migration post-pandemic, with shifts in destination states within India.
- Rising unemployment and agricultural distress fueled migration.
- Many workers returned to their hometowns during the pandemic, intensifying rural economic challenges.

## 4. Educational attainment and skill disparities among migrant workers in India Insights from the National Sample Survey, 2020-21

**Presenter(s):** Manish Mamgai, Dr. Kunal Keshri

**Affiliation** International Institute for Population Sciences, Mumbai, India

## Abstract

India's shifting demographic landscape is characterized by a sweeping wave of internal migration, transforming the country's population dynamics. A staggering estimate of 450 million individuals embark on this internal migration, dispersing across different corners of the nation. This migration unlocks new avenues of employment opportunities, offering sustenance to countless lives. In the process, education and skills emerge as the significant prerequisites for better employment prospects. Pursuing better jobs is intimately integrated with migrant's educational achievement and skill competence. Thus, this study unravels the educational and skill profiles of migrant workers in India, drawing insights from the National Sample Survey 2020-21. Interestingly, the findings reveal a tendency of migrant workers to outperform their non-migrant counterparts in terms of education and skills. Unfortunately, women migrant workers appear as the most disadvantaged population among migrant workers, with lower education and skill levels. There are also substantial variations in the degree of education and skills among migrants across different migratory streams, with urban migrants outperforming rural migrants. Furthermore, individuals at the extremes of the educational spectrum – those either lacking formal education or possessing advanced degrees – tend to enjoy higher prospects than their peers with intermediate levels of education.

## Primary Insights

- Urban migrants tend to have higher educational attainment compared to rural migrants.

- Women migrants face significant disadvantages in education and skill acquisition.
- Wealthier individuals possess better education, while landowners show lower skill levels.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Remittance Utilization** Discussions centered on how remittances are allocated across sectors, particularly education and healthcare.
- **Post-Return Challenges** Addressing reintegration issues for migrants was highlighted as a critical area for policy focus.
- **Pandemic-Induced Shifts** Extensive debate on the economic and social implications of changing migration patterns post-COVID-19.
- **Skill Disparities** Emphasis on bridging educational and skill gaps to improve migrant labor outcomes.

### IV. Audience Engagement and Session Dynamics

#### High-Interaction Presentations

- The presentation on remittance impacts sparked discussions on resource allocation and social transformation.
- Analysis of post-pandemic migration trends prompted debate on rural employment and economic resilience.

#### Limited Engagement Areas

- Skill disparities among migrant workers received comparatively less interaction, possibly due to its broader scope.

### V. Session Conclusion

The session provided an in-depth exploration of migration dynamics, highlighting the economic, social, and policy-related challenges migrants face. Key findings underscored the transformative potential of remittances, the need for skill-building initiatives, and the importance of adaptive policies in addressing pandemic-induced migration shifts.

### VI. Key Strategic Implications

1. **Policy Support for Migrants and Returnees** Develop targeted programs addressing skill application and economic reintegration challenges.
2. **Educational and Skill Development Programs** Implement initiatives focused on reducing disparities in education and skill levels, particularly for women and marginalized groups.
3. **Pandemic Recovery Strategies** Enhance safety nets and economic support mechanisms to stabilize rural areas affected by migration dynamics.
4. **Optimizing Remittance Utilization** Encourage infrastructure investments and policy reforms to maximize the economic benefits of remittances for migrant households.

## SESSION 7.4 FERTILITY, MARRIAGE AND CHILDLESSNESS

**Session Theme:** Family Formation and Dissolution, Family and Kinship

**Session Chair(s):** Ramesh Adhikari

### I. Session Overview

This session delved into the intricate factors shaping fertility, marriage, and childlessness in Asia. It examined how socio-economic factors, cultural norms, migration patterns and education levels contribute

to changing family structures across diverse Asian societies. The session showcased research on intergenerational fertility trends, the impact of education and migration on childbearing decisions, and the retreat from marriage in Asia.

## II. Presentations Summaries

### 1. International Transmission of Fertility Attitudes and Behaviors in the Chitwan Valley

**Theme:** Family Formation and Dissolution, Family and Kinship

**Presenter(s):** Lyman Stone

**Affiliation** McGill University, Montreal, Canada

#### Abstract

Intergenerational correlations in family size have been observed in many populations. However, less is known about the extent of intergenerational within-family correlations in attitudes about family formation. In the case of the Chitwan Valley of Nepal, I use longitudinal data linked across multiple generations to assess the association between parental family attitudes and behaviors during an individual's childhood and youth, and the child's family and fertility outcomes as an adult. I focus on desired family size and attitudes towards children, with children ever born as a primary outcome variable. Furthermore, using a unique measure of geospatial and temporal exposure to different schooling environments, as well as variation in parents' parenting strategies and beliefs, I assess the extent to which intergenerational transmission of fertility values and behaviors is influenced by the schooling environment, parenting behaviors, and other factors such as ethnicity, religion, and gender-matched parent-child days. Preliminary findings suggest that intergenerational transmission of fertility attitudes is relatively low, with variation by sex, schooling environment, and parent traits, even though transmission of fertility behaviors (i.e. children ever born) is relatively high. This paper remains in the statistical analysis stage, and so an extended abstract is not yet available.

#### Primary Insights

- Investigated intergenerational fertility outcomes and attitudes in the Chitwan Valley, Nepal
- Found a positive correlation between paternal international migration and birth weight of children
- Children born to fathers who migrated internationally had higher birth weights compared to children whose fathers remained in Nepal.
- This effect was more pronounced for boys than girls.
- The study highlighted the potential positive impacts of remittances on maternal health and child outcomes

### 2. Education and Childlessness among Women in Hong Kong

**Presenter(s):** Yuying Tong, Chunxue Zhang

**Affiliation** The Chinese University of Hong Kong, China

#### Abstract

Extant literature frequently posits that higher educational attainment is associated with increased childlessness, particularly among women. The challenges of achieving a harmonious work-life balance are commonly cited as a significant barrier for highly educated women in family formation. While previous research efforts have sought to ascertain the ubiquity of this phenomenon, studies suggest that the



interplay between education and childlessness may vary across different fields of study and professional domains. However, there is a paucity of research exploring temporal shifts in this relationship. With the growing perception of family life as a luxury, it is conceivable that the link between educational attainment and childlessness is diminishing over time. This study utilizes Hong Kong as a focal point to investigate the dynamics between educational level and childlessness. Employing multiple years of census data, our preliminary descriptive analysis indicates a trend consistent with this hypothesis. Subsequent examinations will dissect these patterns further, employing cohort and period analyses to elucidate the evolving nature of this relationship among women in Hong Kong.

#### **Primary Insights**

- Explored the relationship between education and childlessness among women in Hong Kong.
- Higher educational attainment was associated with increased childlessness, particularly among women.
- Hong Kong has a notably high childlessness rate compared to other East Asian societies.
- The study discussed the influence of factors such as the availability of domestic helpers, high housing costs, and long work hours on childbearing decisions.
- Childlessness rates have been rising across all age groups in Hong Kong, indicating a potential shift in social norms.

### **3. Temporal Changes in Retreat from Marriage in Asia**

**Presenter(s):** Fatemeh Torabi

**Affiliation** University of Tehran, Tehran, Iran

#### **Abstract**

Retreat from marriage has been documented in different parts of Asia. This paper aims to deepen our understanding by covering the whole continent and extending the period of study to the 5 decades between 1970 and 2020. The Kaplan-Meier survival estimates show considerable gender differences in retreat from marriage. In more than half of Asian countries marriage is no longer universal for women, compared to one-third of countries where men have departed from marriage. The results of discrete-time hazard models provide evidence for the role of both structural and cultural factors in determining retreat from marriage. Regardless of gender, the hazards of retreat are higher in countries with a larger share of urban population and with predominance of non-Muslim population. Adjusting for other factors does not remove these influences. Women's experience is initially determined by additional factors, which disappear after the adjustment. These results highlight the importance of religion and the associated system of values, norms and customs as well as the role of urbanization, which creates not only competing social and economic opportunities but also some impediments to marriage of both men and women such as a prolonged and more complicated process of mate selection.

#### **Primary Insights**

- Analyzed the prevalence of retreat from marriage among men and women in Asia over five decades (1970-2019).
- Marriage is no longer universal for most women in over half of the Asian countries studied.
- Increased access to education and economic opportunities, along with evolving gender roles, are key factors contributing to the retreat from marriage.
- The findings support the relevance of gender role, modernization, and rational choice theories in understanding contemporary marriage trends.

- Southeastern Asia exhibits the most significant retreat from marriage among women, indicating a shift towards greater female autonomy and economic participation

#### 4. Examining Geospatial Variations in Early Marriage and motherhood in India Insights from the fifth round of the National Family Health Survey

**Presenter(s):** Rishabh Kumar, Soumen Barik

**Affiliation:** International institute for Population Sciences, Mumbai, India

##### Abstract

**Introduction:** Despite of many laws, rights and well-known consequences of early marriage and motherhood, it is still prevalent in developing countries particularly in India.

**Objective:** This study aims to examine the spatial heterogeneity and meso scale correlates of early marriage and motherhood across 707 districts of India.

**Data:** Latest round of National Family Health Survey (NFHS-V), 2019-21 has been used as a data source.

**Methods:** Moran's I statistics, bivariate LISA and Significant maps were used to understand spatial dependence and clustering of early marriage and motherhood. Multiple regression, spatial lag and error models were used to examine correlates of early marriage and motherhood.

**Results:** The multilevel analysis revealed significant variations in early marriage and motherhood at state, district, PSU levels in India, with PSU contributing highest variation. Univariate Moran's I statistics indicated spatial heterogeneity in districts of India. Bivariate Moran's I suggested spatial clustering against meso-scale correlates in geographical hotspots of India. Spatial error model identified no education, lack of mass media exposure and poverty as strong predictors for both early marriage and motherhood.

**Conclusion:** Spatial clusters of early marriage and motherhood exist in Indian districts. Higher women's education and increased exposure to mass media can mitigate these issues.

##### Primary Insights

- Investigated spatial patterns and factors associated with early marriage and motherhood in 707 districts across India.
- Significant regional variations in early marriage and motherhood were observed, with higher prevalence in central and eastern India.
- Higher educational attainment significantly reduced the likelihood of early marriage and motherhood, emphasizing the importance of education in delaying these life events.
- Poverty, limited mass media exposure, and membership in marginalized groups were identified as key factors contributing to the prevalence of early marriage and motherhood.
- There is the need for targeted interventions that consider regional disparities and address the social and cultural norms that perpetuate early marriage and motherhood

#### III. Analysis of Floor Questions Cross-Cutting Themes

- **Socioeconomic Influences on Fertility** Discussions centered on how economic development, education levels, and access to healthcare impact fertility rates and family size across Asian countries.
- **Changing Gender Roles and Marriage** The session explored the shifting dynamics of marriage in Asia, driven by factors such as increased female education and labor force participation. The

discussions highlighted the implications of these changes for family formation and reproductive decision-making.

- **Migration and Family Dynamics** The session examined the impact of international migration on fertility outcomes and family structures. The presentations raised questions about the role of remittances in supporting maternal and child health and the challenges faced by families separated by migration.

#### IV. Audience Engagement and Session Dynamics

##### Engagement Patterns

- The session fostered active audience engagement, with presentations prompting discussions on policy implications and the need for context-specific interventions to address the unique challenges faced by different countries.

##### Noteworthy Discussions

- The presentation on childlessness in Hong Kong sparked a discussion on the potential cultural and societal factors contributing to the high rates observed, such as changing lifestyle preferences and the influence of urban living.
- The research on early marriage and motherhood in India prompted questions about the effectiveness of existing policies aimed at delaying marriage and the importance of community-based interventions to address social norms.
- The study on the retreat from marriage in Asia generated interest in understanding the diverse regional trends and the potential implications for population aging and social support systems in the future.

#### V. Session Conclusion

The session provided valuable insights into the complex interplay of factors shaping fertility, marriage, and childlessness across Asia. The presentations underscored the importance of considering the cultural, social, and economic contexts of each country when developing policies and interventions aimed at promoting reproductive health and well-being. The session highlighted the need for further research on the evolving dynamics of family formation and the long-term consequences of demographic shifts in the region.

#### VI. Key Strategic Implications

1. **Education, Economic Empowerment, and Socioeconomic Equity** Invest in girls' education and women's economic empowerment to reduce fertility rates and improve health outcomes, while addressing poverty and healthcare access to ensure equitable reproductive health outcomes.
2. **Culturally Sensitive Interventions, Data Collection, and Collaboration** Develop tailored programs for each community's cultural norms, strengthen research for evidence-based policies, and foster collaboration between governments, civil society, and research institutions to promote reproductive health and rights

### SESSION 7.5 HEALTH, WELL-BEING, AND LIFE SATISFACTION

**Session Theme:** Population Dynamics, Demographic Transition, and Population Ageing

**Session Chair(s):** Wei Guo

## I. Session Overview

This session focused on the health, well-being, and life satisfaction of older adults across various countries, exploring how economic, social, and cultural factors impact aging populations. The presentations examined disease accumulation, economic crises, social capital, and life expectancy, providing insights into the challenges faced by older adults and the policy implications required to address these issues in different contexts.

## II. Presentation Summaries

### 1. To understand the sequence and speed of accumulation of disease combinations among middle-aged and elderly in India

**Presenter(s):** Shamrin Akhtar

**Affiliation:** International Institute for Population, Mumbai, India

#### Abstract

This research paper delves into the intricate temporal aspects of chronic disease epidemiology by introducing and elucidating the concepts of sequence and closed morbidity intervals. The morbidity interval is the duration extending from the initiation of the latest diagnosed chronic ailment to the survey date. This temporal parameter encapsulates the period during which additional chronic diseases may manifest, preceding the survey date. In contrast, the closed morbidity interval designates the temporal gap between the inception of distinct chronic diseases.

**Methodology:** The research cohort comprised individuals with instances of multiple chronic diseases. The study employed statistical techniques, including latent component analysis, to discern patterns and temporal dependencies in the occurrence of successive chronic conditions.

**Results:** The analysis revealed that the morbidity interval exhibited considerable variability among individuals, reflecting the diverse trajectories of chronic disease progression. Factors such as gender, age, occupation, and lifestyle choices emerged as influential determinants shaping the temporal dynamics of morbidity intervals.

**Discussion:** This conceptualization facilitates a more nuanced understanding of the evolving health status of individuals over time. Moreover, the identification and characterization of closed morbidity intervals underscore the need for a comprehensive assessment of the temporal relationships between distinct chronic diseases.

#### Primary Insights

- The study explores the sequence of chronic disease accumulation, with gender, age, occupation, and lifestyle influencing morbidity patterns.
- Latent component analysis identifies patterns and temporal dependencies of diseases, revealing significant variability in the onset of chronic conditions.

### 2. Impact of Economic, Social, and Cultural Capital on the Mental Well-being and Life Satisfaction of Older Adults in Lucknow City

**Presenter(s):** Anamika Singh, Esha Chatterjee

**Affiliation:** Indian Institute of Technology Kanpur, India

## Abstract

This study examines associations between Bourdieu's core forms of capital (economic, social, and cultural) and older adult's life satisfaction and mental wellbeing. Our sample includes 410 older adults aged 60 and above in Lucknow city selected using multistage cluster sampling. Key dependent variables include a) an ordered variable indicating life satisfaction (low, medium, and high); and b) a binary variable that takes a value of 1 if the older adult has an average or above average overall score on the Warwick-Edinburgh Mental Well-being Scale (WEMWBS); and takes a value of 0 if the older adult has low or below average overall score on the WEMWBS. Ordered logistic regression and logistic regression are used to assess associations between all three forms of capital and life satisfaction, and mental wellbeing of older adults respectively, after controlling for socio-demographic variables and overall fitness. Findings show that higher levels of social capital (social support from the neighborhood), and cultural capital (education and cultural engagement) are associated with greater life satisfaction and higher likelihoods of having average and above average scores on the WEMWBS. This study highlights the role of higher social, and cultural capital as a possible intervention mechanism for improving mental wellbeing of older adults.

### Primary Insights

- Social capital (neighborhood support) and cultural capital (education, cultural engagement) have a significant positive effect on mental well-being and life satisfaction.
- Economic capital has a lesser impact on mental well-being but is important for life satisfaction among older adults.

## 3. Impact of Economic Crisis on the Life Satisfaction of Older Persons in Sri Lanka

**Presenter(s):** Manori Kaluthantiri Weeratunga

**Affiliation:** Western Sydney University, Australia; University of Colombo, Sri Lanka

### Abstract

Population aging presents a significant challenge for Sri Lanka in the 21st century. The current economic crisis exacerbates the difficulties of older individuals, leading to a decline in their overall quality of life. This study seeks to investigate how the economic downturn impacts the life satisfaction of older persons in Sri Lanka. Employing a mixed-method approach, the research incorporates a sample survey comprising 450 respondents followed by 10 case studies. The ongoing economic crisis has disproportionately affected the elderly, rendering them particularly vulnerable. Previously, many elders reported favorable conditions regarding emotional support, manageable expenses, and savings capacity. Similarly, they expressed contentment with their living situations. However, the onset of the crisis precipitated a notable shift. Older individuals increasingly disagreed with assertions about the adequacy of emotional support, affordability of expenses, and their ability to save money. Significantly, income-related challenges emerged as the primary concern during this period, followed by health and social life-related issues. Severity of issues varies depending on the demographic, and socio-economic background of older people. Addressing these concerns necessitates the formulation of new policies and programs tailored to better manage and alleviate the challenges confronting the elderly population in Sri Lanka, fostering sustainable solutions for their well-being.

### Primary Insights

- The Sri Lankan economic crisis has led to significant declines in life satisfaction among older adults, with major concerns around income, healthcare costs, and social support.

- Older adults are experiencing heightened emotional strain due to reduced social support, increased healthcare costs, and limited savings.

#### 4. Working Life Expectancy Among Older Filipinos

**Presenter(s):** Grace Cruz, Christian Joy Cruz

**Affiliation:** University of the Philippines, Quezon City, Philippines

##### Abstract

Using linked data from the Longitudinal Study of Ageing and Health in the Philippines (LSAHP) Waves 1 and 2 data, this study estimates the working life expectancy among older Filipinos, 60 years and older, by sex. LSAHP is the first nationally representative panel study on older people in the Philippines with a baseline sample of 5985. The IMaCh for Interpolated Markov Chain software developed by Brouard and Lievre was used in generating multistate life tables.

In the analysis, we estimated the changes in transition schedules from working to not working, working to death, not working to working, and not working to death. We also estimated the expected remaining years working and not working by age group and by initial work status, i.e., if working or not working. Results show that older people who are 65 years old and over who are working have a longer remaining life expectancy compared to those not working. The former are also expected to spend more of their remaining years working compared to the latter. The study findings significantly promote active ageing as the Philippines is projected to enter its aging phase within the decade.

##### Primary Insights

- Older Filipinos who remain in the workforce beyond 60 experience a longer working life expectancy, which is associated with improved quality of life.
- Active ageing policies that delay retirement may increase life satisfaction by promoting continued social and economic participation.

#### III. Analysis of Floor Questions Cross-Cutting Themes

- **Economic Security** Focus on the financial challenges of older adults, especially during crises. Questions explored tailored economic policies for better financial and healthcare security.
- **Social & Cultural Capital** Emphasis on community support and cultural engagement for enhancing well-being. Queries discussed programs to reduce isolation and foster belonging.
- **Active Ageing** Debate on policies supporting delayed retirement and flexible work arrangements to encourage workforce participation.
- **Gender & Occupation** Inquiries into the intersection of gender, occupation, and health, highlighting disparities in chronic disease accumulation.

#### IV. Audience Engagement and Session Dynamics

##### High-Interaction Areas

- **Economic Impact** Extensive discussion on economic crises and policy responses for older adults' financial security.
- **Active Ageing** Significant engagement on extending working life and post-retirement employment policies.

##### Limited Engagement Areas

- **Cultural Capital** Less focus on leveraging cultural capital for older adults' benefit.
- **Gender-Specific Health** Limited discussion on gender-specific health policies for older adults.

## V. Session Conclusion

The session explored the diverse challenges faced by older adults, particularly focusing on economic crises, health disparities, and the impact of social and cultural factors on well-being. It highlighted the importance of active ageing, community support, and economic stability in enhancing life satisfaction among the elderly.

## VI. Key Strategic Implications

1. **Active Ageing Policies** Implement policies that extend working life and provide flexible work options to improve well-being.
2. **Economic Security** Focus on financial support and healthcare access, especially during economic crises.
3. **Community & Cultural Engagement** Promote community support systems and cultural engagement to enhance mental well-being.
4. **Gender-Specific Health Policies** Develop targeted healthcare strategies addressing gender and occupation-related needs of older adults.

## SESSION 8.1 AGEING, HEALTH, AND POVERTY

**Session Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Session Chair(s):** Aris Ananta

### I. Session Overview

The session explored the intersection of aging, health, and poverty in South Asia, focusing on critical challenges such as geriatric depression, cognitive impairment, chronic illnesses, and sensory impairments. Presenter(s): highlighted the roles of socio-demographic factors, gender disparities, education, and healthcare access in shaping health outcomes for aging populations.

### II. Presentations Summaries

#### 1. Prevalence and Covariates of Depression among Older Adults in Nepal: A Systematic Review and Meta-Analysis

**Presenter(s):** Gayatri Khanal, Y. Selvamani Thapa, Saravanan Chinnaiyan

**Affiliations:** SRM Institute of Science and Technology, Tamil Nadu, India. Nisarga Hospital and Research Centre, Dhangadi, Nepal

#### Abstract

**Purpose:** Globally, the most common mental health condition in older individuals is depression, a significant emerging public health problem in Nepal. Older adults with depression are overlooked in Nepal due to the paucity of updated epidemiological literature. The current study aimed to determine the prevalence of depression and its covariates among older adults.

**Methods:** PRISMA-compliant searches of the PubMed, Scopus, NepMed/Nepjol, and Google Scholar databases were conducted from 2013 to 2023. The included papers' quality was assessed using a JBI quality appraisal technique. The data were analyzed using R statistical program. Heterogeneity was assessed by  $I^2$  test.

**Results:** Geriatric depression affected 52% of the population overall (95% CI = 44%, 59%). The pooled prevalence in the subgroup analysis was greater in the central region and among older adults living in old age homes. The presence of chronic diseases, increasing age, female sex, illiterate, limitation on daily living, and feeling of loneliness were predictors of geriatric depression.

**Conclusion:** Even though the estimation of depression differs with geographic region and study settings, one out of two older adults in Nepal had experienced depression, suggesting the need for public health interventions to support and reduce geriatric depression in Nepal.

### Primary Insights

- Geriatric depression prevalence in Nepal is 52%, with over half of the elderly population reporting depressive symptoms.
- Major risk factors include chronic illnesses, advanced age, gender, illiteracy, social isolation, and lack of respect in familial and societal settings.
- Women, widows, and individuals without social support networks are disproportionately affected.
- The systematic review identified critical gaps in mental health services, particularly for early detection and treatment of depression.
- Findings emphasized the cultural stigma surrounding mental health, limiting care-seeking behavior among older adults.

## 2. Multivariate decomposition of gender differentials in cognitive impairment among older adults in India based on Longitudinal Ageing Study in India, 2017-2018

**Presenter(s):** Madhurima Sharma, Indrajit Goswami

**Affiliations:** International Institute for Population Sciences, Mumbai, India.

### Abstract

**Background:** Increasing life expectancy and declining fertility rates have increased the ageing population worldwide. Literature lacks consensus regarding the risk of cognitive impairments by gender.

**Objective:** This study aims to identify differences in cognition impairments between male and female older adults in India.

**Methodology:** Data for 31,464 older adults, aged 60 years and above (male-15,098 and female- 16,366), from the recent Longitudinal Ageing Study in India (LASI) Wave-1 has been used. Cognitive impairment is measured through five broad domains (memory, orientation, arithmetic function, executive function, and object naming). A multivariate decomposition analysis was used to identify covariates' contributions, which explains the group differences to average predictions.

**Findings:** Results show significant gender differences in cognitive impairment among older adults disfavoring females (differences: 13.4;  $p < 0.001$ ). About 62 percent of the overall gender inequalities in the cognitive impairment were explained by the differences in compositional characteristics (Endowments) between males and females, remaining 38 percent was due to the difference in the effect of characteristics (Coefficient).

**Conclusion:** Findings support the hypothesis that the female gender is positively associated with higher cognitive impairments. Gender-responsive interventions improving education access among the female gender would bring relevant and desired



### **Primary Insights**

- Cognitive impairment is more common among women, particularly linked to widowhood, depression, and low education.
- Rural and socioeconomically disadvantaged groups show higher rates of cognitive decline due to limited healthcare access and lower literacy.
- Elderly women face compounded vulnerabilities, including financial insecurity.
- Rural populations exhibit significantly higher rates of cognitive impairment than urban populations.

### **3. Chronic Morbidity among Elderly Population and Its Determinants in Bangladesh**

**Presenter(s):** M Sheikh Giash Uddin, Sharmin Aktar Laizu, Mohammed Ahsanul Alam

**Affiliations:** Jagannath University, Dhaka, Bangladesh / National Institute of Population Research and Training (NIPORT), Dhaka, Bangladesh

#### **Abstract**

The aim of this study was to assess the prevalence and demographic and socioeconomic correlates of chronic morbidity among elderly population in Bangladesh. Data used from the survey of the Need Assessment of Geriatric Care in Bangladesh conducted by NIPORT. This survey was a three-stage stratified sample of households. The multinomial logistic regression model was employed. Binary logistic regression was used to assess the effect of socio-demographic and socioeconomic variables with the presence of the number of chronic diseases. About 52% of elderly people had at least chronic disease, and 14% had at least two chronic diseases. In bivariate analysis, socioeconomic and demographic and health seeking factors like division, occupational status, place of residence, types of toilet facility, wealth index, received treatment, place of treatment were significantly associated with the presence of chronic disease and the number of chronic diseases. In multivariable adjusted models, factors associated with the presence of chronic disease and multi-morbidity were division, place of residence, wealth index. The study quantified that majority of elderly were suffering from multiple diseases and economically vulnerable in the family. The findings expressed the issues need to address to support the elderly population for their survival.

#### **Primary Insights**

- Aging-related chronic illnesses like hypertension, diabetes, and arthritis are more prevalent among women and rural populations.
- Chronic conditions are worsened by limited healthcare access, low awareness, and delayed diagnosis.
- Lower education and income levels significantly impact health outcomes, with higher morbidity in disadvantaged groups.
- Age-related functional decline is closely linked to increased healthcare needs, highlighting gaps in accessibility and affordability.

### **4. Changes in Average Years Lived Without Vision and Hearing Impairment of the Older Thais from 2002 to 2021**

**Presenter(s):** Patama Vapattanawong

**Affiliations:** Institute for Population and Social Research, Mahidol University, Nakhon Pathom, Thailand

## Abstract

According to the senescent processes, vision and hearing will be impaired when age increases and can cause many problems, especially in old age. This study aims to analyze whether the average years lived without vision and hearing impairment have changed for older Thais in the last two decades. If so, what are the patterns of change? The data on self-reporting levels of vision and hearing from the 2002, 2007, 2011, 2014, 2017, and 2021 Survey of the Older Persons in Thailand (SOPT) were employed. This study applied the life table and the Sullivan Method to estimate the average lived years. The degrees of vision and hearing were weighted using the disability weights from the Global Burden of Disease 2013 study. The results showed quite different patterns of changes between the proportion of vision impairment-free life expectancies (VIFLE) and hearing impairment-free life expectancies (HIFLE). The proportion of VIFLE tended to increase at the beginning periods of the study and then decrease later on. In contrast, the proportion of HIFLE tended to increase over the same study periods. These changes might reflect the alternation between compression and expansion of morbidity in Thailand.

### Primary Insights

- Vision impairments have steadily increased among older adults in Thailand, while hearing impairments have fluctuated over the past two decades.
- Women are more likely to experience vision impairments due to longer life expectancy and greater exposure to chronic illnesses like diabetes.
- The "male-female survival paradox" shows women live longer but face more health complications, increasing their reliance on caregiving.
- Sensory impairments are linked to decreased quality of life, underscoring the need for early detection and intervention.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Healthcare Access Equity** Extensive discussion on disparities in healthcare availability across geographic and socio-economic groups, especially for elderly women.
- **Gendered Health Outcomes** Insightful dialogue on the unique health challenges faced by aging women and their implications for policy and healthcare delivery.
- **Role of Education** Recognition of education as a critical factor in reducing health inequities and improving outcomes for aging populations
- **COVID-19 Impact** Exploration of how the pandemic influenced depression studies and increased data heterogeneity, especially for mental health conditions

### V. Audience Engagement and Session Dynamics

#### Engagement Patterns

- **High-Interaction Presentations**
  - Geriatric depression and cognitive impairment sparked in-depth discussions on interventions and underlying factors.
- **Moderate Engagement Areas**
  - Chronic morbidity and sensory impairments generated practical debates on public health system gaps and resource allocation.

### V. Session Conclusion

The session illuminated the complex interplay between aging, health, and socio-economic factors, emphasizing the need for multi-faceted, inclusive approaches to address systemic inequities in aging healthcare. The presentations offered critical insights into how gender, education, and geographic location shape health outcomes for older adults, emphasizing the urgency of addressing these disparities.

## VI. Key Strategic Implications

1. **Integrated Geriatric Healthcare** Develop comprehensive health policies addressing the diverse needs of aging populations
2. **Gender-Sensitive Interventions** Focus on education, healthcare decentralization, and tailored support for aging women
3. **Preventive and Community-Based Care** Leverage local resources for regular screenings, early detection, and healthcare delivery innovations.
4. **Public Awareness Campaigns** Reduce stigma and misinformation surrounding aging and geriatric conditions through education and outreach.

## SESSION 8.2 HEALTH VULNERABILITIES AND MULTIMORBIDITY

**Session Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Session Chair(s):** Evi Nurvidya Arifin

### I. Session Overview

The session explored various dimensions of health vulnerabilities and multimorbidity, examining the impact of particulate matter pollution on COPD risk, associations between demographic and socioeconomic factors and multimorbidity, the clustering of multiple chronic diseases and their geographical variations, and the factors associated with lung health of older Filipinos.

### II. Presentations Summaries

#### 1. Exploring Gender-Specific Vulnerabilities Unveiling the Impact of Particulate Matter Pollution on COPD Risk in India's Working Population

**Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Presenter(s):** Nishtha Bhakta & Sunaina Saxena

**Affiliation:** TERI School of Advanced Studies, New Delhi, India

#### Abstract

This paper attempts to investigate the gender-specific impact of Chronic Obstructive Pulmonary Disease (COPD), particularly focusing on particulate matter (indoor + outdoor) pollution as a primary risk factor among India's working population. COPD is a growing public health concern in India, exacerbated by growing urbanization and declining air quality. The working age group (15-64 years) faces increased susceptibility, potentially affecting the country's GDP. Reviewing the literature reveals a strong correlation between air pollution and rising COPD cases. This study explores gender inequities in 'joint-relative risk' for COPD, using Disability Adjusted Life Years (DALYs) from World Health Organization (WHO) and Global Burden of Disease (GBD) 2019 data. Findings indicate that males exhibit a higher joint relative risk from particulate matter pollution, whereas a disaggregated analysis reveals women face higher risk from household air pollution due to persistent use of unclean cooking fuels. While emphasizing particulate matter pollution, especially ambient and household sources, the study suggests future research should encompass additional risk factors like occupational exposures and lifestyle choices such as smoking, as a way forward.

#### Primary Insights

- Examined the gender-specific impact of particulate matter pollution on Chronic Obstructive Pulmonary Disease (COPD) risk in India.

- Higher COPD mortality rates were observed in men while disability burdens remained similar across genders.
- Ambient air pollution had a more significant effect on males while household air pollution had a greater effect on females.
- Women experienced higher disability burdens from household air pollution while men were more impacted by outdoor and occupational exposures.

## **2. Associations between Demographic and Socioeconomic Factors with Multimorbidity Resulting from Non-Communicable Diseases (NCDs) among Men in India Insights from the Nationally Representative Survey (NFHS-5)**

**Presenter(s):** Harekrishna Manna

**Affiliation:** Central University of Karnataka, Gulbarga, India

### **Abstract**

Multimorbidity is the multiple chronic conditions due to NCDs for an extended period. This study aims to understand the correlation between demographic and socioeconomic factors and multimorbidity, investigating spatial variations. Employing data from the National Family Health Survey-5 (2019–2021), the study utilized bivariate analysis and a Multinomial Logistic Regression model for statistical analyses, presenting Odds Ratios (OR) at a 95% confidence interval (CI) to demonstrate the strength of associations. The results revealed that individuals in the 45–54 age group an increased likelihood of multimorbidity (OR: 5.889; CI: 4.763–7.281), as did married individuals (OR: 2.117; CI: 1.664–2.693), those from more affluent backgrounds (OR: 1.512; CI: 1.195–1.912), overweight individuals (OR: 2.022; CI: 1.634–2.502), and residents in the eastern (OR: 2.328; CI: 1.833–2.957) and southern regions (OR: 1.973; CI: 1.569–2.483). Substance consumption (OR: 1.164; CI: 1.034–1.310) and alcohol consumption (OR: 1.608; CI: 1.427–1.811) were also associated with an increased likelihood of multimorbidity. These findings emphasize the need for a comprehensive understanding of multimorbidity challenges, requiring collaborative efforts from epidemiologists, health researchers, and policymakers. Addressing multimorbidity is crucial for reducing premature mortality linked to NCDs and achieving Sustainable Development Goal-3 (SDG-3) by 2030.

### **Primary Insights**

- Investigated the correlation between demographic and socioeconomic factors and multimorbidity resulting from Non-Communicable Diseases (NCDs) among men in India.
- Men aged 45–54, married individuals, those from more affluent backgrounds, overweight individuals, and residents in the eastern and southern regions showed an increased likelihood of multimorbidity.
- Substance and alcohol consumption were associated with an increased likelihood of multimorbidity.
- The prevalence of single morbidity was higher in the northeastern and southern parts of India.
- The prevalence of multimorbidity was higher in the eastern and southeastern districts of India.

## **3. Multimorbidity Clustering and Their Geographical Variation in Indian Adults**

**Presenter(s):** Rashmi Rashmi

**Affiliation:** International Institute for Population Sciences, Mumbai, India

## Abstract

Multimorbidity is a significant global health challenge, particularly pronounced in countries like India experiencing rapid demographic and epidemiological transitions. Despite efforts in understanding multimorbidity susceptibility among adults, there's a lack of insight into their patterns and geographical variations within India. Addressing this gap, the present study uses data from 73,396 adults aged 45 and above from the Longitudinal Aging Study of India to explore the intricate clustering of multiple chronic diseases and assess how specific clusters differ across various geographical levels within the country. Utilizing latent class analysis, a data-driven-approach, we identify four distinct multimorbidity patterns from 12 common chronic conditions, including diabetes, hypertension, cardiovascular diseases, and respiratory disorders. Furthermore, we examine intra-class correlation coefficients (ICCs) to understand variations at individual, community, and state levels. Our findings reveal that Indian adults can be categorized into four distinct multimorbidity patterns, each characterized by unique features across different geographical scales. The understanding of small area variations in multimorbidity clustering holds vital implications for healthcare planning, resource allocation, and the development of targeted intervention strategies. Importantly, our study underscores the inadequacy of a single disease-oriented healthcare model in India, where individuals are grappling with multiple chronic conditions across diverse regions of the country.

### Primary Insights

- Explored the clustering of multiple chronic diseases and their geographical variations within India.
- Hypertension, gastrointestinal disorders, musculoskeletal or bone disorders, diabetes and lung disease were commonly occurring chronic conditions.
- Four distinct multimorbidity clusters were identified.
- The concentration of complex cardio-metabolic disorders was highest in some states and between community concentration was higher in metabolic disorders.

## 4. Factors Associated with Lung Health of Older Filipinos Exploring Gender Differences

**Presenter(s):** Mark Ryan Paguirigan, Marvin Marquez & Grace Cruz

**Affiliation** University of the Philippines Population Institute, Quezon City, Philippines

### Abstract

Low peak expiratory flow (PEF) is a consistent phenomenon among older individuals, yet a comprehensive understanding remains elusive at the population level, particularly in developing countries. This study aims to evaluate the lung health of older Filipinos using PEF meters, indicative of respiratory muscle strength and disease presence. We utilize multivariate regression analyses on baseline data from the Longitudinal Study of Ageing and Health in the Philippines, a nationally representative survey of Filipinos aged 60 and above. Preliminary findings reveal a noteworthy deterioration in lung function with advancing age. Among males, those in older age groups, with adequate income, suffering from respiratory diseases (such as asthma and emphysema), and those who are underweight, are inversely associated with PEF. Similarly, for females, increasing age, urban residency, lower education levels, respiratory conditions, tuberculosis history, and underweight status show negative associations with PEF. Further research is warranted to establish specific cutoff points for older Filipinos, facilitating targeted interventions to mitigate declining lung health in this subpopulation

### Primary Insights

- Evaluated the lung health of older Filipinos using PEF meters.

- Advancing age, respiratory illnesses, a history of tuberculosis, and being underweight significantly reduced lung function in both genders.
- Overweight status, higher educational attainment, and rural residence were associated with better lung health.
- The effects of respiratory diseases and tuberculosis appeared to be more pronounced in women, highlighting potential gender-specific vulnerabilities.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Gendered Health Vulnerabilities** Women face unique health challenges, such as higher disability burdens from certain conditions (e.g., COPD) despite lower mortality rates. This necessitates gender-sensitive healthcare policies.
- **Social Determinants of Health** Socioeconomic status, location, and lifestyle factors significantly impact health outcomes, particularly multimorbidity. Addressing poverty, inequality, and environmental hazards is crucial for improving population health.
- **Data-Driven Insights** Robust data collection and analysis are essential for understanding health trends and disparities. Investing in research and surveillance systems supports evidence-based policymaking and healthcare delivery.

### IV. Audience Engagement and Session Dynamics

#### Engagement Patterns

- The session witnessed active audience participation, with engaging discussions and insightful questions from the attendees.

#### Noteworthy Discussions

- Discussions revolved around the implications of research findings for policy interventions, healthcare strategies, and future research directions.

### V. Session Conclusion

The session provided valuable insights into the complex interplay of factors influencing health vulnerabilities and multimorbidity, emphasizing the need for collaborative efforts among researchers, policymakers, and healthcare professionals to address these growing concerns.

### VI. Key Strategic Implications

1. **Policy Development** Advocate for policies that address social determinants of health, reduce environmental risks, and promote healthy lifestyles to prevent and manage chronic diseases and multimorbidity.
2. **Healthcare System Strengthening** Enhance healthcare systems to provide comprehensive and integrated care for individuals with multimorbidity, focusing on early detection, disease management, and patient-centered approaches.
3. **Research and Innovation** Promote research to better understand the complex interactions between various health conditions, identify effective interventions for multimorbidity, and develop innovative healthcare delivery models.
4. **Public Awareness and Education** Raise public awareness about the importance of preventive measures, healthy aging, and early detection of chronic diseases to empower individuals to take proactive steps towards maintaining their health and well-being.

## SESSION 8.3 ADDRESSING HEALTH AND SOCIAL VULNERABILITIES

**Session Chair(s):** Sunethra Perera

### I. Session Overview

This session explored the multifaceted challenges related to health and social vulnerabilities, with a particular focus on strategies, policies, and interventions aimed at improving the well-being of affected populations. Key themes included trafficking of women, the burden of tuberculosis, and the impact of inter-caste marriages on economic inequalities in child nutrition. The session highlighted the interplay of socio-economic and cultural factors in perpetuating vulnerabilities and emphasised the need for comprehensive, evidence-based solutions.

### II. Presentation Summaries

#### 1. Women Trafficking in Nepal Why should we strengthen prevention measures?

**Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Vinay Kumar Jha, M Sheikh Giash Uddi

**Affiliation:** Mid-West University, Nepal / Jagannath University, Bangladesh

#### Abstract

This paper explores the genesis, evolution and contemporary challenges of women and girls trafficking problem in Nepal. The dramatic growth in migration and trafficking flows has been caused by the combination of various social factors. Gender discrimination, illiteracy, poverty, class clashes and natural calamities create complications in life and increase in inability to cope with these challenges.

Methodologically, this study uses a combination of qualitative and quantitative approach. In Quantitative approach both households' head and trafficked survivors were interviewed through questionnaires. At first, 600 households interview were conducted to assess the people's knowledge and perception towards risk and vulnerability factors on supply side of women and girls trafficking and also assessed the existing prevention efforts from governments and non-government organizations working on women and girls trafficking issues. , data collection involved conducting in-depth interviews with 32 key informants and one Focus Group Discussions (FGD) with Teachers, Students in order to receive a broader understanding of the social factors which is helping to create vulnerabilities in life of women and children. The paper proposes policy pathways which include community cooperation and capacity building. By fostering inclusiveness, transparency and accountability, the government can strengthen its prevention measures and reduce the size of problem.

#### Primary Insights

- Over 200,000 girls are trafficked annually in Nepal.
- Key drivers of vulnerability poverty, illiteracy, gender discrimination, cultural norms, and natural disasters.
- Study conducted in Sindhupalchok district using household surveys, interviews with trafficked survivors, and key informant interviews.
- Findings showed a lack of actionable knowledge about trafficking despite general awareness.

- Recommendations strengthen legislation, promote socio-economic initiatives, and enhance community cooperation to combat trafficking.

## **2. Burden of Tuberculosis and Facility Readiness Evidence from Large Scale Survey and Routine Surveillance in Nepal**

**Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Presenter(s):** Harad Kumar Sharma, Sampurna Kakchapati, Prajwol Shrestha, Ratna Bhattarai, Gokul Mishra, Sulabh Ghimire, Sushil Chandra Baral

**Affiliation** National Tuberculosis Control Center/Herd International/ Save The Children Nepal / Freelance Consultant, Kathmandu, Nepal/ Cist College, Kathmandu, Nepal

### **Abstract**

Tuberculosis remains a public health problem in Nepal. Approximately half (45%) of tuberculosis cases are missing from diagnosis and care. This study analyzed data from national-level tuberculosis prevalence survey, health facility survey and routine surveillance system to examine the effects of socio-demographic correlates on likelihood of tuberculosis and tuberculosis service readiness using logistic regression analysis. Geospatial analysis was also performed to explore regional disparity on tuberculosis notification and death. Older people, male, less educated and poor people were at higher risk of tuberculosis. Only about a quarter (23%) of facilities offer TB diagnosis and treatment service, while about one-third (31%) facilities had tuberculosis management guidelines and less than one in five (17%) facilities had staff with intensive training on tuberculosis. The overall readiness score of health facilities providing tuberculosis service was 32.4. Public Health Facilities, facilities of Sudurpaschim Province and hospitals had higher odds of the readiness than their counterparts. Higher tuberculosis case notification and death rate was observed in Terai region with higher population density. The study identified elderly, males and less educated, poor and those living in terai region as vulnerable population. Therefore, additional effort should be invested to improve prevention, diagnosis and treatment service among the vulnerable population.

### **Primary Insights**

- Tuberculosis (TB) is a major public health issue in Nepal, with many cases going undiagnosed.
- Older adults, males, individuals with lower education levels, and those from lower socio-economic backgrounds are at higher risk.
- Geographic disparities exist, with the Terai region bearing a disproportionate TB burden.
- Health facilities are inadequately prepared for TB services, particularly in diagnosis, treatment, and trained personnel.
- Recommendations targeted interventions for high-risk groups, capacity building for healthcare facilities and staff, and increased community awareness.

## **3. Can Inter-Caste Marriages Reduce Economic Inequalities in Child Nutrition in India? Panel Data Analysis**

**Theme:** Family Formation and Dissolution, Family and Kinship

**Presenter(s):** Rukmi Pradeep

**Affiliation:** International Institute for Population Sciences, Mumbai, India



## Abstract

**Objective:** The study focuses on intermarriages based on vertical caste preferences in India and its dimension of loosening the existing inequalities in children’s nutritional outcomes.

**Background:** Endogamous marriages in India reflect a socially segregated society based on religion and caste perpetuating caste hierarchy through same-caste marriages. Global evidence suggests that intermarriages can reduce inequality between and across generations.

**Method:** Panel data is constructed from the latest three rounds of the National Family Health Survey. Wagstaff corrected concentration index measures inequality in the child nutrition of same-caste and inter-caste couples. The random effects regression model assesses the impact of inter-caste marriage on child nutritional inequalities.

**Results:** The concentration index identifies that the economic inequality in child’s nutrition indicators exists, and it is being diminished in the presence of inter-caste marriages. Panel data regression shows that an increase in inter-caste marriage is associated with declining inequalities in the three child nutrition indicators.

**Conclusion:** The study concludes with the existence of an assortative sorting trend in the Indian marriage market based on caste. The role of inter-caste marriages in loosening the economic inequalities reflected in the child’s outcomes is found to be substantial and statistically significant through the results of the study.

## Primary Insights

- Endogamous marriages perpetuate caste-based inequalities, while inter-caste marriages may reduce these disparities.
- Using data from the National Family Health Survey (NFHS), the study found that children from inter-caste couples had lower chances of stunting and were underweight.
- The analysis showed a negative association between inter-caste marriages and nutritional inequalities, suggesting they help mitigate socio-economic disparities.
- Recommendations policy measures to encourage inter-caste marriages and further research on their long-term socio-economic impacts.

## III. Analysis of Floor Questions Cross-Cutting Themes

- The Q&A session revealed several cross-cutting themes, highlighting the complex interplay of socio-economic factors, cultural norms, and health outcomes.
- Participants engaged in discussions on the effectiveness of awareness programs in preventing trafficking, strategies for improving TB treatment success rates, and the role of DOT (Directly Observed Treatment)
- The impact of inter-caste marriages on child health, considering factors like nutrition access, food habits, and social acceptance, was also a key point of discussion.
- Geographical disparities in disease transmission and the influence of population density and migration patterns were explored.

## IV. Audience Engagement and Session Dynamics

### High-Interaction Presentations

- Presentations on women trafficking and TB elicited significant interest and discussion. The topic of inter-caste marriages and their potential in addressing economic inequalities in child nutrition generated lively debate.

#### **Limited Engagement Areas**

- While all presentations received audience engagement, the discussion on women trafficking, particularly the challenges of reintegration for survivors, garnered a particularly strong response

#### **V. Session Conclusion**

This session effectively highlighted the complex challenges posed by health and social vulnerabilities. It underscored the need for comprehensive, context-specific solutions, emphasizing targeted interventions for vulnerable groups, strengthened health systems for equitable access, promotion of social equity and empowerment of marginalized communities, and community engagement for sustainable solutions.

#### **VI. Key Strategic Implications**

1. Strengthen preventative strategies for women trafficking and TB, focusing on awareness, community empowerment, and addressing socio-economic vulnerabilities.
2. Improve health facilities' capacity to provide comprehensive TB services, including diagnosis, treatment, and DOT.
3. Advocate for policies promoting social equity and reducing disparities, including encouraging inter-caste marriages and empowering marginalized communities.
4. Invest in robust data collection and analysis to understand health vulnerabilities, monitor interventions, and inform evidence-based policymaking.

### **SESSION 8.4 INTERNAL AND LABOUR MIGRATION**

**Session Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Session Chair(s):** Guy Abel

#### **I. Session Overview**

This session explored the complexities of internal and labour migration within India and the Philippines. The session examined the driving forces behind these movements, the demographic characteristics of migrants, and the impact on both sending and receiving communities. The session also explored the influence of regional development policies on internal migration patterns within the Philippines.

#### **II. Presentations Summaries**

##### **1. Understanding the Dynamics of Asian Migration in India Exploring Trends, Patterns, Causes and Duration of Stay Periods**

**Presenter(s):** Vinay Kumar, Dr. Sanjay Kumar

**Affiliation :** Banaras Hindu University, Varanasi, India

#### **Abstract**

Global migration trends are reshaping the demographic landscape of the world. Asia is a center for migration, with a variety of flows. Migration has an effect on the socio-economic dynamics of India as well

as the world. This study examines in detail about patterns of migration inside India from different parts of Asia, including the reasons for the movements, the duration of stays, and the implications of these patterns. The researcher used a quantitative approach to this study. The study aims to offer thorough insights into the complex nature of this phenomenon by closely examining migration statistics (such as by using the required data from different sources over different time periods). As per the Census of India (1991–2011), there is a continuous decline in the number of migrants coming to India from Asian countries, with a sharp decline in the migration of men compared to women. Among the people who migrate from Asian countries to India, most of them are those who have migrated for 10 years or more. Since 1991, there has been a growth in migration for work, business, education and moved with household, while there has been a decline in migration for other purposes.

### Primary Insights

- Examined migration patterns from Asian countries to India using Census of India data (1991, 2001, 2011) and reports from UNHCR and ILO
- Overall decline in migration from Asian countries to India between 1991 and 2011, particularly among men
- Migration for work/employment increased, indicating India's growing economy as a pull factor
- West Bengal, Punjab, and Bihar received the highest share of migrants
- Long-term migration (10+ years) dominant from countries with historical ties to India (Bangladesh, Pakistan, Sri Lanka)

## 2. Migration dynamics and consequences An origin and destination-based study of Bengali labour migrants in Mumbai

**Presenter(s):** Sourav Mandal, Archana K Roy

**Affiliation:** International Institute for Population Sciences, Mumbai, India

### Abstract

The new economics of labor migration, world-system theory, highlights the material and ideological linkage between origin and destination. However, current migration studies often overlooked the dual impact on both original communities and migrants at destinations. This study aims to address this gap by examining migration patterns, processes, and consequences holistically. This study collects data from 300 migrants' families in Bankura, West Bengal, and traces 240 migrants in Mumbai, Maharashtra. Findings reveal that 90% of migrants belong to the SC community and are landless, with unemployment, low wages and irregular employment at origin driving migration. Labor contractors facilitate migration, and remittances are crucial for day-to-day expenses of the household. Positive outcomes include improved living conditions for 82% of households, but dependency issues arise in the absence of migrants. Migrants experience increased income and skill development, yet face challenges like long hours, lack of promotion, and alcohol addiction in 74% of cases. Most laborers are engaged in the private sector, with 40% of their income spent towards meeting basic needs in their destination. Addressing this, there is a pressing need for affordable accommodation and food provision, requiring concerted efforts from both government and employers.

### Primary Insights

- Investigated reasons for migration from rural West Bengal to Mumbai through an origin-destination study.
- Economic pressures (poverty, unemployment, low wages) identified as key drivers of migration.

- Migration led to improved socio-economic conditions for families but brought challenges (fear, loneliness, healthcare difficulties) for migrants.
- Information gap between migrants and families regarding living/working conditions and challenges.
- Migrants often concealed difficulties to avoid distressing families

### 3. Moving Away from the Center? The Impact of Regional Development on Population Redistribution in the Philippines

**Presenter(s):** Christian Joy Cruz, Angelo Rafael Nacionales

**Affiliation** University of the Philippines Population Institute, Quezon City, Philippines

#### Abstract

Using data from the 2020 Philippine census, this paper aims to analyze the intermigration patterns in three metropolitan areas and examine the impact of regional development planning and activities on the movement of people to and from these urban centers. Analyzing the influence of regional development activities on migration dynamics could offer helpful knowledge for policymakers and planners in promoting balanced and equitable growth in all regions of the country. The census data allows the estimation of the bidirectional flow of people between the regional center and subregional centers, the regional center and provinces within the region, and the subregional centers and the rest of the region. Initial findings indicate that there is significant migration between the urban centers and the rest of Central Visayas, particularly, more people move out from its regional center (Cebu City). About a quarter of net out-migrants from Cebu City moved to the subregional centers (Lapu-Lapu City and Mandaue City) and the rest moved to other parts of the region. While Lapu-Lapu City and Mandaue City received migrants from the regional center, their role as a receiving area was tempered by a significant flow of migrants moving to other municipalities and cities in the region.

#### Primary Insights

- Analyzed internal migration patterns in the Philippines using the 2020 census data.
- Focused on influence of regional development policies on migration to and from regional/subregional centers.
- Significant migration between urban centers and the rest of Central Visayas, particularly out-migration from Cebu City.
- Many migrants from Cebu City moved to subregional centers (Lapu-Lapu City and Mandaue City) or other areas within the region.
- The study highlighted development challenges due to urbanization and national objectives of balanced regional development.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Economic Drivers of Migration** The session highlighted the role of economic factors, such as poverty, unemployment, and the search for better opportunities, as primary drivers of both internal and international migration.
- **Impact of Migration on Sending and Receiving Communities** Discussions focused on the complex and multifaceted consequences of migration, including the benefits of remittances for families left behind, the challenges faced by migrants in new environments, and the impact on social and economic structures in both origin and destination areas.

- **Role of Regional Development Policies** The session explored the influence of government policies aimed at promoting balanced regional development on migration patterns. The presentations and discussions raised questions about the effectiveness of such policies in achieving desired outcomes.

#### IV. Audience Engagement & Session Dynamics

##### Moderate Engagement

- The session generated moderate audience engagement, with discussions primarily focused on policy implications and the need for research-based interventions.

##### Key Discussions

- **Migration to India** Discussed evolving trends and patterns of Asian migration and the impact of India's growing economy.
- **Bengali Labour Migrants in Mumbai** Raised questions about social and emotional costs of migration and the need for support systems.
- **Internal Migration in the Philippines** Discussed the role of urban planning and regional development strategies in shaping migration patterns.

#### V. Session Conclusion

The session provided valuable insights into the dynamics of internal and labour migration within Asian contexts. The presentations underscored the complexity of these movements and the multifaceted factors that influence migration decisions. The session emphasized the importance of understanding the consequences of migration for both sending and receiving communities and the need for evidence-based policies to address the challenges and opportunities associated with migration.

#### VI. Key Strategic Implications

1. **Promote Inclusive and Balanced Development** Address poverty, unemployment, and regional disparities by investing in infrastructure, education, and economic opportunities to reduce migration pressures.
2. **Strengthen Social Protection and Integration** Provide migrants with access to healthcare, housing, education, and support systems to ease challenges and ensure smooth integration into new communities.
3. **Enhance Research, Collaboration, and Policy Effectiveness** Improve data collection, promote dialogue among stakeholders, and share best practices to understand migration trends and develop effective strategies.

## SESSION 8.5 HEALTH VULNERABILITIES AND INEQUITIES

**Session Chair(s):** Risto Conte Keivabu

### I. Session Overview

The session focused on health vulnerabilities and inequities, particularly among marginalized populations such as women, migrants, and those residing in vulnerable geographical areas. It explored disparities in maternal and reproductive health, nutritional issues, and the mental health impacts of migration and socio-economic challenges. The session highlighted how geographical, cultural, and economic factors influence health outcomes, discussing essential policy interventions to address these challenges.

## II. Presentations Summaries

### 1. Unveiling Hidden Story of Anaemia among Indian Muslim Women A Comprehensive Analysis from 2005 to 2021

**Theme:** Gender and Development

**Presenter(s):** Zeenat Hashmi, Ashish Singh

**Affiliation:** Indian Institute of Technology Bombay, Mumbai, India

#### Abstract

This study investigates the prevalence and trends of nutritional anaemia among Muslim women in India, focusing on disparities and contributing factors. Utilizing diverse analytical techniques, including concentration indices, logistic regression, and decomposition analysis, we identify trends of anaemia and analyse the prevalence across the different regions and states in India.

Severe anaemia has risen significantly from 1.76% (2005–2006) to 2.66% (2019–2021) in the general female population, with a more pronounced increase of 4.62% among Muslim women. Geographically, the Eastern and Northeastern regions have the highest anaemia rates, followed by the Western region. Rural areas face elevated anaemia rates among Muslim women, and education plays a pivotal role. Persistent caste-based disparities disproportionately affect Scheduled Caste and Scheduled Tribe populations. Economic disparities are evident, with the poorest quintile consistently at higher risk. Encouragingly, recent data indicates progress in reducing anaemia among the poorest quintile. These findings underscore the need for targeted interventions to address geographical, educational, and socio-economic disparities in combating anaemia among Indian women, aligning with overarching public health objectives.

#### Primary Insights

- Focused on nutritional anaemia among Indian Muslim women, analyzing data from 2005–2021
- Severe anaemia among Muslim women increased from 1.76% in 2005–06 to 2.66% in 2019–21
- Rural areas and the Eastern and North-eastern regions show the highest anaemia rates
- Economic disparities contribute to higher risks, particularly among the poorest quintiles
- Caste-based disparities also emerge within the Muslim community

### 2. Knowledge, Attitudes, and Practices Regarding Reproductive and Maternal Health among Pregnant Women in Climate-Affected Coastal Areas of Bangladesh

**Theme:** Population and Environment, Climate Change, and Sustainable Development

**Presenter(s):** Abdullah Al Mahmud, Sharif Hossain

**Affiliation:** Population Council, Dhaka, Bangladesh

#### Abstract

Bangladesh stands at the forefront of climate change with its coastal region exposed to sea-level rise and coastal flooding over the last three decades. The resultant sea-water intrusion has increased salinity in coastal drinking water with severe health consequences to surrounding populations. Reproductive health of pregnant women in southern Bangladesh is affected by drinking water with high levels of salt. Women are usually vulnerable in health and family planning and this vulnerability is more in coastal areas of Bangladesh as their health seeking behavior is highly affected. This study was conducted to explore

Knowledge, attitudes, practices regarding reproductive and maternal health among pregnant women in climate affected coastal areas of Bangladesh. Study sample consists of 779 pregnant women aged 18-49 years interviewed in 5 selected coastal unions of Dacope upazila, Khulna district of Bangladesh. Findings suggest that pregnant women of coastal areas of Bangladesh have been exposed to lower use of FP methods, ANC, PNC, delivery care. Knowledge regarding potential pregnancy complications and danger signs is low among pregnant women living in coastal areas. Addressing poor knowledge related to taking care during pregnancy, danger signs, increasing access to safe drinking water must be improved to change behaviors and reduce risks.

#### **Primary Insights**

- Explores the impact of climate change and salinity on maternal and reproductive health in coastal Bangladesh
- Low usage of family planning, antenatal care (ANC), and postnatal care (PNC) among pregnant women
- Saline water adversely affects pregnancy outcomes, including miscarriages and infant stunting

### **3. Assessing the Vulnerability of Reproductive, Maternal, Child, and Adolescent Health in Northeast India**

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Presenter(s):** Anchal Purbey, A.J. Francis Xavier, Rajib Acharya, Niranjana Saggurti

**Affiliation:** Population Council Consulting Pvt. Ltd., Noida, India. Population Research Centre, Gandhigram, India. Population Council, New Delhi, India

#### **Abstract**

Northeastern communities in India are prone to various social and geographical vulnerabilities leading to poor health outcomes. These issues have received insufficient attention from researchers and remain inadequately understood. This study presents an attempt to primarily assess various kinds of geographical vulnerabilities and their association, particularly with reproductive, maternal, newborn and child health (RMNCH) outcomes. Spatial patterns of RMNCH indicators were identified using univariate local indicator of spatial association (LISA). Multivariate logistic regression and bivariate LISA technique was used to study socio-geographical determinants of RMNCH using National Family Health Survey (NFHS 2019-21). Multivariate logistic results depicted high multidimensional poverty index, international border and drought-prone districts were significantly associated with poor RMNCH outcomes. Bivariate clustering analysis depicted significant association between low antenatal care (Moran's I = -0.16) and low consumption of IFA (Moran's I = -0.25) with greater time taken to reach the nearest facility in Arunachal Pradesh. Also, low maternal and child health indicators were significantly associated with high multidimensional poverty index in Nagaland. The findings of the study can be utilized in developing regionally tailored targeted interventions. Such efforts can address specific localized needs of different geographical pockets within the region and improve overall health status.

#### **Primary Insights**

- Highlights geographical vulnerabilities, especially in regions with high multidimensional poverty
- Lower antenatal care (ANC) and iron-folic acid (IFA) consumption in areas like Arunachal Pradesh and Nagaland due to healthcare access challenges
- Poor health outcomes are strongly associated with socio-geographical factors

#### 4. The Long-Lasting Impact of Left-Behind Experience on Mental Health of Rural-Urban Migrant Workers

**Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Rongge Zhao, Zhongshan Yue, Weidong Li, Shuzhuo Li

**Affiliation** Xi'an Jiaotong University, Xi'an, China

##### Abstract

Using data from the migrant survey and based on the life course theory and cumulative disadvantage theory, we aim to analyze the long-lasting impact of left-behind experience on the mental health of the new generation of “post-90s” migrant workers. The results suggest that the experience of being left behind has a long-lasting negative impact on mental health of the new generation of migrant workers, and the mental health level of the new generation of migrant workers who had been left behind is significantly lower than that of those who have not been left behind. Specifically, being left behind with both parents migrated, being left behind for more than seven years, and being left behind in early life (say during adolescence) have a greater negative impact on mental health of new-generation migrant workers. Our results are robust after we controlled selectivity bias in the sample using propensity score matching (PSM). Through mediation analysis, we find that the left-behind experience does not have a direct effect on the mental health of the new generation migrant workers but has an indirect effect through the chain mediation of parent-child relationship and psychological capital.

##### Primary Insights

- Investigates the mental health impacts on young migrant workers in China who were left behind by their parents
- Longer separation, especially during adolescence, is linked to significant mental health challenges such as depression and anxiety
- Parent-child relationships and psychological capital play a key role in mediating mental health effects

### III. Analysis of Floor Questions Cross-Cutting Themes

#### Thematic Discussions

- **Health Inequities** Health disparities arising from socio-economic, geographical, and cultural factors
- **Targeted Interventions** Need for region-specific, tailored interventions to address health vulnerabilities in marginalized populations
- **Socio-economic and Cultural Determinants** The session emphasized how socio-economic status, geographical location, and cultural factors significantly impact health outcomes

### IV. Audience Engagement and Session Dynamics

#### High-Interaction Presentations

- The discussion on anaemia sparked significant dialogue on socio-economic disparities and the need for targeted interventions in marginalized communities
- Reproductive health in climate-affected coastal areas generated substantial debate on climate change impacts and the importance of accessible healthcare

#### Limited Engagement Areas

- The research on left-behind children and migrant workers received relatively less interaction



## V. Session Conclusion

The session provided a comprehensive look at the health vulnerabilities and inequities faced by marginalized populations, highlighting how socio-economic, geographical, and cultural factors intersect to exacerbate health challenges. By focusing on maternal and reproductive health, nutritional issues, and mental health impacts of migration, the presentations emphasized the need for targeted interventions and policy frameworks that address these disparities.

## VI. Key Strategic Implications

1. **Targeted, Region-Specific Interventions** Focus on improving healthcare access in marginalized regions, including rural, coastal, and geographically isolated areas, by enhancing infrastructure, healthcare worker training, and community-based health education.
2. **Nutritional and Maternal Health Initiatives** Implement focused interventions to reduce anaemia, improve access to antenatal and postnatal care, and address the unique challenges of climate-affected regions.
3. **Mental Health Support for Migrants** Prioritize policies that support migrant workers and left-behind children, focusing on family cohesion and mental health services to mitigate the long-term effects of migration.

## PLENARY SESSION II

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### ACADEMIC DISCOURSE ON MIGRATION AND DEVELOPMENT

**Session Chair: Padma Prasad Khatiwada**

#### I. Session Overview

The session delved into the interlinkages between migration and development, exploring its role in addressing global socio-economic challenges like aging populations, labor shortages, and economic instability. Simultaneously, it emphasized the vulnerabilities of migrants and the necessity of strategic policies to mitigate risks while maximizing developmental outcomes. The focus spanned remittance utilization, integration programs, and migration governance reforms.

#### II. Key Contributions

**Speaker 1: Prajwal Sharma, Head of Migration and Development, IOM Nepal**

**Topic** *Academic Discourse on Migration and Development in Nepal*

#### Key Insights

- Global Trends in International Migration: the number of international migrants worldwide reached 281 million in 2023, representing 3.6% of the global population. Migration flows are dynamic, with Asia hosting some of the largest origin and destination countries.
- In the Asia-Pacific region alone, there are approximately 42 million international migrants, underscoring the complexity and dynamism of migration flows influenced by economic, social, and environmental factors.
- Countries like Japan and Republic of Korea have experienced rapidly aging populations and in this context migration has become an essential component of addressing labor shortages and sustaining economies.
- Due to impact of Climate change, particularly, the rising sea levels, floods, and droughts which are catalytic to forcing millions to move, with countries like Bangladesh and the Philippines frequently experiencing climate-induced migration.
- Nepal's initiative to address migration through a comprehensive approach is the Migration School, a joint initiative of the Government of Nepal, IOM, and CDPS, TU.
- Migration School brings together a diverse set of participants, from diaspora leaders to grassroots activists.
- This initiative also provides grants for students to conduct research on thematic migration topics, enriching both academic knowledge and policy discourse.
- It further facilitates academic discussions, helping bridge the gap between policy and practice and showcases Nepal's commitment to a whole-of-society approach in migration governance.

#### Policy Recommendations

- Global Compact for Migration (GCM) is important for establishing regular migration pathways to reduce vulnerabilities and maximize the developmental benefits of migration.
- As a takeaway, Nepal's initiative to address migration through a comprehensive approach: the Migration School is a 2-week intensive course has completed three successful editions, creating a

platform for policymakers, practitioners, civil society, academia, private sector actors, and migrants themselves to engage in meaningful dialogue.

**Speaker 2: Chalernpol Chamchan**

**Topic** *Migrant Children in Thailand Amid Population Decline*

**Key Insights**

- Thailand's population decline presents labor shortages, potentially mitigated by migrant children.
- Challenges include limited access to education, healthcare, and skill development.
- Controversy surrounds viewing migrant children as assets versus liabilities.

**Policy Recommendations**

1. Implement skill development initiatives targeting migrant children.
2. Reform immigration policies to facilitate legal migration pathways.
3. Promote integration through language and cultural orientation programs.

**Speaker 3: Guy J. Abel**

**Topic** *Quantifying Global International Migration*

**Key Insights**

- Limited global migration data hinders effective policy-making.
- Innovations in estimating migration flows, including social media analytics, provide valuable insights.
- Significant migration declines during COVID-19 were followed by rebounds in 2021.

**Policy Recommendations**

1. Standardize international data collection efforts on migration flows.
2. Leverage big data and collaborative platforms for enhanced monitoring.
3. Integrate reliable migration estimates into global demographic planning.

**Speaker 4: Mayanka Ambade**

**Topic** *Migration Insurance Coverage Among Migrants in India*

**Key Insights**

- Language barriers and systemic hurdles reduce healthcare accessibility for migrants.
- Lack of documentation often excludes migrants from health insurance schemes.
- Improving access to insurance reduces untreated illnesses, enhancing public health outcomes.

**Policy Recommendations**

1. Provide multilingual healthcare support services.
2. Develop inclusive health insurance policies for all migrants, regardless of legal status.

**Speaker 5: Nilambar Badal**

**Topic** *Nepal's Labor Migration and Development Nexus*

**Key Insights**

- Nepal's economy heavily depends on remittances (26.9% of GDP in 2023).
- Vulnerabilities include exploitative working conditions, healthcare access, and social costs of migration.
- Bilateral agreements, gender-sensitive policies, and skill development can address these issues.

**Policy Recommendations**

1. Strengthen bilateral and multilateral agreements for migrant rights.
2. Support reintegration programs for returning migrants.
3. Implement gender-transformative migration policies.
4. Regulate recruitment practices to prevent exploitation.

5. Create welfare funds for migrant workers to provide crisis support.
6. Invest remittances into sustainable development projects like education and infrastructure.

### III. Overarching Themes

1. **Economic Contributions** Migration contributes significantly to GDP through remittances and labor force enhancement.
2. **Social Challenges** Migration often exacerbates family separation, urbanization pressures, and exploitative conditions.
3. **Data Gaps** Effective migration policies require robust, standardized, and innovative data collection systems.
4. **Policy and Governance Needs** Comprehensive frameworks are needed to balance migration's economic benefits with its social costs.

### IV. Conclusion

The session highlighted migration's potential to drive sustainable development, emphasizing the importance of policies that address vulnerabilities while maximizing its benefits. Integrating migration into national and global development agendas, supported by actionable data and inclusive governance, remains a priority for leveraging migration's full potential.

## SESSION 9.1 FAMILY DYNAMICS AND SOCIAL CHANGE

**Session Theme:** Family Formation and Dissolution, Family and Kinship

**Session Chair(s):** Ariane Utomo

### I. Session Overview

The session explored the evolving family dynamics in Asia, focusing on marital patterns, caregiving burdens, and the impact of modernization and urbanization. It examined these trends in the contexts of Nepal, India, and China, highlighting shifts toward nuclear families, the growing prevalence of love and inter-caste marriages, the increasing pressure on caregivers, and the rise in divorce rates. The discussion underscored the importance of creating policies that address these changes, promote family well-being, and support social equity.

### II. Presentation Summaries

#### 1. Continuity and Change of Parental Socio-economic Characteristics into the Married Couple

**Theme:** Family Formation and Dissolution, Family and Kinship

**Presenter(s):** Badri Aryal

**Affiliations:** Pokhara University, Pokhara Nepal

#### Abstract

This study is about the attributes of different households which together come into the married couple to unite into their wedlock. The purpose of the study was to trace out the carry-over of the wife and husband side parental socio-economic characteristics into the married couple. A total of seventy-five married couples and their wife side and husband side socio-demographic information were collected using semi-structured questionnaire. Data were collected in *Thakre* Rural Municipality of *Dhading* district of Nepal during February to April of 2022 from the conveniently selected respondents using face to face interview.

The study revealed that there is a growing trend of inter-caste marriage and love marriage in the younger generations compared to their parents, however, the inter-religious marriages are still restricted. The study further unveiled that the husbands have been able to marry wives whose parents have better economic status than their own parent. This finding is useful in understanding the current pattern of marriage as well as socio-economic transfer brought together by the married couple as carryover from their respective parents.

#### **Primary Insights**

- The "sandwich generation" caregivers in India face significant emotional, financial, and marital strain due to their dual caregiving roles.
- Women are disproportionately affected by these burdens compared to men.
- Economic pressures from caregiving result in higher stress levels and lower marital satisfaction.

## **2. Family Caregiving Lived Experiences of Sandwich Generation Caregivers in India**

**Presenter(s):** Sruthi Anilkumar Hemalatha, Sekher T.V

**Affiliations:** International Institute for Population Sciences, Mumbai, India.

#### **Abstract**

Sandwich-generation caregivers, while providing simultaneous care to two generations, face unique challenges and responsibilities. This study aimed to understand the lived experiences of the sandwich-generation caregivers in India, using data from a primary survey of 400 couples residing in Mumbai city within the 25-59 year age group. In addition, 10 case studies were carried out involving members of the sandwich generation and older adults to gain an in-depth understanding of caregiving practices. To assess the impact of various background factors on caregivers' well-being, the study utilized both bivariate and multivariate analyses and considered different aspects such as self-rated health, marital satisfaction, and the nature and frequency of intergenerational transfers. The results highlight significant associations with background characteristics, including age, caste, education, income, religion, and employment status, underscoring the multifaceted nature of challenges faced by caregivers. Variations in health status were observed among different household types. Both men and women residing in sandwich/three-generation households reported lower levels of marital satisfaction compared to those in one/two-generation households. Insights from the case studies highlighted the diversity of attitudes and perceptions regarding caregiving. The study highlights the critical need for tailored support systems that identify and address the unique issues of sandwich generation caregiving.

#### **Primary Insights**

- The "sandwich generation" caregivers in India face significant emotional, financial, and marital strain due to their dual caregiving roles.
- Women are disproportionately affected by these burdens compared to men.
- Economic pressures from caregiving result in higher stress levels and lower marital satisfaction.

## **3. Examining the Role of Modernization and Urbanization in Family Changes in India Evidence from Panel Data Analyses, 1991-2021**

**Presenter(s):** Tapas Dey

**Affiliations:** International Institute for Population Sciences, Mumbai, India

**Abstract**

Despite a dramatic change in family structures, the existing literature in the Indian context does not provide sufficient knowledge on the family changes in the process of modernization and urbanization over time linked to the aspects of demographic transition. In the present study, we shed light on the question of whether the process of modernization and urbanization influences the breaking of Indian traditional family systems. The study uses the five rounds (1992, 1999, 2006, 2016, 2021) of the panel data generated using multiple data sources mainly from the National Family Health Survey (NFHS), India Human Development Survey (IHDS), Economic Survey and Census of India for 1991-2021. Using the Panel data fixed-effects estimates, we find a positive and significant association of ‘family structure’ with ‘modernization’ and ‘urbanization’ in India. Societal modernization such as a rise in literacy rate and structural changes in the economy are positively associated with family changes. Along with the societal changes, Urbanization insists the family nucleation as well. India has been experiencing a slow but steady rise in rural-to-urban transition for decades. The country will continue to urbanize and eventually experience more nucleation of families in the forthcoming years.

**Primary Insights**

- Modernization and urbanization have led to a shift from extended to nuclear families, particularly in urban areas.
- Women’s empowerment, education, and economic growth have facilitated this transition, although rural areas lag in these trends.

**4. Shifting Dynamics of Educational Assortative Mating in India A Comprehensive Analysis using NFHS-5 data**

**Presenter(s):** Gulnaj Basri, Manoj Alagarajan

**Affiliations:** International Institute for Population Sciences, Mumbai, India

**Abstract**

Better education, particularly for women, has emerged as a pivotal driver for transforming women's marriage patterns. In this study, we explored the changing patterns of assortative mating and the tendency for individuals to marry those with similar educational backgrounds in an Indian context. The study employs data from the NFHS-5 to analyses assortative mating among 15- to 49-year-old ever-married couples. The research is framed within five marriage cohorts spanning from 1964 to 2020. The analysis includes loglinear and multivariate analyses to uncover patterns of female literacy in mate selection.

The results show that educational homogamy has significantly increased over time, especially among highly educated people. Better-educated couples are more likely to be homogamous in urban areas, while less-educated couples are more likely to be homogamous in rural areas. A noticeable increase in hypogamy—the practice of women marrying partners with less education—has been observed during the last two decades. Further multivariate analyses show that highly educated women tend to marry men with lower education but from more privileged families. Given that other prominent social boundaries are far more difficult to breach, we conclude that the growth in hypogamous marriage through education ironically indicates deeply ingrained gender norms in India.

**Primary Insights**

- Divorce rates in China are rising, with significant gender and class differences in divorce initiation and outcomes.

- Urban women and those from higher socio-economic backgrounds are more likely to initiate divorces.
- Rural men, especially from lower classes, face social pressure to remarry after divorce.

### III. Analysis of Floor Questions Cross-Cutting Themes

#### Thematic Discussions

- **Gender and Family Roles** Significant discussion on shifting gender dynamics in marriage, caregiving, and divorce.
- **Socio-Economic Factors** Exploration of how education, financial status, and urbanization affect family structures and marital choices.
- **Policy Gaps** A need for policies that support family diversity, address caregiving burdens, and promote gender equality.

### IV. Audience Engagement and Session Dynamics

#### Engagement Patterns

- **High-Interaction Areas**
  - Discussions around divorce rates and caregiving dynamics generated substantial interest, with multiple audience contributions.
- **Limited Engagement Areas**
  - The research on educational assortative mating had less audience interaction, though it provided important regional insights.

### V. Session Conclusion

The session underscored the importance of addressing the intersection of gender, class, and family dynamics in policy development. By focusing on the evolving nature of marriage, caregiving, and divorce, the presentations highlighted the need for policies that promote family well-being and address systemic inequities. The session concluded with a call for more comprehensive and inclusive policies that can adapt to the changing needs of families in Asia.

### VI. Key Strategic Implications

1. **Comprehensive Family Policies** Develop policies that recognize the diverse needs of families, including support for caregivers, legal protections for women, and the promotion of socio-economic equality in marital choices.
2. **Rights-Based Legal Frameworks** Strengthen legal frameworks to ensure gender equality and support for divorced individuals, particularly through social and financial safety nets.

## SESSION 9.2 ENVIRONMENTAL VULNERABILITIES AND URBANISATION

**Session Chair(s):** Dirgha Ghimire

### I. Session Overview

This session explored waste management challenges in India and the impact of depopulation and an ageing population on heat exposure in South Korea. The session also explored intergenerational geographic proximity in Japan, driven by the residential mobility of adult children.

### II. PRESENTATIONS SUMMARIES

## 1. Understanding the Waste Management in India Reading Through Swachh Bharat Mission

**Theme:** Population and Environment, Climate Change, and Sustainable Development

**Presenter(s):** Chandan Kumar Hansda, Susmita Dutta

**Affiliation:** International Institute for Population Sciences, Mumbai, India

### Abstract

Solid Waste Management in developing countries is a continuously discussed issue today in population development and environmental debate. Unscientific collection, segregation, and disposal of solid waste results in health vulnerability to the population residing in the proximity areas through inland and underground pollution. India, as a developing nation, is no exception from this situation, however, the Government of India has taken policy and programme initiatives to deal with the phenomena. Swachh Bharat Mission (SBM) is a program initiative launched in 2014 to promote cleanliness and sanitation across India. A study utilizing two rounds of the National Sample Survey (NSS) conducted pre-and-post SBM implementation revealed that 48.3% of households continued to dispose of waste in open areas. Disturbingly, 12 states, such as Bihar (69.3%), West Bengal (67.1%), and Odisha (66.8%), reported over 50% of households practicing open dumping. Furthermore, 58.9% of households lacked waste collection arrangements, with over 20 states having more than 50% of households without proper disposal arrangements. The findings emphasize the persistence of unscientific waste disposal practices, indicating the need for a more programmatic and comprehensive government approach to address solid waste management in India.

### Primary Insights

- India's waste management faces regional disparities, with urbanization driving MSW from 62 to 165 million tons by 2031.
- Peri-urban and rural areas are neglected, often serving as dumping grounds.
- NSS data shows rising open garbage disposal and inadequate collection, particularly in rural areas, with states showing mixed progress (e.g., Tripura vs. Chhattisgarh).
- Budget allocation disparities between SBM-Gramin and SBM-Urban worsen rural and peri-urban conditions.
- Poor waste management impacts public health through environmental contamination.
- Reforms needed include improved infrastructure, community engagement, targeted rural interventions, and integrated approaches for sustainable practices.

## 2. Reading Survival Gains Across the Stages of Transition with Keyfitz's Entropy – Insight from India and Japan

**Theme:** Mortality, Morbidity, Epidemiology, and Causes of Death

**Presenter(s):** Rahul Mondal

**Affiliation:** International Institute for Population Sciences, Mumbai, India

### Abstract

**Background:** There has been a demographic tradition of decomposing a change in life expectancy, especially following the generalization of life table entropy ( $H$ ). We explore the time derivative of life expectancy through age-specific mortality changes and entropy across different levels of life expectancy.

**Objective:** We compare survival gains in heterogenous populations at different stages of mortality transition with time derivative of life expectancy.



**Methods:** Inspection of Keyfitz’s entropy is followed by the age decomposition of life expectancy based on the continuous change in the survival function, with an illustration based on Sample Registration System data from India and the Human Mortality Database for Japan.

**Results:** Contribution of age-specific improvement of mortality to the survival gain is higher for India than in Japan, given its stage of mortality transition. However, the contribution of heterogeneity in death distribution is also higher in India than in Japan, reflecting the lifespan inequality in the former.

**Conclusion:** Decomposition of change in life expectancy shows a greater contribution of heterogeneity in age pattern of mortality at a relatively backward stages of mortality transition.

#### Primary Insights

- Compared survival gains and mortality drivers in India and Japan across different transition stages.
- Highlighted challenges in comparing mortality, including lifespan inequality and unclear metrics.
- Analyzed life expectancy improvements using age-specific data from India’s SRS and Japan’s Human Mortality Database.
- Found that India’s survival gains were focused on younger and adult ages, while Japan’s were more prominent in older ages.
- Observed high lifespan dispersion in India, suggesting the need for universal health coverage and targeted interventions to address unequal mortality improvements.

### 3. Residential Mobility of Adult Children, Changes in Living Arrangements, and Intergenerational Geographic Proximity in Japan

**Theme: Population** Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Masataka Nakagawa

**Affiliation:** National Institute of Population and Social Security Research, Tokyo, Japan

#### Abstract

This paper analyses the relationships between migration of adult children, their co-residing patterns and geographical distances to parents, highlighting the role of return migration to non-metropolitan regions. Using data drawn from the latest Japanese National Survey on Migration and the Longitudinal Survey of Middle-aged and Elderly Persons, individual-level characteristics and migration trajectory of respondents are linked to information on their parents, including the place of residence of non-core siding parents. The proportion of those who have migrated for family-related reasons is significantly higher in the non-metropolitan regions, where return migrants are more likely than stayers (those without inter-prefectural migration experience) to live with their parents. These observations suggest that the higher prevalence of co-residence between parents and their adult children in the non-metropolitan region is partly sustained by return migration. Among those not living with their parents, geographical distances to their parents are also narrower in the non-metropolitan regions, but there is no significant difference by migration status. The effect of return migration on the likelihood of co-residence is more significant among those aged 40 and over than those in younger age groups, implying that motivations for return migration vary across life stages.

**Primary Insights**

- Analyzed the impact of return migration on intergenerational proximity in Japan, focusing on regional differences.
- Found higher return migration rates in non-metropolitan areas, with young adults driven by education and employment, and middle-aged adults by caregiving responsibilities.
- Observed that return migrants in non-metropolitan areas are more likely to co-reside with or live near parents.
- Recommended region-specific policies and improved data collection to support multigenerational co-residence and strengthen family bonds.

**4. Depopulation, Super Aging, and Extreme Heat Events in South Korea**

**Theme:** Future Challenges of Asian Population Dynamics

**Presenter(s):** Oh Seok Kim

**Affiliation** Korea University, Geography

**Primary Insights**

- Explored the intersection of depopulation, super-ageing, and extreme heat events (EHEs) in South Korea.
- Noted rising temperatures and the ageing population, with urban areas like Seoul and Busan being hotspots due to high population density and urban heat island effects.
- Found that depopulation in rural regions reduces exposure but increases vulnerability due to the concentration of older adults and inadequate infrastructure.
- Projected increased exposure to EHEs in the 2040s, especially in metropolitan regions.
- Critiqued the disconnect in climate adaptation policies, highlighting the need for urban and rural adaptation strategies, data-driven policymaking, and ageing-centric policies.
- Recommended applying this framework to similar challenges in Nepal, using small-area demographic projections and integrating climate data into national resilience plans.

**III. Analysis of floor questions Cross-cutting themes**

- **Impact of Demographic Change** Addressed how urbanisation, depopulation, and ageing influence environmental vulnerabilities and public health, emphasizing the need for adaptive policies.
- **Regional Disparities** Highlighted regional differences in waste management and heat exposure vulnerabilities, stressing the need for targeted, region-specific interventions.
- **Policy Gaps and Recommendations** Identified gaps in policies on waste management, climate adaptation, and ageing populations, calling for reforms, increased investment, and data-driven policymaking.

**IV. Session conclusion**

This session highlighted the complex interplay of environmental vulnerabilities, urbanization, and demographic changes, with a focus on waste management challenges in India and the impact of depopulation and ageing on heat exposure in South Korea. The session underscored the need for data-driven policymaking, targeted interventions, and a focus on addressing regional disparities to enhance resilience and achieve sustainability goals.

## V. Key strategic implications

1. **Investing in Waste Management Infrastructure** Increasing investment in waste management infrastructure, particularly in rural and peri-urban areas, is crucial for improving sanitation and public health outcomes in India.
2. **Developing Ageing-Centric Climate Adaptation Policies** Integrating ageing considerations into climate adaptation policies is vital for protecting vulnerable older populations from extreme heat events, especially in countries experiencing rapid ageing.
3. **Promoting Data-Driven Decision-Making** Utilising demographic and climate data to inform policy decisions can enhance the effectiveness of interventions and ensure equitable resource allocation.

## SESSION 9.3 AGEING SOCIETIES AND LABOUR

**Session Chair(s):** Chalernpol Chamchan

### I. Session Overview

The session focused on addressing the challenges faced by special population groups, particularly ageing workers, and the role of migration in chronic health conditions. The session aimed to identify strategies for fostering inclusion, promoting the social and economic contributions of older workers, and advocating for policy integration to support these groups in the labour market.

### II. Presentations Summaries

#### 1. The Impact of Contextual Factors on Aged Workers' Labour Force Participation in Japan

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter(s):** Nobutaka Fukuda

**Affiliation:** Tohoku University, Japan

#### Abstract

**Objective:** This study attempts to investigate the patterns and determinants of aged people's employment in Japan. While much attention has been paid to population ageing and its eventual impact on social security, it has been insufficiently studied concerning older workers' employment. Thus, this paper addresses the labour supply of aged people.

**Methods:** Data come from a nationwide online survey in Japan in 2019. The targeted population is Japanese men and women between ages 50 and 69. This study analyzed respondents over age 55 at the time of the survey. Logistic regression analysis was used to examine the determinants of labour force participation.

**Results:** Results showed that older workers' greater wages increased the probability of employment. Second, while self-employed and agricultural workers retired at a relatively advanced age, older workers' labor supply did not differ between employees in professional and service jobs. Third, Wives whose husbands were in poor health retreated from the labor market with a greater probability than those with husbands in good health.

**Conclusion:** Older workers' employment is regarded as the joint product of economic incentives and structural constraints. Besides, there is a gender gap in the impact of intra-familial contextual factors on the labor supply of aged people.

**Primary Insights**

- Investigated employment patterns among older workers, particularly women, in Japan
- Found that economic incentives (e.g., wages) and structural constraints (e.g., firm size) shape employment outcomes
- Older women face career interruptions due to caregiving roles, affecting their participation in the labour market
- Greater wages increase employment likelihood for older workers
- Family-related career interruptions reduce older women's labor force participation
- Older women often work in smaller firms and part-time positions

**2. Migrants ageing and their chronic health conditions in India**

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter Name(s)** Vasim Ahamad

**Affiliations:** International Institute for Population Sciences, Mumbai, India

**Abstract**

Abstract: This study empirically examines the effects of migration on the chronic health condition of older persons in India. The Longitudinal Ageing Study in India (LASI) Wave-I, data was used for this study. The study comprises 65,724 samples of older adults for analysis. The level and patterns of migrants and the distribution of chronic disease were analyzed using descriptive, and multinomial logistic regression analysis was used to see the association between both. The findings suggest that 57% of the older adults migrated. Most of the migration occurred intrastate migration (89%) and 25 years ago (80%). Furthermore, 27.4% and 19.2% of older adults had one and multiple chronic conditions, respectively. The adjusted results of the multinomial logistic regression showed that intrastate [RRR: 1.66; CI: 1.35-2.03] and immigrants [RRR: 2.16; CI: 1.73-2.70] had a higher likelihood of multiple chronic diseases than the non-migrants. Migrants with 25+ years of duration [RRR: 1.13; CI: 1.09-1.19] and [RRR: 1.23; CI: 1.16-1.29] had a higher likelihood of one and multiple chronic diseases, respectively. In exploring migrations' effect on chronic health, policymakers should prioritize migrants in their agenda to maintain the health of older adults in India to achieve the sustainable goal of active and healthy ageing.

**Primary Insights**

- Explores the link between migration and chronic health conditions in older adults
- Highlights vulnerability of long-term, intrastate, and rural-to-urban migrants to chronic health risks
- 57% of older adults in the study were migrants, with 80% being women
- Long-term migration (25+ years) increases likelihood of chronic conditions
- Rural-to-urban migration associated with higher health risks

**3. Narrative of Governing Emigration A case study in Hong Kong**

**Theme:** Digital Technology for Demographic Analysis

**Presenter Name(s)** Ka Wang Kelvin Lam, Eric Fong, Xinxin Wang

**Affiliations:** The University of Hong Kong, Hong Kong, Hong Kong. Yale University, New Haven, Connecticut, USA

## Abstract

Understanding media narratives helps us better understand how diverse actors in society attempt to shape public opinion. The government, pro-government politicians, and pro-government opinion influencers create narratives through major newspapers about an event, which can also be seen to maintain or regain control over the interpretation of the unfolding event. Our study examines the media narrative surrounding the recent emigration wave in Hong Kong following the large-scale social unrest in 2019. We utilized the Latent Dirichlet Allocation (LDA), a generative statistical model, which provides an efficient and effective method for the analysis of large-scale textual data. Analyzing reports and articles from five major Chinese newspapers in Hong Kong, published between January 2020 and December 2022, we identified five major themes. These themes shed light on the strategies used to interpret the emigration phenomenon.

### Primary Insights

- Examined how media narratives shaped public opinion about emigration from Hong Kong post-2019 unrest
- Identified government strategies to minimize negative impacts of emigration
- Five pro-government themes identified in media coverage
- Focus on minimizing emigration impact and emphasizing family challenges

### III. Analysis of Floor Questions Cross-Cutting Themes

- Economic incentives and structural constraints in labour market participation
- Health disparities among ageing migrant populations
- Impact of media narratives on societal perceptions of migration

### IV. Audience Engagement and Session Dynamics Engagement Patterns

#### High-Interaction Presentations

- Japan's labour force participation study generated significant discussion
- Migrants' health conditions sparked debates about policy interventions

#### Noteworthy Discussions

- Structural barriers facing older workers
- Migration's impact on health and social dynamics

### V. Session Conclusion

The session provided comprehensive insights into the challenges faced by ageing workers and migrants, revealing complex intersections between labour market dynamics, health conditions, and social transformations across different Asian contexts.

### VI. Key Strategic Implications

1. **Labour Market Integration** Develop targeted policies to support older workers, particularly women, addressing structural barriers and career interruptions.
2. **Migrant Health Policies** Create comprehensive healthcare strategies that address the unique vulnerabilities of long-term and rural-to-urban migrants.
3. **Media and Narrative Strategies** Understand and leverage media narratives in shaping public perceptions of migration and social change.

## SESSION 9.4 EDUCATION, LANGUAGE, AND HEALTH

**Session Chair(s):** Singh Brijesh P.

### I. Session Overview

This session explored the interconnectedness of ethnicity/race, religion, language, population, economy, labor markets, and special population groups. Discussions centered around cognitive function in older tribal and non-tribal populations in India, skill development for caregivers in Thailand, and the impact of education on cognitive function.

### II. Presentations Summaries

#### 1. Does Educational Attainment Improve Cognitive Functioning of Older Tribal Population in India?

**Theme:** Ethnicity/Race, Religion and Language

**Presenter(s):** Neha Kumari, Nandita Saikia

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

This study examines cognitive functioning disparities between tribal and non-tribal older populations in India using data from the Longitudinal Ageing Study in India (LASI) 2017-18. We analyzed 62,322 older adults, including 11,390 tribal and 50,932 non-tribal individuals, focusing on cognitive health assessed through the Health and Retirement Study cognition module. Results indicate that tribal older adults have significantly lower cognitive functioning compared to their non-tribal counterparts, with 77.5% of this difference attributable to variations in educational attainment and other characteristics. Education emerges as a crucial factor influencing cognitive functioning, highlighting the need for addressing educational disparities to promote cognitive equality among tribal and non-tribal populations. Additionally, participation in social activities is identified as a contributing factor to cognitive differences, reflecting contrasting social engagement patterns between tribal and non-tribal older adults. The study acknowledges limitations, such as potential measurement errors in assessing cognitive functioning and the cross-sectional nature of the research, underscoring the necessity for longitudinal studies to establish causal relationships and develop effective strategies for enhancing cognitive health in older populations. This research underscores the importance of targeted interventions and policies aimed at improving cognitive well-being and overall quality of life among older tribal individuals in India.

#### Primary Insights

- Investigated lower cognitive function among older tribal adults in India using LASI data.
- Tribal individuals had significantly lower cognitive functioning compared to non-tribal individuals.
- Education was strongly associated with better cognitive functioning.
- Other influencing factors age, gender, marital status, social activity, smoking, urban/rural living, and wealth index.
- Educational disparities were a major contributor to the cognitive gap between tribal and non-tribal adults.
- Highlighted the need for culturally appropriate cognitive assessment tools recognizing diverse cognitive development forms

## 2. Demand-Driven Skill Development in the Thai Key Industries

**Theme:** Population and Economy, Demographic Dividend, and Labor Market

**Presenter(s):** Chadatan Osatis, Jintatat Chaiyapuck

**Affiliation:** College of Population Studies, Chulalongkorn University, Bangkok, Thailand

### Abstract

In Thailand, the demand for skilled labor is constantly increasing in response to the upgrade of industrialization. A future skills policy that effectively responds to the challenge of achieving inclusive growth in the context of changing labor markets requires a more integrated and broader perspective that goes beyond the traditional boundaries of skills policies.

The research seeks to explore the current skill requirements and analyze strategies for effective skill development. We employ a mixed methods approach by survey questionnaires and semi-structured interviews. The findings reveal that 103 out of 2,000 establishments demand labor in 2023. Approximately 60 percent require skilled labor. Problem-solving, digital literacy, management, learning, and innovation are considered the most important hard skills for success. Employers prioritize attributes such as integrity, patience, diligence, responsibility, discipline, resilience, agility, empathy, accountability and analytical thinking.

In conclusion, demand-driven skill development is essential for ensuring the competitiveness of key industries in Thailand. Integrating skill development with public employment service is critical for achieving inclusive growth in the context of changing labor markets. By aligning training programs with the evolving needs of the market, stakeholders can better prepare the workforce for the jobs of the future and drive economic growth.

### Primary Insights

- Explored skill requirements in Thai industries and strategies for effective development.
- Emphasized evidence-based training investments aligned with labor market demands.
- Discussed technological change's dual impact on on-the-job training versus general education.
- Highlighted integration of skill development with public employment services for inclusive growth.
- Identified challenges funding continuity, stakeholder coordination, cultural attitudes towards vocational education, and monitoring and evaluation.
- Addressed skill mismatches between workforce supply and establishment demands.

## 3. Considering Required Skills Among Foreign Elderly Careworkers in Thailand

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter(s):** Suphanna Krongthaeo, Nontawatch Sankla, Sudarat Musikawong

**Affiliation:** Mahidol, School of Nursing Ramathibodhi, Bangkok, Thailand / Mahidol University, IPSR, Salaya, Thailand

### Abstract

Thailand established a long-term care system through the Healthy Establishments Act B.E. 2016. To create opportunities to access services with good quality, standards, and safety. Thailand has developed a public health community-based care team consisting of a care manager and caregiver. We call them community caregivers. Both have received training and developed the potential to take care of some elderly people,

but not all. As of early 2024, unmet need is apparent in the National Health Security Office database between the number of elderly people who are dependent (561,001 persons), but there are only 98,843 community caregivers. While there are 157 certified care facilities, this care deficit increases migrant caregivers.

This study aims is in phase one, which is to understand the optimal competency for caregivers who are foreign workers in Thailand. The paper provides preliminary in-depth interview findings gathered in 2024 about required and necessary skill sets from the point of view of the private sector, elderly households that employ caregivers, elderly households that employ foreign workers as domestic and caregivers and regulators such as the Ministries/Department of Health, Ministries/Department of Employment. With approximately 72 interviews, using snowball sampling, patterns in the interview data was analyzed using thematic analysis.

### Primary Insights

- The study aimed to understand optimal competencies for migrant caregivers in Thailand, focusing on the necessary skills for foreign workers in this role.
- Key discussion points highlighted the challenges faced by migrant caregivers, including language barriers, cultural differences, lack of specific skills, safety concerns, and labor compliance issues.
- The importance of addressing these challenges through training and support was emphasized to ensure effective and safe care for elderly individuals.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Cognitive Function and Measurement in Diverse Populations** Questions and discussions focused on the need for culturally appropriate tools to assess cognitive function in tribal communities, recognizing diverse forms of knowledge and skills beyond conventional literacy measures.
- **Skill Gaps and Labor Market Dynamics** Discussions explored the mismatch between available skills and industry demands, highlighting the need for effective skill development programs that respond to evolving labor market needs.
- **Support for Migrant Caregivers** Questions raised the specific challenges faced by migrant caregivers in Thailand, emphasizing the need for targeted training and support programs to address language barriers, cultural differences, and other challenge

### IV. Audience Engagement and Session Dynamics

#### Engagement Patterns

- Moderate audience engagement with presentations and discussions.

#### Noteworthy Discussions

- The need for culturally sensitive cognitive assessment tools.
- Strategies for effective skill development programs addressing labor market demands.
- Support and training needs for migrant caregivers in Thailand.

### V. Session Conclusion

The session shed light on the complex interplay between education, language, health, and socio-economic factors influencing cognitive function, skill development, and caregiving practices. The discussions emphasized the need for tailored interventions and support systems that address the unique needs of diverse population groups.

### VI. Key Strategic Implications



1. **Develop Culturally Appropriate Assessment Tools** Create cognitive function assessment tools that are sensitive to cultural differences and recognize diverse forms of knowledge and skills in tribal and other communities.
2. **Strengthen Skill Development Programs** Design and implement effective skill development programs aligned with dynamic labor market needs, ensuring inclusive growth opportunities for all.
3. **Provide Comprehensive Support for Migrant Caregivers** Establish comprehensive support systems for migrant caregivers, addressing language barriers, cultural differences, skill gaps, and other challenges to ensure quality care for elderly individuals.

## POSTER PRESENTATION- DAY 3

### REFLECTIONS ON THE INTERDISCIPLINARY INSIGHTS FROM POSTER PRESENTATIONS

*"The poster presentations showcased diverse topics in population studies, health, and social issues, including aging populations, the impact of climate change on health outcomes, and social determinants of health. These presentations highlighted robust methodologies, compelling visuals, and actionable insights, such as recommendations for improving access to healthcare services for vulnerable populations and developing community-based programs to address social inequalities. Presenters actively engaged audiences, fostering lively discussions and responding to numerous questions with clarity and confidence. Strengths included clear statistical analysis, well-structured designs, and practical recommendations for policy and practice. However, limitations like the need for deeper exploration of causal factors, region-specific data, and scalability of solutions were noted. Overall, the session emphasized the relevance of research in addressing global and local challenges while fostering interdisciplinary dialogue and policy engagement"*

#### 1. Fertility and Education

- Focuses on the relationship between female education and declining fertility rates, particularly in rural and urban settings.
- **Presentation**
  - *Saroja Adhikari et al. "Rural/Urban Fertility Differentials in the Global South Is Female Education the Key Driver of Declining Birth Rates?"*

#### 2. Reproductive Health and Abortion Services

- Examines abortion prevalence, post-abortion contraceptive use, and access to reproductive health services.
- **Presentations**
  - *Aditi Prasad, Nirmal Singh "Unveiling the Abortion Landscape in India A Comprehensive Analysis using NFHS-5 Data"*
  - *Joemet Jose et al. "Post-abortion Contraceptive Use among Currently Married Women in India"*
  - *Rinika Biswas, Dr. Harihar Sahoo "Medical Method of Abortion in India Prevalence and Determinants"*

#### 3. Maternal and Child Nutrition

- Highlights the role of nutrition education and counselling in improving maternal and child health outcomes.
- **Presentation**
  - *Manoj Raut et al. "Nutrition Education Counselling by Frontline Health and Nutrition Care Workers is Associated with Improved Iron Adherence among Women"*

#### 4. Menstrual Health and Gender Equality

- Explores cultural practices like chhaupadi and their implications for sustainable development.
- **Presentation**
  - *Manusha Paudel "Persisting Menstrual Restrictions and Chhaupadi in Nepal Implications for Sustainable Development Goals"*

#### 5. Spousal and Gender-Based Violence

- Investigates the cultural factors influencing spousal violence and gender dynamics in relationships.
- **Presentation**
  - *Madhumita Bango, Gyan Chandra Kashyap "Does Consanguinity Play a Role in Spousal Violence in the Southern States of India?"*

#### 6. Migration and Health Risks

- Focuses on the health risks associated with migration and temporary relocations during pregnancy.
- **Presentations**
  - *Rutuja Patil et al. "Does Social Support Play a Role in Women's Decision to Temporarily Migrate to Their Natal Home During or After Pregnancy?"*
  - *Richa Panchgaur, Alok Kumar "Rural Population Proximity to Migrants and Suspected COVID-19 Risk"*

#### 7. Women's Economic Empowerment and Low Fertility

- **Explores how fertility decline influences women's economic empowerment.**
- **Presentation**
  - *Roni Sikdar, Dhananjay W. Bansod "Exploring Pathways to Empowerment Influence of Low Fertility on Women's Economic Empowerment in India"*

#### 8. Cultural and Traditional Health Practices

- Analyzes the role of traditional practices in healthcare and livelihoods
- **Presentation**
  - *Rahul Rahul, Chandra Jyoti Sonowal "The Dynamics of Nomadism and Traditional Medicinal Practices as Livelihood A Study of Nomadic Sapera Community"*

#### 9. Chronic Illness and Health Behavior

- Studies health-seeking behavior and the lived experiences of individuals with chronic illnesses.
- **Presentation**
  - *Kennith Gregory Dillena "Experience of Breast Cancer and Health Seeking Behavior of Indigent Elderly Women in the Philippines"*

#### 10. Family Planning and Policy Analysis

- Focuses on contraceptive behavior and achieving national goals for family planning.
- **Presentation**
  - *Adnan Khan, Ayesha Khan "Reaching the National Goal of 50% CPR in Pakistan An Analysis of Number of Users and Gaps in Family Planning Services"*

### SESSION 10.1 DEMOGRAPHIC SHIFTS AND SOCIAL WELL-BEING

**Session Chair(s):** Bidhya Shrestha

#### I. Session Overview

This session delved into the intricacies of demographic shifts in China, examining their impact on family structures and social well-being. The presentations explored the historical evolution of Chinese family demographics, the challenges posed by an aging population, and the effectiveness of policy interventions aimed at mitigating these challenges.

## II. Presentations Summaries

### 1. The Past, Present, and Future of Chinese Family Demography

**Theme:** Family Formation and Dissolution, Family and Kinship

**Presenter(s):** Martin Kolk & Weiwen Lai

**Affiliation:** Stockholm University, Stockholm, Sweden

#### Abstract

In our study, we give an overview of Chinese families from pre-industrial times, as well as the vast changes in the 20<sup>th</sup> century, and give an overview of contemporary Chinese family demography. We relate current developments with the changing family demography in OECD countries, with a particular focus on the recent experience of China's East Asian neighbors. We relate changes in Chinese families to theories of ideational change, changing gender relations, and human capital investment in children. We put particular focus on childbearing patterns, and family formation, as well as changes in union separation and household composition. We contrast and focus on similarities and differences with the family demography of China compared to changing families in the West, but also in South Asia and Southeast Asia. We focus on the long-term patterns and identify those that are stable, and those that are changing over time. We conclude with a forecast of future family change in China, relating both to likely developments for individual life courses of Chinese men and women, as well as how it is likely to affect aggregated patterns in Chinese population structure over the 21<sup>st</sup> century.

#### Primary Insights

- Examined China's demographic changes, including shifts from joint to nuclear families, reduced urban patrilineal customs, and stalled gender equality progress post-1980.
- Highlighted trends such as rising divorce rates, delayed childbearing, and ultra-low fertility, especially in Manchuria's rust belt.
- Discussed the hukou system's role in social inequality and challenges of rapid ageing post-2035, with limited pension coverage and reliance on family for elderly care.
- Identified barriers to raising fertility, including high education costs, inadequate childcare, and poor work-family balance.
- Compared China's ultra-low fertility with Japan and South Korea, noting limited success of pro-natalist policies in East Asia.

### 2. Before, During, and After Exploring the Impact of Divorce on Women's Physical and Mental Health in West Bengal

**Theme:** Family Formation and Dissolution, Family and Kinship

**Presenter(s):** Sunandita Das

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

Divorce signifies a profound life shift. Existing studies quantify divorce's impact but lack a detailed exploration of real experiences, especially in India. This qualitative study addresses this gap by investigating the physical and mental health of women before, during, and after divorce stages, with a particular emphasis on major reasons for divorce in West Bengal. We conducted in-depth interviews with ten divorced women through a purposive sampling method. The findings revealed that women who

endured domestic violence in their marriages did not regret their decision to divorce. Infidelity led to heightened anxiety, anger, and grief. Also, women felt stress when their partners neglected marriage responsibilities. Some participants found coping with their children depressing, viewing them as burdens. Despite negative mental health outcomes, the study revealed positive outcomes, with respondents finding peace and embracing a better life after divorce. These insights emphasize support for divorced individuals and families to enhance social well-being.

#### **Primary Insights**

- Examined the effects of divorce on women's health in West Bengal based on qualitative research with 30 divorced women
- Highlighted the challenges and opportunities associated with divorce in the evolving context of Indian marriage
- Shared major findings, including women's experiences with violence, infidelity, neglect, and the emotional burden of child-rearing post-divorce
- Emphasised that despite challenges, divorce enabled personal growth for many women
- Recommended government support through counselling, financial aid, legal access, and awareness campaigns, as well as the importance of social support

### **3. Demographic Challenges and Responses in East Asia: The Case of South Korea**

**Theme:** Future Challenges of Asian Population Dynamics

**Presenter(s):** Myung Jin Hwang, Jina Lee, & Kiwhan Kim

**Affiliation:** Korea University, Seoul, Republic of Korea

#### **Abstract**

South Korea has been grappling with profound demographic shifts characterized by ultra-low birth rates and an aging population. This abstract explores the policy approaches and outcomes of South Korea's childcare support, gender equality, and family policies in response to these challenges. It critically assesses the successes and failures of past policies and advocates for a complementary approach, emphasizing the need for integrated long-term population planning facilitated by a "control tower" mechanism. Additionally, it addresses the issue of population dispersion contributing to local extinction, advocating for a comprehensive and cooperative strategy rather than competitive or antagonistic measures. This abstract contributes to the discourse on demographic challenges and solutions in East Asia, drawing insights from South Korea's experiences.

#### **Primary Insights**

- Discussed non-marital births in South Korea, highlighting growing acceptance but persistent social backlash.
- Explored shifting norms, including youth preference for cohabitation over marriage and advocacy for recognizing diverse family structures.
- Analysed drivers of low fertility, such as economic and policy barriers, leading to population decline, workforce shrinkage, and higher social burdens.
- Highlighted the ageing population's impact, including labour shortages and rising healthcare costs, alongside urban migration causing regional extinction.
- Reviewed government responses, including policy coordination, economic revitalisation, and support for young families.

- Identified recent positive trends (2024) fertility rebound, increased marriages, and changing societal attitudes toward family and childbearing.
- Proposed a Ministry of Population Planning for centralized, long-term demographic strategies.

#### **4. Housing Insecurity among Renters in Slums A Study from Noida City, India**

**Theme:** Population Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Johny K D & Esha Chatterjee

**Affiliation:** Indian Institute of Technology, Kanpur, Kanpur, India

##### **Abstract**

More than 50% of the population in developing economies reside in urban regions (UNDESA 2022). Globally, slums pose one of the biggest challenges to the cities in the 21st century. Increasing population in slums reflects the lack of affordable housing in cities in the global south. In comparison to 'informal' house owners, renters are no longer a minority category in slums. Slum Rehabilitation Schemes (SRS) that are supposed to provide alternate better-quality housing to slum dwellers, do not talk about renters. This is the first study in the Indian context to explore the role of housing insecurity amongst renters in slums. We conducted 40 semi-structured interviews with respondents living on rent in the slums of Noida city. Results bring out the precarious lives of renters in slums. Slum dwellers perceive that SRS is likely to worsen their conditions by displacing them-and forcing them to return to native villages which can cause subsequent downward social mobility. This study highlights the need for the government, local political groups, and civil society to consider the needs of renters while designing SRS.

##### **Primary Insights**

- Focused on housing insecurity among renters in slums and the impact of slum rehabilitation schemes (SRS) on their lives
- Presented statistics on the global and Indian slum populations, including their significant share in major cities
- Focused on Noida as a case study due to its economic importance and ongoing SRS
- Analysed the informal and formal rental markets in Noida slums
- Examined the negative impact of SRS on renters, leading to housing insecurity, potential displacement, loss of livelihood, and downward social mobility
- Concluded that SRS could worsen the quality of life for slum dwellers and emphasised the need to consider their needs in policy design

#### **III. Analysis of Floor Questions Cross-Cutting Themes**

- **Policy Effectiveness** Explored the impact of policies on challenges like China's fertility rates and India's support systems for divorced women.
- **Social Change & Family Dynamics** Highlighted evolving family structures, including the acceptance of non-marital births and the complexities of divorce in India.
- **Vulnerability & Marginalization** Focused on the effects of demographic shifts on vulnerable groups, such as slum dwellers facing displacement and women navigating divorce challenges.

#### **IV. AUDIENCE ENGAGEMENT & SESSION DYNAMICS**

- **Active Participation** All presentations elicited active audience participation, indicating high interest in the topics discussed.

- **Key Discussions**
  - Explored strengths and weaknesses of existing policies addressing demographic challenges.
  - Discussed changing family structures, gender roles, and societal values in the context of demographic shifts.

## V. SESSION CONCLUSION

The session provided a comprehensive overview of the multifaceted demographic shifts occurring across Asia and their profound effects on social well-being. Through insightful presentations and engaged discussions, participants gained a deeper understanding of the challenges and opportunities arising from these transformations.

## VI. KEY STRATEGIC IMPLICATIONS

1. **Adapt Policies** Develop adaptable and context-specific policies to address evolving demographic landscapes.
2. **Empower Vulnerable Groups** Prioritize interventions for vulnerable groups, ensuring access to education, healthcare, and legal aid.
3. **Promote Inclusive Social Norms** Foster a more inclusive society that embraces diverse family forms and promotes gender equality.

## SESSION 10.2 CHILDCARE, WORK, AND FAMILY DYNAMICS

**Session Chair(s):** Trilochan Pokharel

**Session Theme:** Gender and Development

### I. Session Overview

This session explored the intersection of gender and development, examining how gender equality and women's empowerment are crucial to achieving sustainable development goals. Discussions centred around addressing systemic barriers, analyzing the impacts of gender-sensitive policies, and showcasing innovative strategies for fostering inclusive development.

### II. Presentations Summaries

#### 1.The Effect of Childcare on Occupational Mobility Narratives of Stay-at-home Mothers in Urban India

**Presenter(s):** Aditi Prasad, Aparajita Chattopadhyay

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

In the urban landscape of India, the role of women, particularly as stay-at-home mothers, constitutes a dynamic intersection of tradition, evolving societal norms, and personal agency. This study investigates the intricate relationship between childcare responsibilities and the pursuit of occupational mobility among urban stay-at-home mothers. The decision to assume the role of a stay-at-home mother demands a nuanced understanding that recognizes the complex interplay of societal expectations, familial dynamics, and individual agency. Through an analysis of their narratives, we aim to discern the motivations, challenges, and aspirations that underlie this choice and its intersection with the pursuit of occupational mobility.

In this study, we incorporate the narratives of 20 stay-at-home mothers from New Delhi, the capital of India. Our focus centers on young mothers aged 25-35 with at least one child aged five or below, thereby capturing a pivotal life transition into motherhood and exploring how these mothers navigate this significant life event. This study shows that the mobility of young mothers is strongly tied to the strength of the support system available for women. The failing public childcare infrastructure and overpriced private facilities pigeonhole young mothers into their homes, forcing them to choose between their careers and family.

### Primary Insights

- Inadequate and expensive childcare options force women to prioritise family over careers
- Societal expectations reinforce traditional gender roles, making it difficult for women to return to work
- Economic independence and partner support significantly impact women's ability to pursue careers
- Quality time with children is a priority for mothers, influencing career choices
- Public childcare infrastructure is failing, forcing mothers to rely on costly private services or give up careers.

## 2. Chinese Women's Economic Activities during Transition into Parenthood and Its Variation across China's Economic Transition

**Presenter(s):** Menghan Zhao, Kaidi Liao, Yuanyuan Qi

**Affiliation:** Renmin University of China, Beijing, China

### Abstract

Although Chinese women reached a high level of labor force participation before economic reform starting in the late 1970s, women's deteriorating position in the labor market has been documented recently. However, due to limited data, extant work focused only on the period after 1990. Based on 2014 Life History Survey data from the China Health and Retirement Longitudinal Survey, this study employs the event study analysis to analyze the dynamic trajectory of women's working status before and after their first childbirths since 1980. Results showed that women's working probabilities decreased after giving birth but recovered in the long term. Among working mothers, the economic activities of those who worked in enterprises before giving birth were more negatively affected by childbirths, while those who worked in state sectors or rural areas were less affected. Further, compared to a woman who gave birth to her first child in the 1980s, a woman who gave birth after 2000 faced more negative effects of childbearing. The results contributed to our understanding of the negative influence of giving birth on women's career trajectories and had policy implications for supporting women's childbearing in China.

### Primary Insights

- Childbirth significantly reduces women's employment, with stronger negative effects in recent decades
- Women with preschool-age children face greater challenges in the workforce
- The negative impact of having a young child lasts longer for women working in enterprises compared to state or agricultural sectors
- Women's employment decreases after childbirth, rising again after the third year but not reaching pre-birth levels until seven years later

### 3. Gendered Division of Childcare and Willingness to Have More Children in China

**Presenter(s):** Fan Yang, Jianan Liu, Pinrui Guo

**Affiliation:** Renmin University of China, Beijing, China

#### Abstract

**Objective:** This study details the gendered division of childcare in China and the effect of husbands' childcare input on wives' intentions of higher-order births. It emphasises the role in mitigating women's conflicts between career development and intrahousehold responsibilities and distinguishes the effects by women's socioeconomic status.

**Methods:** Data from a national survey is designed to determine the costs of child-rearing and fertility intentions of women and examine the relationship between the husband's share of time spent in childcare and the number of children the wife is willing to give birth to using Poisson regression models.

**Results:** The male breadwinner and female homemaker mode is still common in China. Spousal childcare input promotes women's progression to give more births by reducing their concerns about the negative impacts on their quality of life and career development associated with subsequent childbirth. Furthermore, in contrast to existing findings, this effect is more salient among women of lower socioeconomic status.

**Conclusions and Contribution:** This study emphasizes the importance of gender equality in childcare in addressing current low fertility issues in China and of women's socioeconomic status in moderating the association between the gendered division of childcare and the intention to have higher-order births.

#### Primary Insights

- Shared childcare responsibilities positively influence wives' willingness to have more children
- Husbands' participation in childcare helps women balance career and family duties
- Socioeconomic status affects how childcare division impacts fertility intentions

### 4. Examining the Role of Husband Characteristics in Child Marriage

**Presenter(s):** Pranab Ray, Manoj Alagarajan

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

Child marriage, a pervasive issue globally, particularly in regions like South Asia, persists despite legislative efforts and awareness campaigns. This study delves into the determinants of child marriage in India, focusing on the role of husband characteristics. Using data from the National Family Health Survey (NFHS-5), the study analyses various socio-economic factors associated with child marriage prevalence. Findings reveal higher rates of child marriage in rural areas, among certain religious and caste groups, and in regions with lower socio-economic development. Education emerges as a critical factor, with higher levels of education for both spouses associated with lower prevalence of child marriage. Additionally, husband occupation, age at marriage, and household size are significant determinants. It also reveals the association of boy and girl child marriage. The study underscores the importance of education and awareness in reducing child marriage rates and highlights the need for targeted interventions addressing socio-economic disparities. Despite limitations related to data collection and causality inference, the study



provides valuable insights for policymakers and stakeholders working towards ending child marriage and promoting gender equality in India.

#### Primary Insights

- Child marriage is more common in rural areas, among specific groups, and in regions with lower socio-economic development
- Husband's education, occupation, and age at marriage significantly influence child marriage prevalence
- Higher education is linked to lower child marriage prevalence

### 5. Assessing Job Satisfaction Among Female Migrants in Mumbai's Formal Sector A Primary Data Analysis

**Presenter(s):** Niharika Awasthi

**Affiliation:** International Institute for Population Science, Mumbai, India

#### Abstract

This abstract introduces an upcoming study focusing on evaluating the job satisfaction among females who migrated to Mumbai for the purpose of employment and are currently living in working women hostels and working in formal sector jobs. The study will utilize the primary data collected from 300 female migrants and the Minnesota Job Satisfaction Scale (MJSS) (MSQ-short form) developed by Weiss et al. (1967) will be used as primary assessment tool. By examining various factors influencing job satisfaction among this demographic, the research aims to illuminate areas for potential improvement in their work environments, given that the women selected for the sample migrated primarily for employment purposes. The MJSS, designed to encompass both intrinsic and extrinsic facets of job satisfaction, provides a comprehensive framework for analysis. Through this examination, the research endeavors to offer insights into the distinctive challenges encountered by female migrants in the formal sector workforce and propose strategies to enhance their job satisfaction and overall well-being. The findings of this study will contribute to a nuanced comprehension of job satisfaction dynamics, thereby informing evidence-based interventions and policy recommendations aimed at fostering more supportive and gratifying work environments for female migrants in the formal sector.

#### Primary Insights

- Intrinsic factors (e.g., personal fulfilment) and extrinsic factors (e.g., pay) contribute to job satisfaction
- Socio-economic aspects, social expectations, and family pressures influence workplace satisfaction

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Gender Equality and Empowerment** Discussions highlighted the need to challenge traditional gender roles and empower women through supportive policies and access to resources like childcare.
- **Childcare Infrastructure and Affordability** The lack of affordable and accessible childcare was identified as a major barrier to women's workforce participation and career advancement.
- **Policy Interventions and Societal Change** The session emphasized the importance of policy interventions, including childcare subsidies, parental leave policies, and promoting shared parenting responsibilities, to address gender disparities and support working mothers.

## IV. Audience Engagement and Session Dynamics

### Engagement Patterns

- The session witnessed active audience participation, with attendees engaging in discussions on the scalability of findings to other urban centres, the long-term impact of childcare responsibilities on career progression, and the design of policies to better support working mothers.

### Noteworthy Debates

- Need for broader systemic changes versus reliance on family support
- Importance of inclusive research terminology
- Impact of cultural industries on gender roles
- Clarification of workforce participation trends for women

## V. Session Conclusion

The session provided a comprehensive analysis of the interplay between childcare, gender roles, and occupational mobility, offering valuable insights into the challenges faced by women in balancing work and family responsibilities. It highlighted the need for systemic solutions, including improved public childcare infrastructure, employer-supported initiatives, and societal shifts towards more equitable gender norms.

## SESSION 10.3 INEQUALITY, POVERTY, AND HEALTH

**Session Chair(s):** KS James

### I. Session Overview

This session examined the critical health challenges faced by vulnerable groups in South Asia, focusing on the interplay between inequality, poverty, and health outcomes. The presentations highlighted the disparities in healthcare access for women of reproductive age in India, the link between functional limitations and food insecurity among elderly women in Bihar, and the low health literacy levels among adolescents in Nepal.

### II. Presentations Summaries

#### 1. Adversities in accessing Public Healthcare facility: A lens to understand the Pattern among Women of Reproductive age Group in India

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter(s):** Manideepa Mahato

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

Accessibility to healthcare facilities is one of the basic amenities for the Public Healthcare system to combat poor health outcomes in developing and underdeveloped countries. In India, despite demographic transition and economic growth, healthcare remains inaccessible to a significant portion of women, which particularly can be observed by their health status. Analyzing data from the 5th round of NFHS, the study categorizes facilities into technical and non-technical, examining their spatial distribution and current status along with predictors. Findings reveal that while about a third of Indian women reported no issues accessing healthcare, but ST poor rural population were disproportionately affected. Logistic regression identifies education, wealth, bank account status, health insurance, religion, and age as significant

predictors of healthcare access issues. Technical problems such as drug unavailability, no healthcare provider and even lack of female healthcare providers, were prevalent. The study underscores the urgent need for improved accessibility and availability of public healthcare facilities to enhance women's health outcomes. It advocates regular monitoring and regulation of the healthcare system to address these challenges effectively.

### Primary Insights

- Over 75% of India's healthcare infrastructure is concentrated in urban areas, which serve only 27% of the population, leading to significant disparities in healthcare access for women of reproductive age.
- Key barriers to healthcare access include technical limitations, financial constraints, and cultural factors.
- Rural, adolescent, Muslim, and tribal women face the greatest barriers to healthcare access.
- Education, access to banking, and insurance are crucial factors in overcoming barriers to healthcare access.
- Improving the quality, accessibility, and monitoring of public healthcare services is crucial to addressing disparities and enhancing maternal and child health outcomes.

## 2. Associates of Activities of Daily Living (ADL) and Mental Health with Food Security Issues Among Elderly Women in Bihar A Case Study of Buxar and Nawada

**Theme:** Population Dynamics, Demographic Transition, and Population Ageing

**Presenter(s):** Sarika Rai

**Affiliation:** International Institute for Population Sciences, Mumbai, India

### Abstract

This study investigates the association between food security, Activities of Daily Living (ADL), and mental health among elderly women in Bihar's Buxar and Nawada districts. Multinomial logistic regression analysis was performed using information from a primary survey of 521 women (age 60+) carried out by the Asian Development Research Institute (ADRI), Patna, Bihar. Numerous predictor factors, including age, comorbidities, marital status, caste, religion, and educational attainment, were taken into account for the study. Results show a strong association between food insecurity and increased ADL problems and depression in older women. Severe ADL problems and depression are more likely to occur in elderly women who experience moderate to severe food poverty. Interestingly, women aged 70-79 are 5.6 times more prone to experiencing two or more ADL challenges compared to those aged 60-69. Moreover, elderly women without formal education have a 2.3-fold higher risk of encountering ADL problems. Elderly women aged 70–79, belonging to lower socioeconomic status, lacking formal education, and coping with multiple health conditions, are particularly prone to most susceptible to cognitive disorders, depression, and difficulties with activities of daily living. addressing these discrepancies requires focused interventions to improve the quality of life for older women.

### Primary Insights

- Functional limitations (ADLs and IADLs) and mental health issues contribute significantly to food insecurity among elderly women in Bihar.
- Severe food insecurity is most prevalent among older, poorer, and less-educated women.
- Depression and physical limitations are strongly associated with severe food insecurity.

- Targeted interventions are needed to enhance food security, provide mental health support, and integrate food insecurity assessments into healthcare policies.

### 3. Exploring the Health Literacy Needs of the Adolescent Population

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter(s):** Shanti Khanal

**Affiliation** Graduate School of Education, Tribhuvan University, Kirtipur Nepal

#### Abstract

Adolescent health literacy (AHL) is crucial for health promotion, yet evidence on AHL needs is rare, particularly in underdeveloped regions like Nepal. This formative study aims to explore AHL needs among school adolescents in Nepal to inform intervention design.

In this study, ninth graders from four community schools in Birendranagar municipality, Surkhet participated in an exploratory qualitative approach. Data collection occurred during June and July 2022, comprising four FGDs with six students per school and seven KIIs with three HPE teachers and four school nurses. Participants were purposively sampled, while HPE teachers and school nurses were automatically included. The collected data underwent deductive analysis using ATLAS.ti.

The study identified five major themes under two main areas: familiarization with HL and HL abilities. Participants predominantly demonstrated a unidimensional understanding of health and disease and unfamiliarity with HL terms and situations in the first area. In the second area, participants showed limited abilities in accessing health information, understanding health terms and information, assessing credibility, making decisions, and utilizing and sharing health information.

The study emphasizes participants' unfamiliarity and limited HL skills. This highlights the urgent need to improve HL among adolescents to enhance adolescent well-being.

#### Primary Insights

- Adolescents in Nepal have low health literacy, facing significant challenges in accessing, understanding, and using health information.
- Systemic barriers, limited integration of health literacy in school curricula, and cultural restrictions hinder adolescents' ability to make informed health decisions.
- Targeted educational interventions are crucial to strengthening adolescents' health literacy, empower them to make informed decisions, and improve health outcomes.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Healthcare Accessibility & Equity** Unequal distribution of resources, barriers for marginalized groups, improving rural infrastructure, addressing financial constraints, overcoming cultural barriers.
- **Vulnerability of Elderly** Challenges faced by elderly women, particularly in accessing healthcare and food security. Role of social safety nets, mental health support, and community interventions.
- **Health Literacy & Empowerment** Importance of health literacy for informed health decisions. Integrating health literacy into education, role of community health workers, overcoming cultural barriers to health knowledge.

### IV. Audience Engagement & Session Dynamics

#### High-Interaction

- Presentations on healthcare access for women, elderly women's food security, and adolescent health literacy sparked significant discussion.

#### Key Themes

- Interconnectedness of inequality, poverty, and health. Need for a multisectoral approach involving healthcare, education, and social welfare. Importance of empowering marginalized communities.

#### V. Session Conclusion

The session provided valuable insights into the health challenges faced by vulnerable groups in South Asia, emphasizing the urgent need for equitable healthcare access, targeted support for marginalized populations, and systemic reforms to address disparities in health outcomes. It underscored the importance of collaborative efforts across different sectors to improve the health and well-being of all members of society.

#### VI. Key Strategic Implications

1. **Decentralize Healthcare** Prioritize equitable access by decentralizing healthcare facilities across all areas, focusing on affordability and cultural sensitivity.
2. **Support Vulnerable Groups** Strengthen social safety nets, implement targeted food security programs, and integrate mental health services.
3. **Promote Health Literacy** Reform health education in schools and communities to enhance health literacy among adolescents and families.
4. **Foster Cross-Sectoral Collaboration** Encourage collaboration between healthcare, education, and financial sectors to address health and well-being holistically.

## SESSION 10.4 SOCIAL TRUST, DISCRIMINATION, AND HEALTH

**Session Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Session Chair(s):** Neelanjana Pandey

#### I. Session Overview

This session explored the complex interplay between social trust, discrimination, and health outcomes. It examined the impact of internet usage on social trust amongst young people in China<sup>12</sup> and considered the pervasiveness of everyday discrimination against older adults in India, highlighting the impact of age, socioeconomic status, caste, and gender.

#### II. Presentations Summaries

##### 1. Internet Use and Social Trust among Young Generations in China

**Presenter(s):** Wei Guo

**Affiliation:** Nanning University

#### Abstract

This study aims to clarify both the influence of internet use on the social trust levels of young generations and the mechanisms by which social networks mediate this impact. Leveraging data from the Chinese General Social Survey spanning seven periods from 2010 to 2018, this study employs fixed effects and KHB models to calculate the mediating effects of social networks. The findings indicate that the increased use of the internet not only enhances the social networks of young generations but also significantly diminishes their level of social trust. Social networks exhibit a notable mitigating effect on the negative

impact of internet use. Prior to incorporating social networks, the influence of internet use on the social trust levels among young generations appeared relatively weak. However, upon integrating the role of social networks, there was a significant decrease in the social trust levels. This suggests that the negative impact of social networks on the relationship between internet use and social trust among the young generation is reinforced. This paper uncovers the influence of internet use on the formation of social networks among adolescents and highlights the suppressive effect of social networks on the impact of internet use on social trust.

#### Primary Insights

- Increased internet use amongst young people in China (aged 18-44 years) is associated with a decrease in social trust, despite positive effects on social networks and social support.
- Social networks appear to reinforce the negative impact of internet use on social trust.

## 2. Aging against Odds Everyday Discrimination against Older Adults in India

**Presenter(s):** Vinod Kumar<sup>1</sup>, Bajarang Bahadur, Harshita Chari

**Affiliations:** International Institute for Population Sciences, Mumbai, India. Banaras Hindu University, Varanasi, India. Gokhale Institute of Politics and Economics, Pune, India

#### Primary Insights

- Everyday discrimination is prevalent amongst older adults in India, with 17.7% reporting experiences of discrimination.
- Discrimination is influenced by factors such as age, financial status, caste, and gender, with individuals aged 80 and above, the poorest, females, and those belonging to minority religious or caste groups (Muslims and SC/ST) facing higher levels of discrimination

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Impact of Digital Technologies** Discussions focused on the potential negative consequences of internet use on social trust and the need for policies that promote digital literacy and responsible internet use.
- **Addressing Discrimination** There was significant discussion about the need for policy interventions to address discrimination against vulnerable groups, including older adults, those from lower socioeconomic backgrounds, and those belonging to minority groups

### IV. Session Conclusion

The session provided insights into the challenges of maintaining social trust in an increasingly digital world and the urgent need to address discrimination to improve health outcomes.

### V. Key Strategic Implications

1. **Promoting Digital Literacy** Policies should promote digital literacy to educate young people on responsible internet use and critical thinking.
2. **Strengthening Social Trust** Community-based initiatives that foster face-to-face interactions can help to build social cohesion.
3. **Combating Discrimination** Legal frameworks to combat age-based discrimination and awareness campaigns to promote the rights of older adults should be strengthened.
4. **Targeted Interventions** Specific interventions for vulnerable groups, such as females, SC/ST groups, and those living in rural areas are needed

## SESSION 11.1 GENDER-BASED VIOLENCE AND HEALTH

**Session Chair(s):** Melanie Channon

### I. Session Overview

The session explored the critical issue of gender-based violence and its profound impact on health, focusing on the driving factors behind gender-based violence in India, the role of women's agency in reducing spousal violence in Nepal, and the consequences of intimate partner violence (IPV) and resilience strategies among abortion-seeking women in Nepal.

### II. PRESENTATIONS SUMMARIES

#### 1. What Drives Gender-Based Violence in India?

**Theme:** Gender and Development

**Presenter(s):** Gyan Kashyap & Madhumita Bango

**Affiliation** IIHMR Bangalore, Bangalore, India. PHFI, Bangalore, India

#### Abstract

Violence against women continues to be pervasive in India though there have been efforts made to ameliorate its incidence. Addressing this issue necessitates evaluating evidence-informed indicators and risk factors that impact the prevalence and predictors of physical, emotional, and sexual violence across the Indian states and union territories. We collected data utilizing a structured questionnaire in Computer Assisted Personal Interviews (CAPI) from the domestic violence module within India's nationally representative National Family Health Survey-5 (NFHS-5) survey. We estimated the prevalence and adjusted odds ratios for physical, emotional, and sexual violence experienced by the women by some selected background characteristics along with women characteristics, husband characteristics. The overall prevalence of physical, emotional, and sexual violence was found to be 28%, 14% and 6%, respectively. Our results underscore key predictors of gender-based violence (GBV) in India, including women's age, education, number of children, use of contraception, use of mobile phone, husband's age, education, alcoholism and household's wealth quintile, place of residence, and caste. The findings offer valuable insights into comprehending the implications of GBV in the Indian context. They also highlight the imperative for public health interventions to mitigate these predictors by raising awareness about the pertinent laws concerning violence against women.

#### Primary Insights

- Highlighted the pervasive nature of violence against women in India despite mitigation efforts
- Defined violence rooted in gender norms, encompassing physical, emotional, sexual, and psychological harm
- Presented prevalence statistics and examined the association of factors like education, children, alcoholism, wealth, and caste with violence.
- Underscored the importance of existing social policy interventions and recommended strengthening them to encourage reporting.
- Suggested interventions like girls' education, women's empowerment, preventing child marriage, and promoting gender equality.

## **2. Women's Agency in Reducing Spousal Violence Evidence from Nepal Demographic Health Survey, 2022**

**Presenter(s):** Renuka Kumari Karki

**Affiliation :** Patan Multiple Campus, Lalitpur, Nepal

### **Abstract**

Women's agency is the overall capability of a woman to exercise freedom and govern her choices. Spousal violence remains a public health concern and a human rights issue. This study aims to examine the role of women's agency in reducing spousal violence.

Data for this study is derived from the Nepal Demographic Health Surveys (NDHS) of 2022. A sample of 3853 women aged 15-49 currently in an intimate relationship is selected in the analysis. Women's household decision-making power has been used to explore the women's agency as indicated by decision-making power on own health care, large household purchases, and ownership of property. Women's decision-making power appears to be the most powerful predictor for reducing spousal violence. The bivariate analysis is used to test the significant association between variables. Logistic regression has also been measured to examine the net effect of several independent variables on dependent variables.

The result revealed by multivariate logistic regression analysis showed that high levels of women's agencies may result in lower spousal violence. Women agency-related factors are positively associated as indicated by low p-value (<0.001) with them experiencing spousal violence.

The findings suggest that policies and programs that promote women's agencies will significantly reduce spousal violence.

### **Primary Insights**

- Explored the role of women's agency (decision-making, land ownership) in reducing spousal violence in Nepal using NDHS 2022 data.
- Presented global and Nepal-specific statistics, highlighting that 27% of ever-married women in Nepal reported experiencing violence.
- Analyzed the correlation between women's agency and spousal violence, noting the impact of sociocultural factors and husband's alcohol consumption.
- Deduced that women's decision-making power and land ownership empower them, while marginalized women face compounded vulnerabilities.
- Recommended legal and policy interventions, community initiatives, and strengthening support systems to address spousal violence.
- Emphasized the importance of addressing structural barriers and empowering women to reduce violence against women in Nepal.

## **3. Consequences of Intimate Partner Violence and Resilience Strategies amongst Abortion-Seeking Women in Nepal**

**Presenter(s):** Anupama Ale Magar

**Affiliation:** Center for Research on Environment, Health and Population Activities (CREHPA)

### **Primary Insights**

- Discussed the high prevalence of IPV globally and in Nepal, specifically focusing on abortion-seeking women



- Identified the types of IPV experienced by these women, including physical violence, sexual coercion, emotional abuse, and pregnancy-related abuse
- Explored the key triggers of IPV, such as cultural norms, economic disempowerment, and substance abuse
- Documented the consequences of IPV on women's health, finances, social connections, and family structures
- Highlighted the coping strategies employed by women, including seeking informal support and developing emotional resilience

## II. ANALYSIS OF FLOOR QUESTIONS CROSS-CUTTING THEMES

- **Policy and Legal Frameworks** Discussions focused on the existing policies and legal frameworks in India and Nepal addressing gender-based violence. The effectiveness of these measures and the need for stronger implementation and enforcement were key points of discussion
- **Socioeconomic and Cultural Factors** Participants engaged in discussions about the underlying socioeconomic and cultural factors that contribute to gender-based violence. The influence of patriarchal norms, gender inequality, and poverty was highlighted as significant drivers
- **Support Systems and Resilience** The session underscored the importance of support systems for survivors of gender-based violence. Discussions explored both formal and informal support networks, highlighting the need for accessible and culturally sensitive services, including counselling, legal aid, and shelters.

## IV. AUDIENCE ENGAGEMENT & SESSION DYNAMICS

### Active Dialogue

- The session witnessed active audience participation with thoughtful questions and insightful observations, reflecting a strong interest in understanding and addressing gender-based violence.

### Key Discussions

- **Policy Gaps & Recommendations** Focused on gaps in existing policies and the need for comprehensive, multi-sectoral interventions.
- **Cultural Sensitivity** Emphasized the importance of considering the cultural context and developing culturally sensitive interventions. Highlighted the need for community engagement and empowerment.

## V. SESSION CONCLUSION

The session provided a sobering yet crucial examination of gender-based violence and its pervasive impact on women's lives. The presentations and discussions illuminated the complex interplay of factors contributing to this issue, while also highlighting the resilience and coping mechanisms employed by survivors.

## VI. KEY STRATEGIC IMPLICATIONS

1. **Strengthen Legal Frameworks** Enhance legal and policy frameworks to protect women from violence, ensuring comprehensive laws, enforcement, and access to justice.
2. **Address Root Causes** Address underlying socioeconomic and cultural factors, promoting gender equality and challenging patriarchal norms.
3. **Invest in Support Systems** Provide accessible and culturally sensitive support services for survivors, including counseling, legal aid, healthcare, and safe shelters.

## SESSION 11.2 CAREGIVING, LIVING ARRANGEMENTS, AND MENTAL HEALTH

**Session Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Session Chair(s):** Anand Tamang

### I. Session Overview

This session examined the complex interplay between caregiving responsibilities, living arrangements, and the mental health of older adults, particularly in the context of changing family structures and ageing populations. The presentations delved into the challenges and opportunities associated with providing care for older family members, exploring the psychological well-being of both caregivers and care recipients across diverse household structures and socio-economic settings. The session highlighted the need for supportive policies and interventions to mitigate caregiver burden and promote the mental health of older adults.

### II. Presentation Summaries

#### 1. Grandchild caring and psychological health A cross-sectional study among older grandparents from skipped and multi-generation households in India

**Presenter(s):** Papai Barman

**Affiliation:** Institute for Population Sciences, Mumbai, India

#### Abstract

This study investigated the association between grandchild caring and psychological health of individuals aged 60 and above in India, focusing on Skip-Generation Households (SGH) and Multi-Generation Households (MGH). The research utilized secondary data and primary in-depth interviews (IDI) data. The study investigated caregiving hours, reasons, and working status as moderators, with social engagement and functional health as mediators. Methods included logistic regression with interaction and partial least squares structural equation modelling. Grandparents in SGH had higher psychological issues (depression 11.6%, loneliness 48.8%, life dissatisfaction 45.4%) compared to MGH (depression 7.7%, loneliness 29.3%, life dissatisfaction 24.6%). IDI interviews supported these findings. Regression analysis showed SGH grandparents had higher times higher odds of depression, loneliness and life dissatisfaction than MGH counterparts. Furthermore, caregiving hours, reasons for grandchild care, and dual burden emerged as significant moderators. Social engagement and functional health were also found to be significant mediators in the relationship. Change in current demographic trend and family structure, and achieving healthy ageing and SDG goal 3, it is essential to focus on older people obliged to live in SGH and responsible for grandchild caring without help adult members.

#### Primary Insights

- Grandparents living in Skipped-Generation Households (SGH), where they are the primary caregivers for grandchildren without the presence of the parents, experience higher levels of depression, loneliness, and life dissatisfaction compared to those in Multi-Generation Households (MGH).
- Factors such as caregiving intensity, compulsive caregiving involvement, and current employment status negatively affect the psychological health of grandparents.
- Social engagement and functional health can mediate the relationship between caregiving responsibilities and mental health outcomes.

- Word cloud analysis revealed distinct emotional themes associated with each household type SGH—“tension,” “trouble”; MGH—“happy,” “fortunate.”

## **2. Regional Inequality in Caregiver Burden of Older People’s Household in Thailand The Effect of Household Handrail Provision**

**Presenter(s):** Ruttana Phetsitong, Patama Vapattanawong

**Affiliation:** Faculty of Physical Therapy, Mahidol University, Nakhon Pathom, Thailand. Institute for Population and Social Research, Mahidol University, Nakhon Pathom, Thailand

### **Abstract**

In informing the UN Sustainable Development Goal 10 to reduce inequality, this study aims to explore levels of caregiver burden and examine the effects of household handrails on levels of burden among primary caregivers of older people’s households across five regions in Thailand.

A cross-sectional design was employed. The data was drawn from the 2021 Survey of Older Persons in Thailand to quantify levels of the burden among 2,950 caregivers. The older people’s households were classified into three categories: households with no handrail, one handrail, and those with more than one handrail. The analysis employed an ordered logistic model approach.

The findings showed that the mean burden score was  $3.28 \pm 2.85$  from a total score of 10. The mean was highest in Bangkok and lowest in Northern. After adjusting for potential factors, the result highlighted that the caregivers in older people’s households with one handrail in Southern were less likely to experience a burden than those without a handrail (OR = 0.58, 95% CI = 0.36 – 0.93). Nonetheless, in Northeastern, caregivers of households having handrails in more than one place were more likely to perceive a burden than those without a handrail (OR = 1.79, 95% CI = 1.07 – 2.98).

### **Primary Insights**

- The study highlighted significant regional differences in caregiver burden across Thailand, with Bangkok experiencing the highest burden, particularly due to the higher morbidity rates in older populations.
- The presence of handrails in households was found to significantly reduce caregiver burden in some regions, notably in the South, but had the opposite effect in the Northeastern region, where multiple handrails increased the burden.
- Geographic disparities in caregiver burden are influenced by various factors, including the health status of older individuals, the number of caregiving hours provided, and the availability of additional support mechanisms.

## **3. Living arrangements and labor force participation of older adults in Southeast Asia**

**Presenter(s):** Jeofrey Abalos

**Affiliation:** National University of Singapore, Singapore

### **Abstract**

This study aims to describe the living arrangements and labour force participation patterns of older adults (65+) in Southeast Asia and examine the association between the two. Data are drawn from census microdata from several southeast Asian countries, including Cambodia (2013), Indonesia (2010), Laos (2005), Malaysia (2000), Myanmar (2014), Philippines (2010), Thailand (2000), and Vietnam (2009). The

main dependent variable is the labor force participation of older people in the region (0= not in the labor force, 1= in the labor force). Older adults' living arrangement is the main independent variable in the study and is coded into: (1) Living alone, (2) Living with spouse only, (3) Living with ever-married children, (4) Living with unmarried son, (5) Living with unmarried daughter, (6) Living with unmarried son and daughter, and (7) other types of arrangement. Preliminary results show a wide variation in the living arrangements and LFPR of older men and women in Southeast Asia. Living with an ever-married child is associated with a higher labor force participation among older adults, particularly among women.

#### **Primary Insights**

- Older adults, particularly women, who live with their ever-married children showed higher rates of labour force participation.
- The study observed noticeable regional variations in labour force participation patterns across Southeast Asia.
- The mental health of older adults, including factors like loneliness and nervousness, was significantly influenced by their living arrangements.
- Mental health during transitions like widowhood was also found to be influenced by gender, education, economic status, and marriage characteristics.

#### **4. The Crossover Effects of Children (in Law)'s Job Sector on Older Parents' Wellbeing in China**

**Presenter(s):** Mengke Zhao, Yuying Tong

**Affiliation:** The Chinese University of Hong Kong, Hong Kong, China

#### **Abstract**

Using data from CFPS 2020, we examine how adult children's job sector impacts older parents' psychological wellbeing in China and the heterogeneities by the gender of children. The Inverse probability of treatment weighting (IPTW) results show that: Daughters' public sector job significantly benefits parents' mental wellbeing by increasing their life satisfaction and happiness and decreasing depression. Sons' job sector has no significant effects on parents' wellbeing. However, having a son-in-law working in the public sector positively influences parents' life satisfaction and decreases depression. While daughters-in-law's public sector job reduces parents' depression as well as their life satisfaction. Our study contributes to the literature by filling the research gaps about how adult children's occupational characteristics impact old parents' wellbeing under the life course framework within the Chinese context.

#### **Primary Insights**

- The study explored how the job sectors of adult children impact the psychological well-being of their older parents in China, finding significant gender-based differences.
- The occupation of daughters (and daughters-in-law) in the public sector was found to positively affect parents' mental well-being, leading to increased life satisfaction and reduced depression. Conversely, sons' job sectors showed no notable impact.
- The study also highlighted the influence of in-laws' jobs on parents' well-being, particularly when in-laws were employed in the public sector.

#### **5. Widowhood and trajectories of depressive symptoms among older adults in China**

**Presenter(s):** Qing Han, Tingshuai Ge, Quanbao Jiang

**Affiliation:** Institute for Population and Development Studies, School of Public Policy and Administration, Xi'an Jiaotong University, Xi'an, China

## Abstract

**Objective:** The current study is aimed to investigate the effect of time over widowhood on depressive symptoms in the Chinese context, time trajectories of depressive symptoms and its difference across cohorts.

**Method:** Data used was from the CHARLS, a longitudinal data that covers a 9-year period from 2011 to 2020. We used HLM to analyze the effect of time over widowhood on depressive symptoms and the moderating effect of cohorts.

**Results:** the time over widowhood was significantly associated with higher depressive symptoms for younger cohorts. Whereas time of marriage alleviated the effect of time since widowhood. For the period trajectory of the depressive symptoms, it showed a significant increase in depressive symptoms within 6 months before transition to widowhood, which persisted until 13th-18th months after the loss of the spouse.

**Conclusion:** Birth cohort influenced the relationship between time after widowhood and depressive symptoms. In addition, for the period trajectory of the depressive symptoms before and after loss, transition to widowhood may produce anticipatory depressive symptoms, with a significant increase in depressive symptoms already before loss. Differences in gender, long-term care support, and SRH of spouse may lead to differences in the period trajectory of depressive symptoms.

### Primary Insights

- The session focused on how the time since widowhood affects depressive symptoms in older adults in China. The study highlighted that depressive symptoms increase significantly before and after widowhood, with younger cohorts experiencing more pronounced effects.
- The trajectory of depressive symptoms showed a significant rise in the 6 months leading up to widowhood and a continued increase for up to 13 to 18 months following the loss of a spouse.
- Factors such as gender, access to long-term care support, and the health status of the spouse were found to influence these depressive symptom trajectories.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Intergenerational Support & Caregiving** Emphasized the significance of intergenerational support and the multifaceted nature of family caregiving, focusing on economic, social, and emotional aspects.
- **Mental Health of Older Adults** Highlighted the vulnerability of older adults to mental health challenges in the context of changing family structures, widowhood, and caregiving responsibilities.
- **Policy Implications** Underscored the need for comprehensive policies addressing older adults' needs, including financial support for SGHs, healthcare access, and mental health services.

### IV. Audience Engagement & Session Dynamics

- **Active Participation** The session saw active audience participation, particularly during the Q&A segment, with lively discussions on policy recommendations and solutions for challenges faced by older adults and caregivers.
- **Key Audience Interests** Strong interest in understanding cultural nuances of caregiving, impact of changing family dynamics, and the role of government interventions.

### Noteworthy Discussions

- Emphasized the importance of social support networks and community-based initiatives.
- Raised concerns about the potential negative consequences of reducing the retirement age.
- Debated the effectiveness of household modifications like handrails, highlighting regional differences and the need for proper installation.

### V. Session Conclusion

The session provided a comprehensive overview of the interconnectedness between caregiving, living arrangements, and mental health in the context of ageing populations. It highlighted the need for culturally sensitive interventions, supportive policies, and community-based initiatives to promote the well-being of both older adults and their caregivers.

### VI. Key Strategic Implications

1. **Develop Targeted Policies** Address older adults' needs with financial assistance, healthcare access, and mental health support.
2. **Strengthen Support Systems** Enhance community-based support systems, including respite care, counseling, and social engagement programs.
3. **Invest in Research** Conduct further research to understand long-term impacts of living arrangements and caregiving dynamics.
4. **Promote Intergenerational Dialogue** Foster intergenerational dialogue to bridge the gap between generations.
5. **Empower Older Adults** Create opportunities for older adults to actively participate in society, leveraging their skills and experience.

## SESSION 11.3 GENDER, AGEING, AND HEALTH

**Session Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Session Chair(s):** Wassana ImEm

### I. Session Overview

This session delved into the intricate relationship between gender, ageing, and health in South and Southeast Asia. The presentations explored how socioeconomic and gender disparities impact health and well-being across different life stages, highlighting the unique challenges faced by women and the elderly.

### II. Presentations Summaries

#### 1. Gender Differences Across Life Course Socio-economic Position and Cognition in Life Among Older Adults in India

**Theme:** Special Population Groups (Youth, Older Persons, Persons with Disability, etc.)

**Presenter(s):** Sasanka Boro

**Affiliation:** International Institute for Population Sciences Mumbai, Mumbai, India

#### Abstract

**Objective:** To examine the sex differences in the association between socioeconomic position (SEP) over the life course and cognitive function in later life. Linear regression has been deployed along with structural equation models "direct effect" and "indirect effects" model.

**Methods:** Data from the Longitudinal Aging Study in India (2017–2019) were used in the analysis. The sample included 23 584 individuals aged 60 years and above (11 403 men and 12 181 women). Cognitive function was assessed as a latent construct composed of immediate and delayed word recall, orientation, executive functioning, arithmetic ability, and object naming. Structural equation model was used to compare fit of direct and indirect effects model.

**Results:** Significant gender differences in mean cognition scores (men: 25.8, women: 21.1; on a scale of 0–43) were observed. The indirect model provided a better fit for the data. Childhood SEP had no direct effect on cognition but had substantial “indirect effect,” mediated through education.

**Conclusion:** In India, lower levels of early-life human capital investments in nutrition and education among women are associated with female disadvantage in cognitive health. This has important implications for public health policy to reduce the risk of cognitive decline and dementia in the country.

### Primary Insights

- Life-course socioeconomic disparities, particularly in education, significantly impact cognitive function in later life, with women facing greater disadvantages
- Lower socioeconomic position (SEP) in childhood, adulthood, or current life is associated with reduced cognitive function, particularly among women
- Women often experience barriers to education and healthcare access, contributing to their lower SEP and subsequent cognitive decline
- Improving women's education and socioeconomic conditions can reduce gender inequalities in cognition, enhance overall well-being, and generate intergenerational benefits

## 2. Gender Inequality in Healthcare Expenditure Among Uninsured Older Adults Evidence from Longitudinal Ageing Study in India

**Presenter(s):** Barsharani Maharana

**Affiliation:** K J Somaiya Institute of Management, Mumbai, India. International Institute for Population Sciences, Mumbai, India.

### Abstract

Using Longitudinal Ageing Study data, the current paper endeavors to elucidate gender disparity in healthcare expenditure among uninsured older adults in India. Findings indicate wide disparity between uninsured male and female older adults in healthcare expenditure where male older adults are privileged. Also, for expenditure on different health items like medicine charges, hospital/nursing home charges, Operation theatre and surgery charges, tests and investigation charges, male older adults are benefited than their female counterparts. Result from Theil Decomposition Analysis reveals that between male and female older adults, inequality in healthcare expenditure is substantial as the between group component explains 19.2 percent of total inequality by the Theil index L. Likewise, there exists a huge gender disparity in healthcare expenditure between uninsured older adults, where the between group component explains 20 percent of total inequality by Theil L index, which signifies gender is an important factor explaining inequality in healthcare expenditure among uninsured older adults. Evolving policies are needed to meet the healthcare needs of uninsured female older adults and to improve their social status as the composition of female older adults has shifted over the period and this vulnerable group is economically dependent on household members for their healthcare needs.

### **Primary Insights**

- Uninsured older adults in India face substantial healthcare expenditure inequalities, with women experiencing greater financial burdens.
- Societal inequities in education, employment, and health access contribute to the disproportionate healthcare costs faced by older women
- Policy reforms are urgently needed to improve health insurance coverage and address the social and economic disadvantages faced by elderly women.

### **3. What Makes a Difference? Understanding Protective Factors in Cognitive Function Among Older War Widows Evidence from the Vietnam War**

**Presenter(s):** Truc Ngoc Hoang Dang & Bussarawan Teerawichitchainan

**Affiliation** Institute for Population and Social Research, Mahidol University, Nakhon Pathom, Thailand; Centre for Family and Population Research, National University of Singapore, Singapore, Singapore.

#### **Abstract**

Research indicates that one of the most painful life experiences-spouse loss-is highly linked to older adults' cognitive performance worldwide. Additionally, war widows, who carry the combined weight of experiencing both war trauma and the anguish of losing a spouse, are highly correlated with poor psychological wellbeing. This study explores whether there are factors that offer protection against cognitive decline among war widows, who face the dual challenges of spousal loss and the disadvantages associated with war trauma. Utilizing the 2018 Vietnam Health and Aging Survey, this study examines 2,400 ever-married older persons, with 665 war widows. Multivariate analysis identifies significant factors correlated to cognitive functioning, such as post-traumatic stress disorder, education, and limitations in daily life activities. The interaction terms analysis reveals that a broader social network and a higher occupational level act as protective factors for the cognitive functioning of war widows. Findings highlight that despite enduring the loss of a spouse and experiencing adverse war events, war widows with higher human capital, including social networks and occupational status, tend to exhibit better cognitive function compared to other war widows. This implies that investing in human capital serves as a robust protective element for cognitive function among widows.

#### **Primary Insights**

- War widows in Vietnam experience lower cognitive function due to the dual trauma of spousal loss and war experiences.
- Strong social networks and higher-skilled occupations (e.g., manufacturing or professional roles) serve as protective factors, mitigating cognitive decline among war widows.
- Post-war countries need to address the specific needs of war widows by promoting social engagement and facilitating skill development to enhance their human capital and well-being.

### **4. Burden and Consequence of Fall Among India Elderly Evidence from Longitudinal Ageing Study in India**

**Presenter(s):** Itishree Nayak & Basant Kumar Panda

**Affiliation** : Change Alliance, Delhi, India; PCC, Noida, India



## Abstract

Falls and fractures are common and serious preventable problems encountered by elderly population throughout the world and are an important cause of morbidity and mortality. However, the reason and consequence of fall among elderly are sparse. India, with second largest populous country across the globe, has a growing elderly population that have implication for this problem. This paper provides the basis for understanding the prevalence and factors affecting fall among Indian elderly using longitudinal ageing study in India. At national level around a quarter of elderly (23%) had fallen in last year's highest in Odisha and lowest in north-east region. Among the elderly who fall, about half of them faced fall multiple times. The elderly with vision and hearing problems and depression were found to be majorly affected by fall. Among those who fall, 30% also faced serious Injury and bone or joint fracture. The study suggests the home-environment should be safe for the elderly, that can reduce the fall burden and painful consequences. Elder care specialists can assess the risk of falling and subsequent fractures using simple but well validated tools. Government policy should focus on other enabling causes that can reduce the fall.

## Primary Insights

- Falls among India's elderly population represent a growing health burden, often referred to as a "silent epidemic."
- Biological factors (age, sex, health conditions) are significant determinants of falls, while socioeconomic and behavioral factors have weaker associations.
- The consequences of falls include injuries, hospitalization, and reduced mobility.
- Women living alone are particularly vulnerable to falls and their associated consequences.
- Raising awareness, improving health system support, and implementing targeted policy interventions are crucial to addressing this public health challenge.

## 5. Gender Differentials in Transition in Sexual Life in India A Role of Demographic Determinants

**Presenter(s):** Suresh Jungari

**Affiliation:** International Institute for Population Sciences, Mumbai, India.

## Abstract

Social science researchers, particularly demographers, seek to understand adolescents' transition to adulthood through varied approaches and methods. The study objective is to examine demographic determinants of transition in the sexual life of the young population and to examine the gender gaps in the transition in sexual life. The study used the National Family Health Survey's (NFHS) recent three rounds of data conducted during 2005-6, 2015-6 and 2019-21 to examine the transition of sexual life. NFHS data allows exploring the changes in demographic determinants and sexual life. Sexual life operationalized for this study as age at first sex and considered mean age at first sex. Results show that the transition in sexual life among adults is slow. Meagre increase in mean age at first sex was observed from NFHS-3 to NFHS-5 among men in India. It was 22 in 2005-6, 23 in 2015-16 and 23.79 in 2019-21, which shows a prolonged increase in age at first sex. The same trend is followed in women as well. However, gender differences in the mean age at first sex are larger and consistent over a period.

## Primary Insights

- Significant gender disparities exist in the age of sexual initiation among Indian adolescents, influenced by socio-demographic factors.

- Boys often have greater freedom to delay marriage and pursue education, while girls face societal pressures leading to early marriage and childbearing.
- Strategies to promote girls' education, delay early marriages, and improve access to sexual health information are essential to address these gendered disparities.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Socioeconomic Disparities & Health** Pervasive influence of socioeconomic factors on health outcomes. Focus on policies to reduce inequalities, improve access to education/healthcare, and empower marginalized groups.
- **Gender & Ageing** Intersection of gender and ageing, highlighting vulnerabilities of elderly women. Strategies to address gender-specific health concerns, provide social support, and ensure equitable healthcare access.
- **Cognitive Health & Well-being** Factors influencing cognitive health in later life, particularly among older adults and war widows. Interventions to promote cognitive well-being, role of social engagement, and impact of trauma on cognitive decline.
- **Adolescent Health & Gender Disparities** Importance of addressing gender disparities in adolescent health, particularly sexual and reproductive health. Strategies for comprehensive sex education, empowering girls, and addressing societal pressures.

### V. Session Conclusion

The session provided a comprehensive overview of the complex interplay between gender, ageing, and health in South and Southeast Asia, underscoring the pervasive influence of socioeconomic position, gender disparities, and societal inequities on health and cognitive outcomes among older adults and adolescents. The presentations highlighted the need for targeted policies and interventions to address these challenges and promote the well-being of vulnerable populations.

### V. Audience Engagement & Session Dynamics

#### High-Interaction Presentations

- **Cognitive Health in Older Adults** Discussions on policy implications, early life interventions, and the need for longitudinal studies.
- **Healthcare Expenditure for Elderly Women** Focused on health insurance schemes, improving healthcare accessibility, and policy interventions to enhance their social and economic status.
- **Cognitive Function in War Widows** Addressed post-war support, community-based interventions, and mental health services tailored to their specific trauma.

#### Noteworthy Discussions

- Need for gender-sensitive policies across sectors (healthcare, education, social welfare).
- Importance of investing in research and data collection to understand gender, ageing, and health in diverse contexts.

### VI. Key Strategic Implications

1. **Address Gender Inequalities** Improve women's education, healthcare access, and socioeconomic status.
2. **Support Vulnerable Groups** Implement tailored interventions for elderly women, war widows, and adolescent girls.
3. **Raise Awareness** Increase awareness at individual and community levels.
4. **Policy & System Reforms** Strengthen health insurance, enhance infrastructure, integrate socio-economic considerations.

5. **Promote Multisectoral Approaches** Collaboration across education, healthcare, and social systems.

## SESSION 11.4 HEALTH AND WELL-BEING

**Session Chair(s):** Reiko Hayashi

### I. Session Overview

This session examined various aspects of health and well-being, focusing on the psychosocial well-being of elderly individuals living alone in India<sup>8</sup>, socioeconomic inequalities in depression and the role of job conditions in China<sup>9</sup>, and the impact of exposure to family planning messages through mass media on reversible modern contraceptive use among rural women in India

### II. Presentations Summaries

#### 1. Life Satisfaction and Psychosocial Well-being among Elderly Living Alone in India

**Theme:** Population Dynamics, Demographic Transition, and Population Ageing

**Presenter(s):** Harihar Sahoo

**Co-authors** Dipti Govil, Srei Chanda and K.S. James

#### Abstract

Living alone is both a choice and a compulsion among elderly in India as the country is undergoing demographic and social transitions. The present study tries to analyse the factors affecting the psychosocial wellbeing of the elderly through the mediation of living arrangements. The study used data on the elderly population from the Longitudinal Ageing Study in India, wave 1. Social, economic, and health indices were used to measure the composite effect on living arrangement and satisfaction through the path analysis. It was found that the prevalence of living alone (5%) was highest among elderly females, elderly who were not currently married, those with low level of education, and those suffering from depression. Social and economic performance was found to be low among the elderly living alone in comparison to the others. The path analysis suggested that economic status influenced the living arrangement of elderly to a great extent; however, satisfaction with living arrangement was also determined by social status of elderly. The outcome of life satisfaction goes beyond the simple choice of living arrangement rather satisfaction is derived from living arrangements. The elderly living alone should be given economic and social security to promote healthy aging and optimum wellbeing.

#### Primary Insights

- Living alone among elderly individuals in India is influenced by a combination of choice and compulsion, with higher prevalence among females, those not currently married, individuals with low education levels, and those suffering from depression
- Social and economic performance is lower among elderly individuals living alone compared to those living with others

#### 2. Unraveling the Nuances Socioeconomic Inequalities in Depression and the Role of Job Conditions

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Jie Ma

**Affiliation** Asian Demographic Research Institute, Shanghai, China

### Abstract

China has recently witnessed a growing prevalence of depression, accompanied by a rigid employment environment, raising concerns about the mental health of its working population. This study, based on the 2020 China Family Panel Studies data, explores the complex interplay between socioeconomic status (SES), job conditions, and depression in the Chinese labor force. We challenge the conventional “Have versus the Have Nots” hypothesis by revealing a complex pattern where higher SES generally correlates with lower depression, but this relationship exhibits a threshold at the Bachelor degree level, and is hardly finely-graded. Furthermore, our study uniquely explores the mediating roles of various job demands and resources in the SES-depression relationship within a vast Chinese sample. Results show that the well-educated have advantages in job demands, which helps explain the education-based gap in depression. Were it not for the more time-demanding work required of higher earners, the income-based depression gap would have been even larger. Greater job resources of higher SES help explain the depression gap between the high and low SES individuals. Our study contributes to provide insights into job-related SES dynamics of mental health in China, with implications for policies focused on workplace regulation, work-life balance, and adult education programs.

### Primary Insights

- The relationship between socioeconomic status (SES) and depression in China is complex and not linear, with both higher and lower SES groups experiencing unique challenges related to job conditions.
- Well-educated individuals benefit from better job conditions, but higher earners face more time-demanding work, impacting their mental health

### 3. Exposure to Family Planning Messages Through Mass Media as a Determinant of Reversible Modern Contraceptive Use among Rural Women in the Empowered Action Group States of India

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Pooja Tripathi

**Affiliation:** Banaras Hindu University

### Abstract

**Background:** Despite family planning (FP) programs, the use of reversible modern contraception among rural women in India's Empowered Action Group (EAG) states is less. Mass media exposure to FP messages may increase reversible modern contraceptive use. This study examined the relationship between mass media FP messages and reversible modern contraceptive use in rural EAG states of India

**Methods:** The study analyzed data from 292,180 women aged 15-49 in eight EAG states and Assam, sourced from the 2019-21 National Family Health Survey (NFHS-5). Bivariate analysis and multivariable binary logistic regression were employed to examine the factors influencing reversible modern contraceptive use among rural women in India's EAG states.

**Results:** When adjusted for biodemographic, socioeconomic, and geographical characteristics, women exposed to FP messaging via the Internet, radio, or television were more likely to use reversible contemporary contraceptives. Online FP messages increased reversible contraception use by 26%. Radio and TV FP messaging increased the probability of adopting reversible modern contraception by 23% and 21%, respectively.

**Conclusion:** These findings underscore the importance of mass media channels, in designing effective family planning campaigns to address the low utilization of reversible modern contraception among rural women in EAG states.

#### Primary Insights

- Exposure to family planning (FP) messages via the internet, radio, or television is positively associated with increased use of reversible modern contraceptives among rural women in India's Empowered Action Group (EAG) states

#### III. Analysis of Floor Questions Cross-Cutting Themes

- **Measuring Well-being** Discussions centered around the tools and scales used to measure life satisfaction and the complexities of capturing subjective well-being.
- **Impact of Work on Mental Health** There were questions about the specific aspects of job conditions that contribute to depression and the need for further research on gender differences in work-related stress.
- **Effective Communication Strategies for Family Planning** Discussions explored the most effective social media platforms and communication strategies for disseminating family planning information.
- **The Role of Family Planning in a Changing World** Questions were raised about the continued relevance of family planning amidst declining global population trends

#### IV. Session Conclusion

The session highlighted the importance of addressing social, economic, and cultural factors that influence health and well-being across the lifespan.

#### V. Key Strategic Implications

1. **Economic and Social Support** Policies should prioritize economic security through pensions and social security measures to improve the well-being of elderly individuals living alone.
2. **Workplace Regulations** Strengthened workplace regulations are needed to ensure a healthy work-life balance, especially for those vulnerable to job demands.
3. **Leveraging Mass Media for Family Planning** Mass media channels should be strategically used to disseminate family planning messages and increase awareness and usage of modern contraceptive.

## NEPAL SPECIAL SESSION

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**Chair:** Bal Kumar KC

**Presentation:** Population Dynamics of Nepal Fertility, Mortality, and Migration

**Presenter:** Hemraj Regmi, Deputy Chief Statistician, National Statistics Office, Nepal

#### Session Overview

The session focused on Nepal's demographic trends, including fertility, mortality, and migration, based on the National Population and Housing Census (NPHC) 2021. It examined key socio-economic, ecological, and cultural factors that influence these demographic shifts.

### Key Findings

- **Fertility** A decline in the Total Fertility Rate (TFR) from 6.3 in 1961 to 1.94 in 2021, particularly in urban and wealthier areas. However, regions like Madhesh Pradesh and marginalized groups still experience high fertility rates.
- **Mortality** Infant and child mortality rates have significantly decreased. Life expectancy has increased to 71.4 years, though regional disparities remain.
- **Migration and Urbanization** The rural-to-urban shift increased the urban population from 17% in 2011 to 66% in 2021, with significant net migration losses in mountain regions.
- **Age Structure** The dependency ratio has declined, but there is an increasing elderly population, which presents future challenges for Nepal.

### Policy Recommendations

1. Strengthen family planning in underrepresented areas.
2. Promote balanced regional development to ease migration pressures.
3. Implement social security and healthcare policies for the aging population.
4. Strengthen protections for migrant workers.
5. Leverage census data for evidence-based planning.

### Presentation 2: Parkinson's Disease in Nepal - A Growing Public Health Challenge

Presenter: Dr. Rajiv Ojha

#### Key Challenges

- **Rising Prevalence** Parkinson's disease (PD) cases in Nepal have increased significantly, with young-onset PD (YOPD) being notably common in South Asia, including Nepal.
- **Healthcare System Limitations** Delayed diagnoses and limited healthcare resources exacerbate the burden of PD, particularly with a high economic cost of treatment.
- **Environmental and Genetic Triggers** Environmental pollutants and genetic factors contribute to PD in the region.

#### Recommendations

1. Promote early detection and awareness campaigns.
2. Expand treatment accessibility through government programs.
3. Enforce environmental regulations to reduce exposure to PD triggers.

### Presentation 3: Climate Change and Reproductive Health Challenges and Policy Imperatives

Presenters: Dr. Barsha Baral and Dr. Shreyasi Aryal

#### Key Impacts on Sexual and Reproductive Health

- **Reproductive Toxins** Toxins like lead and mercury are linked to fertility decline and birth defects.
- **Maternal Health** Air pollution and extreme heat pose risks for pregnancy complications and neonatal health.
- **Gender-Based Violence** Climate change exacerbates GBV, with increased vulnerability among displaced women.

#### Policy Recommendations

1. Integrate climate change concerns into sexual and reproductive health policies.
2. Promote eco-friendly SRH products and practices.
3. Enhance education and capacity building for healthcare providers.
4. Empower women to take leadership roles in disaster management and policy advocacy.

#### **Presentation 4: Gender Equality and Social Security in Health System**

**Presenter:** Hira Kumari Niraula, Director, Nursing and Social Security Division, Department of Health Services, Ministry of Health and Population

##### **Key Findings**

- **Gender Inequality** Issues such as lower literacy rates for women, high incidence of gender-based violence (GBV), and economic inequality persist.
- **Maternal Health** High maternal mortality ratios remain, with regional disparities.
- **Health and Social Security Programs** Programs like the Aama Program and National Health Insurance aim to reduce healthcare barriers, but underutilization and gaps in rural areas remain.

##### **Recommendations**

1. Strengthen enforcement of gender laws and promote legal awareness.
2. Expand access to health insurance, particularly for informal workers.
3. Improve rural healthcare infrastructure to reduce maternal mortality disparities.
4. Address socio-cultural barriers to promote gender equality in healthcare access.

#### **Presentation 5: Labour Migration in Nepal**

**Presenter:** Hon'ble Sharad Singh Bhandari, Minister for Labour, Employment and Social Security (MOLES)

##### **Key Themes**

###### **Economic Impact of Labour Migration**

- Labour migration is both beneficial and challenging for Nepal.
- Remittances contribute significantly to GDP and economic stability.
- Social costs, including health and psychological issues, need urgent attention.

###### **Challenges Faced by Migrant Workers**

- "Death trap" conditions leading to worker fatalities (over 10,000 reported deaths).
- High incidence of health issues, particularly kidney disease among young returnees.

###### **Government Initiatives**

- National migration policy being developed by a high-level committee.
- Bilateral agreements with foreign countries for better protection and conditions.
- Introduction of collateral-free loans for migrants to reduce financial barriers.

###### **Reintegration and Domestic Employment**

- Plans for a dedicated department for domestic employment.
- Focus on certifying returning migrants' skills and integrating them into the local job market.

###### **Social Security and Gender Issues**

- Special focus on women facing trafficking and gender-based violence.
- Policies aimed at safer migration and addressing post-return stigma for women.

###### **Call for Collaboration**

- The Minister urges stakeholders to collaborate in refining migration policies.
- The Government welcomes feedback and suggestions for better migration frameworks.

## **SESSION 12.1 ADOLESCENT REPRODUCTIVE HEALTH AND FAMILY PLANNING**

**Session Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Session Chair(s):** Terence Hull

### **I. Session Overview**

This session explored the interconnected themes of fertility, fecundity, reproductive health, and reproductive rights. It highlighted the importance of empowering individuals with access to reproductive healthcare, education, and decision-making autonomy, while addressing societal, cultural, and policy challenges. Discussions focused on bridging gaps in reproductive health services and promoting gender equity in reproductive rights.

## II. Presentations Summaries

### 1. Understanding menstrual experiences and needs of adolescent girls in Nepal Developing an intervention to address what matters most.

**Theme:** Fertility, Fecundity, Reproductive Health, and Reproductive Rights

**Presenters:** Silviya Chaulagain, Mahesh Chandra Puri, Sarmila Dhakal, Minakshi Dahal, Rebecca Evans, Melanie Channon

**Affiliation** CREHPA, Lalitpur, Nepal / University of Bath, England, United Kingdom

#### Abstract

Menstruation in Nepal is surrounded by myths, restrictions and taboos, despite being a normal physiological process. Most menstruation interventions focus on menstrual hygiene management, overlooking issues like pain, stigma, mental health, and environmental injustice. This study explores factors associated with menstruation-related practices and, how adolescent girls and stakeholders in Nepal wish to address these issues. As a part of intervention development for a randomized control trial, 29 FGD's and 58 IDI's with adolescent girls, adult men and women, health-care-providers, religious and community leaders were carried out in Surkhet and Kaski. Data was analyzed inductively using thematic analysis. Stigma and restrictions were common but varied widely by ethnicity and region. Reported restrictions included avoiding entering kitchen and temple, sleeping separately and in cow sheds (*Chhaugoth*). These practices stemmed from beliefs that consider menstruating girls impure and untouchable. Community members and girls were concerned about disposable menstrual pads and were open to environmentally friendly options. Girls emphasized the need for pain management as they resorted to home remedies like drinking hot water. Interventions to address pain management and literacy, stigma/restrictions, and access to quality and environmental-friendly menstrual products is needed along with community participation as girls are restricted by social structures and unawareness.

#### Primary Insights

- The session emphasized the psychological, social, and environmental challenges adolescent girls in Nepal face regarding menstruation
- Cultural restrictions, such as *chaupadi*, which forces girls to sleep separately and avoid certain activities during menstruation, contribute to psychological stress and persist despite being banned
- The lack of proper menstrual education, even among healthcare workers, exacerbates the problem
- The session also highlighted the environmental impact of disposable sanitary pads and the community's interest in environmentally friendly alternatives
- Stigma and menstrual restrictions varied by ethnicity and region, leading to feelings of isolation and psychological distress
- A need for better pain management options was identified, as girls often rely on home remedies

### 2. Prevalence and Factors Associated with Unmet Need for Family Planning in Bangladesh An Analysis of Bangladesh Demographic Health Survey



**Presenter(s):** Mohammad Mainul Islam, Aminul Ehsan, Md. Shahadat

**Affiliation** Dept. of Population Sciences, University of Dhaka, Dhaka, Bangladesh

### Abstract

Bangladesh commits to zero unmet family planning needs by 2030 at the Nairobi Summit 2019. There is a need to estimate the prevalence of unmet needs beyond the conventional approach, where the unmet need was measured in terms of all currently married women instead of married women of reproductive age who have a demand for family planning for an accurate fact. This study uses univariate, bivariate, and multivariable analyses of the latest data set from the Bangladesh Demographic Health Survey (BDHS) 2017-2018, with a sample size of 14,018 married women. The study finds that the prevalence of unmet needs is 16.24%, higher than the reported percentage (12%) in the BDHS 2017-2018 report. Divisional variation, rural residence, young age of the women, lower number of living children, death occurrence of live-born children, Muslim religion, most affluent wealth status, not working status, and not visits by family planning workers are the significant factors affecting unmet need. Interventions on accessibility of contraception in divisions and among rural women, younger age groups, the higher ideal number of children, visits by family planning workers, increasing participation of Muslim religious leaders, targeting wealthy households, and secondary completed educated women through research on their high unmet needs are needed.

### Primary Insights

- The prevalence of unmet need for family planning in Bangladesh is 16.24%, higher than previously reported.
- Factors influencing unmet need include rural residence, young age, fewer children, child mortality, Muslim religion, wealth status, lack of family planning worker visits, and low educational levels.
- Interventions are needed to increase access to contraception, particularly in rural areas, among younger women, and in affluent households.
- Engaging Muslim religious leaders, improving participation in family planning programs, and targeting women with secondary education is crucial

### 3. Prevalence and Factors Associated with Unmet Need for Family Planning in Bangladesh An Analysis of Bangladesh Demographic Health Survey

**Presenter(s):** Mohammad Mainul Islam, Aminul Ehsan, Md. Shahadat

**Affiliation:** Dept. of Population Sciences, University of Dhaka, Dhaka, Bangladesh

### Abstract

This study investigates the mediating role of women's empowerment (WE) in the inverse relationship between female education and fertility rates in Bangladesh. Drawing upon Naila Kabeer's WE framework, this research utilizes cross-sectional data from the Bangladesh Demographic and Health Survey 2017-18. The hypothesis posits that higher educational attainment promotes women's empowerment, subsequently leading to reduced fertility. Analysis of 30 variables revealed eight dimensions of WE, encompassing *resources* (asset ownership and exposure to mass media, and reproductive knowledge), *agency* (attitude towards wife-beating, participation in household decisions, and reproductive autonomy), and *achievements* (economic autonomy, social independence, and knowledge and use of contraceptives). The mediation analysis indicates that higher education reduces fertility indirectly by enhancing women's social independence, as evidenced by delayed marriage and childbirth. On the contrary, the remaining seven WE dimensions exhibited no significant mediation effect. The findings suggest that interventions

aimed at enhancing educational opportunities for women could lead to a demographic shift towards later marriage and childbirth contributing to lower fertility rates. This research also underscores the complexity of the education-fertility nexus and advocates for further exploration into the non-significant mediation effects across various WE dimension.

### Primary Insights

- Higher educational attainment contributes to lower fertility rates, primarily through women's social independence, such as delayed marriage and childbirth.
- The study emphasized that education's indirect effect on fertility is primarily mediated through women's social independence, not other empowerment aspects

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Menstrual Justice** Discussions emphasized the need to address menstrual health comprehensively, including mental health, stigma, access to sustainable menstrual products, and culturally sensitive interventions.
- **Socio-Economic Disparities in Family Planning** The need to address these disparities in access, aligning with global frameworks like ICPD 25+ and SDG 3.7, was a key point of discussion.
- **Women's Empowerment and Fertility** Discussions focused on the role of women's education and empowerment in influencing fertility decisions and the need for further research on the impact of specific empowerment dimensions.

### IV. Audience Engagement and Session Dynamics

#### Engagement Patterns

- The session fostered discussions on menstrual justice<sup>9</sup> and witnessed active audience participation regarding specific interventions for family planning and the role of religious leaders and community involvement

#### Noteworthy Discussions

- Debate arose on the effectiveness of current policies and interventions in addressing family planning disparities
- Questions were raised about the potential concerns of decreasing fertility rates due to women's empowerment
- Discussions explored the impact of menstrual diseases on women's experiences and the availability of contraceptive methods
- Concerns were raised about the increasing reliance on traditional contraceptive methods, highlighting a potential gap in access to modern options

### V. Session Conclusion

The session offered a comprehensive overview of adolescent reproductive health and family planning, successfully engaging the audience in discussions about cultural norms, mental health, pain management, environmental sustainability, and access to reproductive healthcare. It highlighted the complex interplay between cultural beliefs, socioeconomic factors, and individual needs in shaping reproductive health outcomes and the importance of comprehensive interventions that address not only physical health but also social, psychological, and environmental aspects

### VI. Key Strategic Implications

1. **Holistic Approach to Menstrual Health** Address hygiene, mental health, stigma, and access to sustainable products.

2. **Targeted Family Planning** Focus on rural areas, younger women, and those facing socioeconomic barriers to improve access to services.
3. **Community Engagement & Empowerment** Involve community leaders and healthcare workers in education, stigma reduction, and advocating for reproductive health services.
4. **Research and Policy Alignment** Ensure research informs policy and program implementation to address evolving reproductive health needs.

## SESSION 12.2 HEALTH, RESILIENCE AND LIFE SATISFACTION

**Session Theme:** Others (Education, Well-being, and Happiness, etc.)

**Session Chair(s):** Ram Hari Aryal

### I. Session Overview

This session examined the determinants of well-being and mental health across different life stages in India. It explored the influence of health, social participation, personal losses, and resilience on subjective well-being, highlighting the importance of fostering social connections and implementing targeted interventions to address mental health challenges.

### II. Presentations Summaries

#### 1. Structural Modeling of Subjective Well-Being Insights from the India Human Development Survey

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Satyam Raj Singh & Akif Mustafa

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### Abstract

Measuring well-being poses a complex challenge for researchers, who must navigate various methods including income, wealth, and capabilities assessment. However, the examination of one's subjective perception of well-being holds particular significance. Despite its inherent difficulties, scholars have endeavored to assess subjective well-being (SWB) using evaluative, hedonic, and eudemonic dimensions as identified by Steptoe et al. (2015). This study utilizes data from the India Human Development Survey (IHDS) to explore changes in economic well-being and employs Structural Equation Modeling (SEM) to conduct a causal analysis, examining pathways. SEM facilitates the study of intricate relationships, the identification of key predictors, and the exploration of mediating and moderating effects. The study delves into how various variables, including occupational status and physical health, directly and indirectly influence SWB. Our findings highlight that subjective well-being can stem from factors such as social interaction, personal losses, and self-perceived health. Furthermore, by modeling the relationships between intervention components, mediators, and outcomes, SEM offers a valuable tool for assessing the impact of interventions on SWB and devising strategies to enhance program effectiveness.

#### Primary Insights

- Subjective well-being (SWB) is influenced by factors like health, social participation, and personal losses.2728
- Health and social participation mediate the effects of age and occupation on SWB.2829
- The study highlights the importance of social interactions, personal losses, and health perceptions in shaping well-being.

## 2. Predictors of Depression Among Adolescents and Young Adults Role of Parents and Peer Network

**Presenter(s):** Sneha Kumari & Suresh Jungari

**Affiliation:** The INCLIN Trust International, New Delhi, India; International Institute for Population Sciences, Mumbai, India

### Abstract

#### "Predictors of Depression among Adolescents and Young Adults: Role of Parents and Peer Network"

Depression among adolescents and young adults remains a widely underestimated and overlooked issue in society. This study aims to bring attention to this societal shadow by exploring the prevalence of depression among adolescents and young adults in Uttar Pradesh and Bihar and its association with various socio-economic characteristics. The study is based on secondary data of the Understanding the Lives of Adolescents and Young Adults (UDAYA) Wave-1 (2015-16) and Wave-2 (2018-19). The research employs Descriptive Analysis and Random Effect model to assess depression levels over time. The initial wave revealed that 1.58% experienced severe symptoms, while 2.77% experienced moderate depression symptoms with subsequent wave indicating an increase to 2.9% and 6.06% respectively. The study establishes significant connections between depression and factors such as parental physical aggression, witnessing father's violence towards the mother, discussions about friendship, number of friends, freedom to express opinions within the family, and other personal concerns. The findings underscore the pressing need for family-based interventions and age-appropriate programs to address the escalating prevalence of depressive illness among adolescents and young adults, emphasizing the pivotal role of communication in both familial and peer networks.

### Primary Insights

- Socio-economic factors, parental relationships, and peer interactions are key predictors of depression among adolescents and young adults.
- Neglect, violence, poor parental relationships, internet addiction, and lack of parent-child communication contribute to depression risk.
- Discussing academics and friendships with parents serves as a protective factor against depression.
- Family-based interventions, improved communication, and quality family time are crucial to addressing adolescent depression.

## 3. Situating Social Kin Relations in Association with Life Satisfaction Among Older Adults; Findings from Longitudinal Ageing Study in India, Wave 1, 2017-18

**Presenter(s):** Shreyantika Nandi

**Affiliation:** International Institute for Population Sciences, Mumbai, India.

### Abstract

Social kins refers to the bonds or social relations that an individual does not acquire by blood and marriage, they are made out of spontaneous efforts to fit into society and community. The present study shows the association between social kins and life satisfaction among the elderly in India. The demographic shift has shrunk considerably. In this context, the role of social kin is imperative in determining the elderly's life satisfaction. Life satisfaction is a key indicator of an individual's subjective health and well-being. The present study utilizes data from LASI, Wave 1, 2017-18. Descriptive statistics have been used to show sample characteristics and ordered logistic regression have been performed to find the association

between social kin and life satisfaction. The study finds that 69% of older adults have social kins while 30% don't. 45% of older adults have higher life satisfaction, while 24% and 30% have medium and lower life satisfaction levels respectively. Older adults having social kins tend to have 1.09 times higher life satisfaction than those without social kins.

#### **Primary Insights**

- Social kinship, or non-family social ties, plays a significant role in enhancing life satisfaction among older adults, particularly as family sizes decrease.
- Older adults with strong social kinship networks report higher levels of life satisfaction.
- Education contributes significantly to the positive effects of social kinship on life satisfaction.
- Targeted interventions are needed to foster social kinship ties and address inequalities in access to social connections among older adults.

#### **4. The Interplay between Depression, Anxiety and Resilience A Case Study of Mothers of Young Children from Slums of Telangana, India**

**Presenter(s):** Sayeed Unisha, Ajay Gupta, Kanchan Negi & Anjula shrivasta

**Affiliation** International Institute for Population Sciences, Mumbai, India; Tata Institute for Population Sciences, Mumbai, India.

#### **Abstract**

The present study assessed the prevalence of anxiety, depression and resilience among women with at least one child under two years of age and the associated factors. It was hypothesized that women with higher resilience were less likely to exhibit symptoms of anxiety or depression after controlling for their socio-economic, demographic and lifestyle characteristics; in other words, the risk of psychological distress during the early motherhood period (defined as two years after childbirth) was relatively lower among women with high resilience.

The analyses were based on the data from the baseline survey of the Tele-Swabhimaan Program in Telangana conducted in 2022 by IIPS and funded by UNICEF. The correlation between family factors and maternal mental health highlighted that marginalization regarding their caste group, religion, and wealth status put the mothers at a greater risk of depression and anxiety, Bivariate correlations between resilience and mental health disorders revealed significant correlations that were in the expected direction. This study lays a foundation for further research related to maternal mental disorders and the role that resilience can play in combating them. It also focuses on the need for screening mothers for mental health issues during pregnancy, post-childbirth and beyond in primary care settings.

#### **Primary Insights**

- Postpartum depression (PPD) and anxiety are prevalent among mothers of young children in the slums of Telangana, India.
- Resilience acts as a protective factor against PPD and anxiety, demonstrating an inverse relationship with these conditions.
- Improved maternal mental health services, including regular screening, early intervention, and resilience-building programs, are crucial to address this issue.

### **III. Analysis of Floor Questions Cross-Cutting Themes**

#### **Subjective Well-being**

- Explored factors influencing SWB across life stages health, social participation, personal losses, resilience.
- Discussed comprehensive well-being measures, role of social policies, and effectiveness of interventions.

#### **Mental Health Across the Life Course**

- Addressed prevalence and impact of mental health challenges (depression, anxiety) among adolescents, young adults, and postpartum mothers.
- Focused on family dynamics, social support, and access to mental health services.

#### **Social Connections and Well-being**

- Highlighted the crucial role of social connections within families and through social kinship ties.
- Explored strategies to strengthen social connections, address social isolation, and create supportive environments.

### **V. Audience Engagement & Session Dynamics**

#### **High-Interaction Presentations**

- **Structural Modeling of SWB** Discussions on limitations of income-based evaluations, policy implications, and need for broader data frameworks.
- **Predictors of Depression Among Adolescents** Focused on strategies for enhancing parent-child communication, family-based interventions, and school-based mental health promotion.
- **Social Kin Relations and Life Satisfaction** Explored policy implications for social inclusivity, role of community-based initiatives, and addressing intersectional inequalities.

#### **Noteworthy Discussions**

- Emphasized adopting a holistic approach to well-being, considering social, psychological, and emotional dimensions.
- Highlighted the need for strengthening mental health services in India, focusing on awareness, access, and stigma reduction.

### **V. Session Conclusion**

The presentations collectively examined the diverse factors influencing well-being and mental health across different demographics in India, highlighting the interplay of socioeconomic, psychological, and social variables.<sup>40</sup> The session emphasized the need for policies and interventions that promote social connections, address mental health challenges, and foster resilience to enhance overall well-being and life satisfaction.

### **VI. Key Strategic Implications**

1. **Promoting Social Connections** Enhance family/social ties; create opportunities, strengthen support networks.
2. **Strengthening Mental Health** Expand access to services, especially for vulnerable groups.
3. **Address Inequalities** Ensure marginalized groups have equitable access to resources.
4. **Encourage Education & Resilience** Promote programs with positive impacts on well-being.
5. **Holistic Well-being Measures** Incorporate subjective and social dimensions in research and policy.

## **SESSION 12.3 AGEING AND ECONOMIC SECURITY**

**Session Theme:** Population and Economy, Demographic Dividend, and Labor Market

**Session Chair(s):** Manasigan Kanchanachitra

## I. Session Overview

This session explored the economic security of ageing populations, focusing on the influence of adult children on the financial market participation of middle-aged and older parents in China<sup>18</sup>, changes in income sources for Thai older persons due to the COVID-19 pandemic<sup>19</sup>, and the relationship between public and private transfers among the elderly in India.

## II. Presentations Summaries

### 1. The Influence of Adult Children on Financial Market Participation of Middle-aged and Old Parents in China

**Presenter(s):** Xianling Zhang

**Affiliation:** School of Sociology and Psychology, Central University of Finance & Economics, Beijing, China

#### Abstract

Along with increasing financial activities of the middle-aged and elderly Chinese, much attention has been paid on the determinants of financial market participation of these people. However, the influences of children on old parents' financial activities were inadequately understood. Using data from the 2023 Digital Divide and Digital Inclusion of Chinese Older Adults Survey, this study explores how adult children affect their parents' financial market participation and the moderating effect of filial piety. The results suggest significant positive effects of the number of children on old parents' investing behaviors. Compared with those having one child, those without children are 58% less likely to participate in the financial market. The sex structure of children also plays an important role. Compared with people who only have one son, those with one son and one daughter are 24.6% more likely to participate in investing. Living with children or not also has significant effects. Females aged 50 and above living with their sons and spouses are less likely to participate in financial market than those who live only with their spouses. Filial piety significantly moderates the influence of living arrangement on financial market participation of the middle-aged and old females in China.

#### Primary Insights

- The number and sex structure of adult children significantly influence their parents' financial market participation in China<sup>18</sup>.
- Living arrangements and filial piety play a moderating role in financial decision-making among middle-aged and elderly individuals

### 2. COVID-19 and Changes in Income Sources for Thai Older Persons A National Transfer Accounts Analysis

**Presenter(s):** Chalernpol Chamchan

**Affiliation:** Institute for Population and Social Research, Mahidol University, Thailand

#### Abstract

This study aims to assess the composition of income sources for Thai OPs and how it changed potentially due to the COVID-19 pandemic. Age-specific economic profiles of the population aged 60+ were compiled and analyzed from the National Transfer Accounts (NTA) for 2017, 2019, and 2021. These profiles include per capita consumption (C), labor income (I), net private or household transfers (HH\_tf), net public transfers (pub\_tf), and private asset-based reallocation (pri\_ABR). According to the NTA concept, the level of C equals the sum of I, HH\_tf, pub\_tf, and pri\_ABR. In this study, the proportion of each component in

the total consumption defines the income source composition. Prior to the COVID-19 pandemic (2017 and 2019), the primary sources of income for OPs' consumption were: pri\_ABR, pub\_tf, and HH\_tf. However, in 2021, the largest share of income shifted dramatically from pri\_ABR to HH\_tf. Net public transfers (pub\_tf) remained significant. The share of income from assets and savings and labor income in the total consumption of OPs decreased sharply. These changes suggest that OPs became more reliant on support from households and the public sector (government). Self-reliance through income from assets and savings, as well as work, appeared more limited and challenging.

#### Primary Insights

- The COVID-19 pandemic significantly altered income sources for older persons in Thailand, leading to increased reliance on household and public transfers.
- Income from assets, savings, and labor income decreased sharply during the pandemic, highlighting the economic vulnerability of older persons

### 3. Relationship Between Public and Private Transfers Among the Elderly In India- A Study Based On LASI-Wave I

**Presenter(s):** Aparna Roy, T.V. Sekher

**Affiliation:** International Institute for Population Sciences

#### Abstract

Transfers are one of the two age-reallocation systems in the generational economy to compensate for the lifecycle deficits incurred by the different age groups. *“The defining feature of transfers is that they involve no explicit quid pro quo or exchange”* (United Nations, 2013). Depending upon the mediating institutions, transfers may be private or public, and they interact with each other based on the motives of transfer giving (Reil-Held,2006). Using Longitudinal Aging Study in India-Wave I, this study analyses if the receipts of public transfers as individuals or to the household increase the elderly’s private transfer-giving behavior (crowding-in hypothesis) and decrease their private transfer receipts (crowding-out hypothesis). The analysis using probit models pointed out that household public transfer receipts had a positive correlation with the elderly’s private transfer-giving behavior, and individual public transfer receipts had a negative correlation with their receipts of private transfers. Thus, we conclude that crowding in and crowding out hypotheses cannot be rejected. Understanding the dynamics of private transfers in response to public transfers allows us to ensure the efficiency of programs formulated

#### Primary Insights

- Both crowding-in and crowding-out effects are observed in the relationship between public and private transfers among elderly individuals in India.
- Household public transfer receipts positively correlate with private transfer-giving behavior, while individual public transfer receipts negatively correlate with the receipt of private transfers

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Defining "Elderly"** Discussions highlighted the variations in the definition of "elderly" across different countries and the need to consider these variations when analyzing working and elderly populations.
- **Impact of Policy-Initiated Transfers** Questions were raised about the specific types of transfers examined in the Thai study and the potential residual effects of these transfers.
- **Accounting for Social Transfers** The need to account for social transfers, particularly those related to healthcare, implemented during the COVID-19 pandemic was discussed.



- **Non-monetary Transfers** The importance of considering non-monetary forms of altruism, particularly within the poorest groups, was highlighted

#### IV. Session Conclusion

The session emphasized the multifaceted nature of economic security for ageing populations and the need for policy interventions that consider the interplay of family support, public transfers, and individual financial behaviors.

#### V. Key Strategic Implications

- **Financial Literacy Programs** Promoting financial literacy programs tailored for the elderly can empower them to make informed investment decisions.
- **Strengthening Social Security Programs** Enhanced social security programs can mitigate the reliance on household transfers and ensure a stable income for older people.
- **Complementary Transfer Systems** Designing complementary public and private transfer systems can ensure that public transfers supplement rather than substitute private support

## SESSION 12.4 EDUCATION, EMPLOYMENT, AND MIGRATION

**Session Chair(s):** Barsharani Maharana

### I. Session Overview

This session examined the interconnected roles of education, employment, and migration in women's empowerment and mobility. Presentations explored various factors influencing women's labour force participation, including socio-economic background, cultural norms, and access to resources. The session highlighted the potential of vocational education and cooperatives to facilitate social inclusion and economic independence for women.

### II. Presentation Summaries

**1.The Origin and the Post-Graduation Migration Intention of International Students in Chinese Mainland**  
**Theme: Population** Mobility and Spatial Demography (Internal and International Migration, including Refugees) and Urbanization

**Presenter(s):** Meng Bai, Yiwen Han

**Affiliation** Xi'an Jiaotong University, Shaanxi, China

#### Abstract

As China emerges as a prominent hub for international students in Asia, post-graduation migration decisions - staying in China, repatriating, or relocating elsewhere - bear implications on regional talent circulation. This study, using RDS sampled data from a survey for international students in two megacities- Shenzhen and Guangzhou in southern China in 2023, probes the nexus between students' national and ethnic origins and their intention of geographical choices post-graduation. 55% of these students express a preference to prolong their stay in China for further education or work. In contrast, should staying untenable, 74% of them prefer repatriation over venturing into a third territory. The results also show a strong correlation between ethnic origin- ethnic Chinese and the intention to stay in China post-graduation, while the effect of national origin is not statistically significant, from either developed versus developing countries or BRI versus non-BRI countries. The propensity is also related to perceived career

prospects, level of education, Chinese proficiency, and financial sourcing. The choice between repatriation and relocating to a third territory significantly related to both the national origins and the ethnic origins, as well as religious beliefs. These findings amplify the understanding of student mobility trends in emerging education destinations.

### Primary Insights

- By 2018, China had emerged as a major destination for international students, solidifying its position on the global education stage.
- Students from BRI countries appear to leverage their Chinese education to pursue global mobility opportunities beyond China.
- Cultural factors, societal safety in the home country, and geographical distance from China significantly influence a student's decision to stay in China after graduation.
- A significant proportion of surveyed students (55.15%) expressed a definite intention to stay in China, while a considerable number (27.28%) remained undecided.
- Among those unable to stay, a majority (68.23%) preferred returning home, while a minority (31.77%) opted for a third country/region.
- Contrary to expectations, students from countries perceived as less safe than China were less likely to stay and more inclined to return home. This finding suggests that factors beyond safety, such as cultural familiarity and economic opportunities, may play a more significant role in their decision-making process.

## 2. Role and Challenges of Vocational Education and Employability Among Out-of-School Girls Evidence from a Mixed-Method Study in Rajasthan

**Theme:** Population and Economy, Demographic Dividend, and Labor Market

**Presenter(s):** Basant Kumar Panda

**Affiliation:** Population Council Consulting Pvt. Ltd., Noida, India

### Abstract

Adolescent girls and young women are critical population subgroup with unmet aspiration and huge opportunity to contribute the nation's economy. Low level of education, female labour force participation and skilling remained a hindrance in achieving this target. This paper analyzed the role of vocational education (VE) in shaping the aspiration of girls for higher education, employment and delaying marriage as well as provide challenges of VE and employment among girls from the stakeholder perspective in Rajasthan, India. The study found enrollment in VE significantly impacted the enrollment in higher education, employment and delaying the marriage. Besides, foundational skills, reading and numeracy, self-decision making, positive community norms and egalitarian gender attitude remained major contributor to this. Finally, multiple factors at various levels such individual, parental, community that impact the girls transition to work roles and higher education. This paper provides a unique opportunity to understand the nexus of VE, employment, and aspiration among the out-of-school girls in Rajasthan. Hence skill training in non-traditional VE for out-of-school girls is essential in making them torchbearers of a women-led "Atmanirbhar Bharat". This will support in achieving multiple goals of sustainable development goals such as eradication of poverty, gender equality and reducing inequality

### Primary Insights

- Girls enrolled in vocational education (VE) programs have a 62% greater likelihood of aspiring to higher education.
- VE positively influences self-efficacy and aspirations for mid-level/professional employment.

- Despite the progress of the Skill India Mission, societal norms and traditional gender roles continue to act as barriers to girls' full participation in vocational education.
- Enrollment remains concentrated in traditional, female-dominated trades like garment-making and beauty.

### **3. Marital Status and Women Labor Force Participation The Interaction of Education and Household Wealth**

**Theme:** Population and Economy, Demographic Dividend, and Labor Market

**Presenter(s):** Aratrika Saha

**Affiliation:** International Institute for Population Sciences, Mumbai, India

#### **Abstract**

**Introduction:** Women have faced workforce entry barriers due to gender norms and discriminatory practices. Education and societal attitudes contribute to gender variations in work participation. This study specifically assesses the impact of marital status on women's labor force participation in the working age group.

**Methodology:** Using the 2022-23 Periodic Labour Force Survey's first visit data, this study employs bivariate logistic regression to evaluate different factors on women's work participation and appropriate interaction terms to assess the interplay between education, household wealth, and marital status.

**Result:** Logistic models identify education, marital status, religion, and wealth quintile as significant factors influencing women's labor force participation. Currently, married urban women show higher participation compared to their counterparts in rural and urban areas. Rural women with higher education have increased odds of labor force participation compared to widowed or divorced.

**Conclusion:** Societal cultural influences, mediated by family, caste, religion, and region, are crucial determinants. Household income influences labor force participation due to financial necessity at lower levels and voluntary withdrawal at higher levels. Marital status significantly affects work participation, reflecting social disapproval of post-marriage employment in India. The interplay of marital status, education, age, and household wealth influences women's labor force participation.

#### **Primary Insights**

- The study examined how marital status, education, and household wealth influence female labour force participation (FLFP) in India.
- Marriage has been shown to decrease FLFP among Indian women.
- Education and wealth have a U-shaped relationship with FLFP.
- Widowed or divorced women exhibit higher labour force participation, likely driven by economic necessity.

### **4. Change in Mobility of Women After Involvement in Cooperative in Nepal**

**Theme:** Others (Education, Well-being, and Happiness, etc.)

**Presenter(s):** Laxmi Bashyal

**Affiliation** Tribhuvan University, Kathmandu, Nepal

## Abstract

In Nepal, cooperative involvement has emerged as a powerful catalyst for empowering women and promoting mobility. This study aims to explore the changes in women's mobility after participating in cooperatives. The study employed a mixed-methods approach, combining quantitative (n=238) and qualitative (4 in-depth interviews) data collection methods. It uses the Parijat Saving and Credit Cooperative Limited of Bhaktapur District as a case study. Systematic random sampling was employed, targeting women who had been members for at least one year and had utilized accounts and loans for income-generating activities. A descriptive analysis approach was used and also incorporated qualitative information to provide a deeper understanding of the observed changes. The findings revealed significant positive changes in women's mobility following their involvement in cooperatives. Women reported increased mobility in various aspects, including visiting new places (from 40% to 50%), banks, or health facilities (from 48% to 85%). Notably, the percentage of women using their vehicles increased from two percent before joining to about one-fifth after joining. These changes benefit individual women, broaden their horizons, and expose them to new experiences and a wider range of opportunities.

### Primary Insights

- Cooperatives play a key role in enhancing women's mobility and empowerment in Nepal.
- They provide women with access to resources, skills, and opportunities that they might not otherwise have.
- Women involved in cooperatives experience significant improvements in financial independence, social inclusion, and self-confidence.
- Despite these benefits, barriers to participation persist, including limited access to public transport, caste/ethnicity and gender-based discrimination, difficulties in obtaining loan documents, and high loan interest rates.

### III. Analysis of Floor Questions Cross-Cutting Themes

- **Women's Empowerment and Agency** A recurring theme across presentations was the importance of empowering women through education, skills development, and access to resources.
- **Interplay of Social and Economic Factors** Discussions highlighted how socio-cultural norms, economic conditions, and individual circumstances intertwine to shape women's opportunities and choices.
- **Policy Interventions for Gender Equity** The session underlined the need for effective and inclusive policies that address systemic inequalities and promote women's full participation in society.

### IV. Audience Engagement and Session Dynamics

#### High-Interaction Presentations

- **Vocational Education in Rajasthan** Significant audience interaction on sustainable training models and strategies to address dropout rates.
- **Women's Mobility and Cooperatives in Nepal** Audience suggestions for broader geographical visuals and expanded data coverage.

#### Noteworthy Discussions

- **Recognition of Unpaid Work** Emphasized the need to recognize and value unpaid work performed by women.
- **Understanding Individual Motivations** Highlighted the importance of understanding and addressing the motivations of individuals not interested in skills training or further education.
- **Gender-Sensitive Policies** Consensus on the urgent need for gender-sensitive policies to address marriage-related employment barriers faced by women.

## V. Session Conclusion

The session offered a comprehensive overview of the complex factors influencing women's education, employment, and migration experiences. It highlighted the need to challenge traditional gender norms and promote inclusive policies that empower women to achieve their full potential.

## VI. Key Strategic Implications

1. **Targeted Interventions** Develop context-specific interventions for different regions and social groups.
2. **Empower Through Education** Strengthen vocational training, focusing on market-relevant skills and addressing barriers.
3. **Advocate for Gender Equity** Promote policies for gender equality in education, employment, and social mobility.
4. **Promote Supportive Networks** Encourage cooperatives and other support networks for women.
5. **Recognize Unpaid Work** Value unpaid work and integrate it into labor force statistics and policy considerations.
6. **Longitudinal Studies** Conduct long-term studies to evaluate the sustained impact of interventions

## POSTER PRESENTATION- DAY 4

### REFLECTIONS ON THE INTERDISCIPLINARY INSIGHTS FROM POSTER PRESENTATIONS

*The presentations were engaging and insightful, with enthusiastic and knowledgeable presenters effectively communicating complex ideas. While some presenters could have demonstrated greater confidence when answering questions, the overall quality was commendable. The research highlighted interconnected challenges requiring integrated approaches aligned with the Sustainable Development Goals, fostering inclusivity and resilience. Considering both local and global contexts is crucial for crafting effective solutions, emphasizing the need for holistic and inclusive approaches to social and health issues.* Here's how the presentation could be structured thematically based on the listed research topics. Each theme integrates related studies to provide a coherent narrative, followed by hypothetical reflections

#### 1. Migration and Urbanization Patterns, Causes, and Consequences

Migration trends underscore the economic opportunities driving urbanization, while also revealing disparities in quality of life.

- **Key Studies**

- *Internal Migration and Quality of Life in India Sustainable Development of Urbanization*
- *Exploring International Labor Migration in the Socio-Economic Context of Indonesia*
- *Contribution of Migration in Growth of Urban Agglomeration in India*
- *Exploring the effects of Migration Dynamics and Remittances in South Asia A Socio-economic Analysis*
- *Pre- and Post-Pandemic Patterns in Geographical Distributions and Internal Migration of Foreign Population in Japan*

#### 2. Gender Dynamics and Women's Empowerment

Empowerment through education and participation in decision-making remains crucial for addressing gender disparities.

- **Key Studies**

- *Empowerment of Women Analysing Trend and Determinants in India*
- *Role of Women's Education in Their Participation in Common Household Decision Makings in India*

- *Gender Disparities in the Double Burden of Malnutrition Among Adolescents in Bangladesh*
- *Navigating women and consanguinity in India Women's empowerment in consanguineous marriages*

### **3. Health and Well-being Across the Life Course**

The COVID-19 pandemic exacerbated health inequalities, while aging populations face increasing challenges of multimorbidity and mental health issues.

- **Key Studies**

- *Large and Unequal Life Expectancy Declines During the COVID-19 Pandemic in India*
- *Understanding the Dual Burden of Undernutrition and Diabetes Among Middle-aged Adults and Elderly in India*
- *Does Social and Economic Well-being Contribute to Improved Mental Health?*
- *Multimorbidity and Its Associated Factors Among Older People in Nepal*

### **4. Family Dynamics and Social Transformations**

Fertility transitions and changes in marital stability are reshaping traditional norms, necessitating policies that support diverse family forms and gender equity.

- **Key Studies**

- *Divorce in Asia Revisited Changing Dynamics in Contemporary Marriages*
- *Changes of Sex Ratio at Birth and Gender Preferences in China*
- *On Completion of Fertility Transition in India A Review of Heterogeneous Success Stories*

### **5. Child Health and Mortality**

Seasonal and environmental factors, coupled with access disparities, drive mortality patterns. Strengthening health systems and community-based interventions can mitigate these risks.

- **Key Studies**

- *A Systematic Review and Meta-analysis on the Leading Causes of Death Among Under-Five Children in Iran*
- *Assessing the Prevalence of Acute Respiratory Infections Among Under-Five Children in Uttar Pradesh, India*
- *Seasonality of Pneumonia Mortality Among Infant Children in India*

### **6. Socioeconomic Inequalities and Development**

Socioeconomic inequalities persist across wage structures and participation in decision-making processes

- **Key Studies**

- *Socioeconomic Inequality in Wages Among Women in India*
- *Participation of Female vs Male Representatives in the Plan Prioritization Process at the Local Level*
- *Livelihood and Occupational Transformations Among Marginalized Communities in Nepal*

### **7. Environmental and Structural Challenges**

Environmental challenges like riverbank erosion and urban shrinkage reveal the vulnerabilities of marginalized communities

- **Key Studies**

- *Impact of Riverbank Erosion on the Tribal Population of Assam*
- *Exploring the Causes and Consequences of Urban Shrinkage in India*

## Poster Awardees

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November 27, 2024

**1. Kamalesh Kumar Patel**

*All India Institute of Medical Sciences, New Delhi, India*

“Association of Screen Time with the Risk of Depression in Adolescent: A Systematic Review and Meta-Analysis”

**2. Pawan Lamsal**

*University of Vienna, Austria*

“Childhood Poverty and Cognitive Ageing: Hindered from the Past?”

November 28, 2024

**3. Md. Anwer Hossain**

*Department of Social Relations, East West University, Dhaka, Bangladesh*

“Premarital Sex and Its Correlates among the Reproductive Age Women in Bangladesh: Findings from Bangladesh Demographic and Health Surveys”

**4. Md Tazvir Amin**

*ICDDR,B, Dhaka, Bangladesh*

“Reliability of Parental Survival History Data Collected Using Mobile Phone Survey: A Validation Study from Bangladesh”

November 29, 2024

**5. Shahbaz Ali**

*International Institute for Population Sciences, Mumbai, India*

“Trends and Differentials of Adolescent Fertility in India”

**6. Devikrishna N B**

*International Institute for Population Sciences, Mumbai, India*

“Unraveling the Asian Demographic Enigma: An Inquiry into Population Momentum in the Era of Modern Demographic Regime”

November 30, 2024

**7. Masataka Nakagawa**

*National Institute of Population and Social Security Research, Tokyo, Japan*

“Pre- and Post-Pandemic Patterns in Geographical Distributions and Internal Migration of Foreign Population in Japan”

**8. John Bryant**

*Bayesian Demography Limited, Christchurch, New Zealand*

“Estimating monthly excess deaths in New Zealand, by age and sex, during the COVID pandemic”

## Attendees Review of the Conference

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The conference provided a robust platform to debate and address pressing global challenges, including policy implementation to manage low fertility, population aging, and climate change. Discussions emphasized the implications of declining fertility rates and explored strategies for countries to address emerging prenatal and demographic concerns effectively.

A central focus was on population projections, identified as essential tools for understanding future scenarios. These projections aim to guide policymakers in managing transitions toward older populations by enabling evidence-based decisions and designing effective, forward-looking policies.

The conference also delved into critical areas in demography, including advancements in fertility, mortality, and technology. Participants appreciated the exploration of innovative approaches to tackle interconnected issues of population dynamics and sustainable development.

### Cultural Performances and Political Engagement

Attendees greatly appreciated the incorporation of cultural performances, which added depth and vibrancy to the event, allowing participants to experience and connect with the local heritage. The host country's active political involvement and demonstrated commitment to addressing population concerns were particularly commendable, reflecting a progressive stance toward global demographic challenges.

### Quality of Speakers and Networking Opportunities

The speakers were highly engaging and informative, presenting well-researched insights that resonated with attendees. The quality of content delivered was exceptional, offering both academic depth and practical relevance. Networking opportunities were highly valued, fostering meaningful connections among participants from diverse disciplines and regions.

### Venue and Logistics

The venue was well-organized, accessible, and conducive to both discussions and networking. Logistics were managed efficiently, ensuring a smooth experience for attendees. However, feedback suggested that earlier communication regarding accommodations, travel, and local guidelines would enhance future events.

### Survey Feedback Highlights (On-site)

- Overall Conference Quality Excellent
- Engagement of Speakers Strongly agree
- Effectiveness of Networking Opportunities Very effective
- Most Valuable Aspect The blend of academic insights, policy implications, and practical strategies, coupled with cultural integration and networking.
- Areas for Improvement Enhance pre-event communication, especially regarding travel logistics and accommodation for international participants.

The conference was a resounding success, combining academic rigor, cultural richness, and actionable policy discussions. It set a high standard for future events and provided invaluable insights into managing demographic transitions and global population challenges. With minor improvements in communication and logistical coordination, it has the potential to become a benchmark for excellence in global conferences on population and development.



## Rapporteur reflection on the conduct of the sessions

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*As a rapporteur, we had the privilege of observing and participating in the sessions over the four days, and the experience was incredibly enriching. The conference showcased a high level of scholarship, with presentations effectively integrating quantitative data and qualitative insights to address critical population and development challenges.*

### Strengths

- **High-Quality Presentations** Presentations were insightful, well-researched, and often emotionally resonant, effectively conveying the human impact of issues such as trafficking, tuberculosis, and child nutrition.
- **Engaging Discussions** The sessions fostered lively and thought-provoking discussions, demonstrating a strong commitment to collaborative learning and a genuine desire among participants to share their expertise and perspectives.
- **Organizational Excellence** The conference was well organized, with smooth transitions between sessions and a generally efficient use of time. The organizers created an inclusive and welcoming environment for all participants.

### Areas for Improvement

- **Time Management and Presentation Styles**
  - **Q&A Sessions** More time could be allocated for in-depth discussions during Q&A sessions to allow for deeper exploration of complex issues.
  - **Presentation Styles** Incorporating more interactive elements, visual aids, and storytelling techniques could enhance audience engagement and understanding.
- **Media Coverage and Logistical Challenges**
  - **Media Engagement** Limited media coverage did not adequately address the key issues of the conference.
  - **Logistics** Challenges included underperforming volunteers, inconsistent attendance at poster presentations, unregistered guests, and disorganized meal distribution.

### Overall Impact

*Despite these minor challenges, the conference served as a valuable platform for collaborative efforts in addressing global population and development issues. The insights and connections fostered during the sessions have the potential to inform future research, policy actions, and progress towards a more sustainable and equitable future.*

### Key Takeaways

- *The conference demonstrated a high level of scholarship and fostered valuable interdisciplinary dialogue.*
- *Enhancing diversity and inclusion, improving time management, and strengthening logistical support are key areas for improvement in future events.*
- *The conference provided valuable insights and connections that will contribute to ongoing efforts to address critical population and development challenges.*

*This refined version maintains the key points from the original while improving clarity and conciseness. It also uses stronger verbs and more concise phrasing to enhance readability.*

## Comprehensive Schedule Overview

### 6th Asian Population Association Conference (27th - 30th November 2024)

Day/ Date	Time	Event	Venue	
<b>DAY 1</b> <b>27th Nov</b> <b>2024</b>	08:00 - 16:45	Registration	Registration Lounge	
	12:00 - 13:00	Lunch	Lunch Area	
	13:00 - 15:00	Inaugural Session	Main Hall: Megha Malhar	
	15:00 - 15:15	Coffee Break		
	15:15 - 16:45	Parallel Sessions:		
		IPUMS Workshop, Maternal Health, Migration Studies		Room 1: Megha Hall
		1.1 Maternal Health and Family Planning		Room 2: Malhar
		1.2 Disparities in Mortality and Morbidity		Room 3: Marva
		1.3 Labor Migration: Integration and Challenges		Room 4: Malshree
	16:45 - 17:45	1.4 Quantifying Urbanization, Ageing, and Migration		Room 5: Madhavi
Poster Session 1 & Coffee Break		Near Marva Room		
17:45 - 20:00	Welcome Drink	Main Hall: Megha Malhar		
<b>DAY 2</b> <b>28th Nov</b> <b>2024</b>	<b>08:00 - 12:00</b>	<b>Registration</b>		
	08:00- 09:30	Parallel Sessions:		
		2.1 Changing Fertility Patterns and Policies		Room 1: Megha
		2.2 Health, Social Norms, and Life Course in Nepal		Room 2: Malhar
		2.3 Gender, Migration, and Empowerment		Room 3: Marva
		2.4 Population Projections and Demographic Transitions		Room 4: Malshree
	09:30 - 09:45	2.5 Health, Gender, and Social Disparities in Nepal		Room 5: Madhavi
		Coffee Break		
	09:45 - 11:15	Parallel Sessions:		
		3.1 Death Registration Systems and Surveys		Room 1: Megha
3.2 Health and Social Impacts of Migration		Room 2: Malhar		
3.3 Environmental Impacts on Health and Food Security		Room 3: Marva		
3.4 Economic Transitions and Demographic Dynamics		Room 4: Malshree		
	3.5 Child Nutrition and Development		Room 5: Madhavi	

	11:15-11:30	Coffee Break		
	11:30-13:00	Parallel Sessions:		
		4.1 Methods in Demographic and Health Research	Room 1: Megha	
		4.2 Child Health Disparities and Mortality	Room 2: Malhar	
		4.3 Nutrition Among Women and Children in India	Room 3: Marva	
		4.4 New Forms and Dynamics of Migration	Room 4: Malshree	
		4.5 Gender Inequality and Empowerment	Room 5: Madhavi	
	13:00 - 14:30	Lunch	Lunch Area	
	14:30 - 16:00	Plenary Session: Fertility and Family Transformation	Main Hall: Megha Malhar	
	16:00 - 17:00	Poster Session 2 & Coffee Break	Adjoining Lunch Area	
	17:00-18:30	UNFPA-APA Session on Demographic Education	Room 1: Megha	
	17:00-18:30	Parallel Session		
		5.1 Challenges of Population Aging	Room 2: Malhar	
		5.2 Marriage and Childbirth Among Youth	Room 3: Marva	
		5.3 Modelling, Estimation, and Data Analysis	Room 4: Malshree	
		5.4 Education, Aspirations, and Social Change	Room 5: Madhavi	
	18:30-19:30	General Assembly	Main Hall: Megha Malhar	
<b>DAY 3</b>  <b>29th Nov 2024</b>	08:00-09:30	Parallel Sessions:		
		6.1 Cultural Norms and Marriage Dynamics	Room 1: Megha	
		6.2 Contraceptive Use and Its Impacts	Room 2: Malhar	
		6.3 Migration Patterns and Acculturation	Room 3: Marva	
			6.4 Health and Nutrition in Changing Environments	Room 4: Malshree
	09:30 - 09:45	Coffee Break		
	09:45 - 11:15	Parallel Session		
		7.1 Barriers and Equity in Women's Healthcare	Room 1: Megha	
		7.2 Fertility Patterns and Influences	Room 2: Malhar	
		7.3 Migration and Economic Impacts	Room 3: Marva	
		7.4 Fertility, Marriage, and Childlessness	Room 4: Malshree	
			7.5 Health, Well-being, and Life Satisfaction	Room 5: Madhavi
	11:15-11:30	Coffee Break		
	11:30-13:00	Parallel Session:		
8.1 Ageing, Health, and Poverty		Room 1: Megha		
8.2 Health Vulnerabilities and Multimorbidity		Room 2: Malhar		
		8.3 Addressing Health and Social Vulnerabilities	Room 3: Marva	

<b>Day 4</b> <b>30th Nov</b> <b>2024</b>		8.4 Internal and Labor Migration	Room 4: Malshree	
		8.5 Health Vulnerabilities and Inequities	Room 5: Madhavi	
	13:00 - 14:30	Lunch	Lunch Area	
	14:30 - 16:00	Plenary Session: Migration and Development	Main Hall: Megha Malhar	
	16:00 - 17:00	Poster Session 3 & Coffee Break	Near Marva Room	
	17:00- 18:30	Parallel Session:		
		9.1 Family Dynamics and Social Change	Room 1: Megha	
		9.2 Environmental Vulnerabilities and Urbanization	Room 2: Malhar	
		9.3 Ageing Societies and Labour	Room 3: Marva	
		9.4 Education, Language, and Health	Room 4: Malshree	
	18:30 - 20:30	Gala Dinner	Main Hall: Megha Malhar	
	08:00- 09:30	Parallel Sessions:		
		10.1 Demographic Shifts and Social Well-Being	Room 1: Megha	
		10.2 Childcare, Work, and Family Dynamics	Room 2: Malhar	
		10.3 Inequality, Poverty, and Health	Room 3: Marva	
	10.4 Social Trust, Discrimination, and Health	Room 4: Malshree		
09:30 - 10:30	Poster Session 4 & Coffee Break			
10:30- 10:45	Coffee Break			
10:45- 12:30	Parallel Sessions:			
	11.1 Gender-Based Violence and Health	Room 1: Megha		
	11.2 Caregiving, Living Arrangements, and Mental Health	Room 2: Malhar		
	11.3 Gender, Ageing, and Health	Room 3: Marva		
	11.4 Health and Well-being	Room 4: Malshree		
12:30 - 14:00	Lunch	Lunch Area		
14:00 - 15:30	Nepal Special Session	Room 1: Megha		
14:00 - 15:30	Parallel Sessions:			
	12.1 Adolescent Reproductive Health and Family Planning	Room 2: Malhar		
	12.2 Health, Resilience and Life Satisfaction	Room 3: Marva		
	12.3 Ageing and Economic Security	Room 4: Malshree		
	12.4 Education, Employment, and Migration	Room 5: Madhavi		
15:30 - 15:45	Coffee Break			
15:45 - 16:45	Poster Award Ceremony & Closing	Main Hall: Megha Malhar		

## ANNEXES (1): MESSAGES FROM THE DIGNITARIES

**Rt. Hon. Prime Minister of Nepal, K.P. Sharma Oli**



### MESSAGE

It is my profound honor to share my thoughts with this esteemed gathering focused on population and development. My heartfelt thanks go to the organizers of this vital forum and to all international delegates for joining us in the beautiful Kathmandu Valley.

As we convene, I am reminded of the global need for collaboration to achieve peace and prosperity. In a world of 8 billion people, millions still struggle with necessities like food, shelter, and healthcare. This is unacceptable, and I urge us all to invest in sustainable development to uplift the most vulnerable among us.

Globally, demographic shifts are altering our societies. With a fertility rate of 2.2 and 10% of the world's population aged 65 or older, innovative policy responses are essential. Nepal, too, is experiencing significant changes, with one in ten citizens now considered senior. Preparing for an aging society is a pressing priority.

Issues such as migration and inequality persist despite advances in human civilization. Migration remains a global trend as people seek better opportunities, yet managing it effectively requires collective efforts. Inequality—be it economic, social, or geographic—fuels division and hinders progress. Addressing these divides is critical for sustainable growth.

Asia, with its diversity and dynamism, exemplifies the complexity of population issues. This conference offers a platform to share knowledge, foster collaboration, and devise solutions inspired by the International Conference on Population and Development (ICPD) held in 1994. As we celebrate ICPD's 30th anniversary next year, let us reaffirm its relevance and renew our commitment to its goals.

In Nepal, demographic shifts such as uneven population distribution and gender disparities require urgent attention. For every 100 female births, 112 male births occur. This imbalance, coupled with a declining mountain population and an expanding Terai region, calls for balanced and inclusive policies.

Education remains a cornerstone of our future. Nepal's universities strive to attract students, yet challenges persist. I hope this forum inspires discussions that strengthen higher education strategies for our youth.

As we recover from the impacts of COVID-19, population challenges have grown more complex. This conference offers an opportunity to evaluate these impacts and strategize for Sustainable Development Goals (SDGs). Additionally, climate change—a crisis disproportionately affecting vulnerable communities—requires immediate, collaborative solutions to ensure a healthier planet for future generations.

Technology, innovation, and capital must serve humanity, not just profit. Narrowing the gap between rich and poor is crucial to creating a world where everyone enjoys dignity, health, and hope. Let us channel our collective will toward this vision.

Finally, Nepal's rich heritage, as the land of Mount Everest and the birthplace of Lord Buddha, teaches us resilience, compassion, and unity. Let us carry these values forward for a more harmonious and prosperous world.

Thank you for your dedication to addressing population and development challenges. I extend my best wishes for the success of this conference and hope it inspires transformative solutions.

*“Sarve Bhavantu Sukhinah, Sarve Santu Niramayah”*—May all beings be happy and free from disease.

Have a pleasant stay in Kathmandu. Thank you.

## **Hon'ble Former Prime Minister of Nepal, Mr. Sher Bahadur Deuba**

### **MESSAGE**

I would like to extend my heartfelt congratulations to the organizers for hosting this significant conference on population and development. I wish the 6th Asian Population Association Conference grand success and warmly welcome all the delegates who have come from various corners of the world to our beautiful country, Nepal.



This forum is vital for exploring and sharing knowledge about the pressing population and development issues that are emerging across Asia. Asia is witnessing many demographic transitions and challenges, and it is through discussions like these that academicians, policymakers, and development practitioners can better inform their strategies and actions.

Demographic transitions, including the youth bulge, population aging, and migration management, are pivotal issues for us today. Ensuring sexual and reproductive health and rights, especially for young women and mothers, is a critical priority. Unfortunately, quality health services remain inaccessible and unaffordable for many in various parts of the world. Health care, as a fundamental human right, must be addressed with urgency.

I hope this forum will not only revisit population and development issues but also provide actionable recommendations for accelerating the Sustainable Development Goals (SDGs). It is crucial to establish a common understanding among national and international stakeholders on these issues to better inform the agenda for national development priorities and post-ICPD and SDG frameworks.

Nepal faces unique challenges within its demographic shifts. For instance, while under-15 children still suffer from inadequate healthcare, there is a pressing need to enhance maternity and newborn care to decrease mortality rates and improve life outcomes across generations. Similarly, issues like gender equality, family planning, poverty, human rights, and social inclusion need comprehensive and integrated approaches. These issues are interconnected and must reinforce one another through well-coordinated policies and programs.

The discussions and findings from this conference will serve as valuable resources for countries like Nepal as we navigate complex population dynamics. We deeply value your expertise and look forward to actionable insights on critical areas such as population distribution, family planning, and sustainable development policies.

Finally, I hope all participants have a memorable and enriching stay in Kathmandu. Together, let us channel our collective knowledge and will to address these shared challenges and pave the way for a more inclusive, equitable, and prosperous future.

Jaya Nepal!

## **Hon'ble Pradip Poudel, Minister for Health and Population**

### **MESSAGE**

I extend my warm wishes for the grand success of this conference. I take immense pleasure in welcoming all the distinguished delegates who have traveled from various corners of the globe to join us here in Nepal, a land of rich cultural heritage and breathtaking landscapes.



On behalf of the Ministry of Health and Population, I extend heartfelt congratulations to the organizers for their tireless efforts in making this gathering possible. This conference represents a solidarity of shared goals and commitments to address population and development issues.

The Constitution of Nepal mandates a shared responsibility for population management among the three tiers of government. Effective population management should aim to maximize the demographic dividend while addressing the challenges of population distribution.

Over the last six decades, Nepal's population has experienced significant changes. For the first four decades, we observed over two percent population growth. However, since the 2011 Population Census, the growth rate has decreased significantly, as recorded by the Nepal Statistics Office.

International out-migration has been identified as a major factor influencing low population growth over the last decade. Currently, 2.2 million Nepalis are living abroad, compared to 1.9 million ten years ago. While the scale of international migration may not be as large as commonly perceived, its impact is clearly reflected in the national demographic structure.

These trends underscore the need for a shift in population policy—from a focus on controlling fertility to a broader population management approach that aligns with contemporary patterns of low population growth.

We must further strengthen mechanisms for updating population profiles and tracking migration patterns. This includes integrating local and provincial population electronic databases with the national network (IPIMS) to ensure accurate and timely data. Our roadmap also includes incentivizing the registration of vital events such as births, marriages, migration, and deaths (including causes of death). This will enable evidence-based planning and policymaking at all levels.

Despite various advancements, Nepal continues to face significant public health challenges, including childhood diseases, maternal health issues, and inadequate water sanitation. These issues contribute to high mortality rates and persistent health disparities across the country. Addressing these challenges requires targeted interventions and international collaboration.

Nepal's experiences with population and health issues reflect broader trends that resonate across Asia and the world. This forum provides an excellent opportunity to share these challenges and explore solutions collaboratively.

I hope this conference serves as a platform for fruitful discussions, inspiring innovative strategies to address population and development issues not just in Nepal but globally. I wish all participants a pleasant and enriching stay in Kathmandu.

Thank you.

### **Dr. Reiko Hayashi, President, Asian Population Association**

#### **MESSAGE**

Welcome to Kathmandu!

The 6th Asian Population Association Conference is held for the first time in Nepal, the emerging economy that sits in the middle of Asia, embracing Mount Everest. This APAC6 is followed by the 5th Conference of 2021, organized by the Indonesian team, which was a complete online conference due to COVID-19. Now, life returns to normal, and we are back to the conventional face-to-face mode. We are glad to be able to meet in person, and we now know how much we missed this human touch, although we can never underestimate the convenience of online technology.

This time, we have received 1,316 paper submissions, which went through rigorous double-blind peer review, two reviews per paper, conducted by 120 regional and international experts who voluntarily contributed to the success of this conference. We are truly grateful to those reviewers and all the scholars who submitted the fruit of their research to enhance the Asian population studies. Throughout the four



days of the conference from 27th to 30th November 2024, 225 oral presentations will be delivered in 53 sessions, and 185 posters will be presented in four days.

Conventionally, demography is centered on three components of the population, namely fertility, mortality, and migration, and we set out the session themes to be divided into 17 themes at the beginning. After receiving papers and sorting them out for the sessions, it turned out that the session themes were much more than the three components, much less than the 17 themes. Health, although it can be the other side of mortality, is the most popular theme chosen by the accepted papers, followed by migration and fertility. Gender and family are equally important themes. A few sessions deal with ageing or education. All these themes are intertwined, and it wasn't easy to divide the papers into different sessions. Throughout the four days of the conference, while hopping from room to room, I hope you will experience the multidisciplinary nature of Asian population studies and also find the new trend of demographic discipline.

Apart from the regular oral and poster sessions, I would like to highlight the inaugural ceremony and plenary sessions, organized in collaboration with the Government of Nepal, UNFPA and IOM, whom we thank indefinitely for their support. Nepal, as in the neighbouring countries, is now shifting from high fertility to low fertility society with a total fertility rate around the replacement level of 2.1. The existing population policy focused on lowering fertility with family planning is now at a crossroads. The eminent speakers in the inaugural session are expected to give insights into Nepal's new population policy direction.

The first plenary session on the second day will be organized in collaboration with UNFPA to discuss the changing realities of fertility and family in Asia. Indeed, Asia's fertility is diverse, ranging from 0.72 in South Korea to 4.84 in Afghanistan, and family formation, notably through marriage, and its values are changing in some respects and not changing in others. Experts from around the world will discuss that.

The second plenary session on the third day is on migration, organized in collaboration with IOM. Asia is in motion. New migration flows are emerging within the region. For example, the number of Nepalis living in Japan is now the same as that of all Europeans and North Americans combined. South Korea is also a new destination country. In addition to the conventional reasons for migration, such as education, work in agriculture, fisheries or construction, care migration has become a new trend due to the global population ageing. The session will discuss the Nepali situation in particular and the Asian context in general.

There are many more topics and events programmed. Please join and discover, and let's strengthen our network. I look forward to meeting each of you in Kathmandu.

### **Prof. Dr. Keshar Jung Baral, Vice-Chancellor, Tribhuvan University**

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#### **MESSAGE**

It is my great pleasure to welcome you all to this significant conference addressing population and development issues at the global, regional, and national levels. On behalf of Tribhuvan University, I extend my heartfelt congratulations to everyone present for your dedication and commitment to these vital discussions. The role of professors and academics in fostering such debates is crucial. I salute all of you who are facilitating dialogues between policymakers, governments, researchers, and early-career students during this conference. Your contributions are invaluable in bridging the gap between knowledge and action.

On behalf of the professors of Tribhuvan University, I wish this conference grand success and extend a special welcome to delegates who have traveled from various corners of the globe to join us in our beautiful country, Nepal.





As the largest and historic university in Nepal, Tribhuvan University boasts over 500,000 students enrolled in more than 1,100 campuses across the country. Our graduates have not only excelled academically but have also made remarkable contributions in their professional careers both in Nepal and abroad.

However, we face a significant challenge in retaining our diligent and talented graduates within Nepal. Tribhuvan University is committed to bridging this gap by involving our faculty and early-career researchers in government's P1 projects and fostering stronger collaborations between academia and policymakers.

This conference, dedicated to population and development issues, is an excellent platform for fostering synergies among diverse disciplines. Here, we are joined not only by demographers and social scientists but also by public health experts, policymakers, and government authorities. This multidisciplinary approach is essential to address the complex challenges of our time.

I would like to express my deepest gratitude to Rt. Hon'ble Prime Minister K.P. Sharma Oli for your kind presence and inspiring address.

Similarly, I extend my gratitude to Hon'ble Former Prime Minister Sher Bahadur Deuba for your valuable presence and remarks.

To our Hon'ble Ministers, Members of Parliament, Deputy Speakers, and all distinguished guests from Nepal and around the world, thank you for joining us and enriching this conference with your insights.

I hope you all have a memorable and enriching stay in Kathmandu. Thank you once again for being a part of this pivotal event.

Wishing the conference great success and fruitful discussions.

Thank you.

**ANNEX (2): NATIONAL AND INTERNATIONAL ORGANIZING COMMITTEES AND VOLUNTEERS****INTERNATIONAL ORGANIZING TEAM**

Reiko Hayashi	APA President
Yogendra B Gurung	NOC President
Padma Prasad Khatiwada	CDPS/ Nepal Population Association President
K S James	APA Vice President
Samir KC	APA Secretary General
Fatemeh Torabi	APA Council Member
Premchand Dommaraju	APA Council Member
Sureeporn Punpuing	APA Council Member
Chalernpol Chamchan	APA Executive Secretary
Wisinee Thipsupanimit	APA Secretariat team member

**INTERNATIONAL SCIENTIFIC COMMITTEE**

Reiko Hayashi	APA President
Yogendra B Gurung	NOC President
Padma Prasad Khatiwada	CDPS/ Nepal Population Association President
S James	APA Vice President
Samir KC	APA Secretary General
Fatemeh Torabi	APA Council Member
Premchand Dommaraju	APA Council Member
Sureeporn Punpuing	APA Council Member
Chalernpol Chamchan	APA Executive Secretary
Wisinee Thipsupanimit	APA Secretariat team member

## NATIONAL ADVISORY AND FACILITATION COMMITTEE

Secretary, Ministry of Health and Population (MoHP)	Joint-Secretary, Ministry of Labour, Employment and Social Security (MoLESS)
Chief, Central Department of Population Studies	Joint-Secretary, Ministry of Women, Children and Senior Citizen (MoWCSC)
Joint-Secretary, Ministry of Health and Population (MoHP)	Joint-Secretary, Ministry of Culture, Tourism and Civil Aviation (MoCTCA)
Joint-Secretary, Office of the Prime Minister and Council of Ministers	Joint-Secretary, Ministry of Education, Science and Technology (MoEST)
Joint-Secretary, Ministry of Home Affairs (MoHA)	Joint-Secretary, Ministry of Federal Affairs and General Administration (MoFAGA)
Joint-Secretary, Ministry of Finance (MoF)	United Nations Population Fund (UNFPA)
Deputy Chief Statistical Officer, National Statistics Office (NSO)	Chairman, Population Association Nepal

## ADVISORS AND FACILITATORS TO NATIONAL ORGANIZING COMMITTEE

Prof. Dr. Yogendra B. Gurung	Dr. Prabin Shakya
Prof. Dr. Mahendra Prasad Sharma	Dr. Padma Prasad Khatiwada
Prof. Dr. Ramesh Adhikari	Dr. Uddhav Sigdel
Dr. Dhanendra Veer Shakya	Dr. Narayan Regmi
Dr. Bal Krishna Mabuhang	Dr. Meeta Sainju Pradhan
Dr. Laxman Kunwar	Trilochan Pokharel
Dr. Bishma Adhikari	UNFPA
Dr. Mahesh Puri	

## Conference Working Committee

Committee	Role
Dr. Bidhya Shrestha	Convener
Mana Maya Mishra	Co-Convener
Naba Raj Thapa	Member
Pawan Kanel	Member
Dr. Dipendra Bikram Sijapati	Member
Vijay Aryal	Member
Youraj Roka	Member
Manawata Aale	Member
Bishnu Dulal	Member
Jagadish Bhattarai	Member
Bandana Joshi	Member
Karma Dolkar Gurung	Member
Ambika Neupane	Member
Roji KC	Member
Giri Raj Dahal	Member

## Resource/Logistics Mobilization Committee

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Committee	Role
Dr. Uddhav Sigdel	Convener
Pradip Bohara	Member
Dr. Bijaya Mani Devkota	Member
Bhakti Subedi	Member
Min Raj Adhikari	Member
Radhika Shrestha	Member
Tantrika Raj Khanal	Member
Rameshwor Kafle	Member
Keshab Parajuli	Member
Shanta Adhikari	Member
Indra Mali	Member
Sarita Bista	Member
Prajita Subedi	Member
Ambika Kaudal	Member
Shubhechchha Ghimire	Member
Arjun Gaire	Member
Keshab Thapa	Member
Shijan Acharya	Member
Doren Thapa	Member

## Hospitality for Delegates and Participants Committee

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Committee	Role
Chandani Rana	Convener
Anup Adhikari	Co-Convener
Dr. Kamala Lamichhane	Member
Pitambar Acharya	Member
Hari Karki	Member
Pramila Bidari	Member
Ramesh Prasad Adhikari	Member
Rita Karki	Member
Laxmi Basyal	Member
Mahendra Rai	Member
Om Chandra Thasineku	Member
Radha Dhakal	Member
Bhumi Datta Poudel	Member
Gobinda Adhikari	Member
Harka Raj Dhungel	Member
Kamal Yakhha	Member

## Event Management Committee

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Committee	Role
Raju Malla	Convener
Prabha Khanal	Member
Renuka Karki	Member
Tulasa Dulal	Member
Tilak Sharma	Member
Basanta Regmi	Member
Gyanendra Giri	Member
Man B. Sunuwar	Member
Samir Khadka	Member
Nabaraj Aryal	Member
Shanta Maya Pariyar	Member
Aviman Singh Lama	Member
Jamuna Shrestha	Member
Ramesh Bhatta	Member

## Media Network Committee

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Committee	Role
Chetan Adhikari	Convener
Bhagabati Sedai	Member
Thaneshwor Kunwar	Member
Baburam Pradhan	Member
Dr. Bhumi Chapagain	Member
Nirmal Adhikari	Member
Santosh Poudel	Member
Kailash Khadka	Member
Rubi Rauniyar	Member
Dinesh Regmi	Member
Mahendra Subedi	Member
Chiranjibi Baral	Member
Rubi Rauniyar	Member
Dinesh Regmi	Member

## Rapporteur's Team

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Contributors	Code Name	Role
Pawan Kanel	PK	Lead
Shubhechcha Ghimire	SG	Co-Lead
Karma Dolkar	KD	Rapporteur/MC, Inaugural Session
Manawata Ale	MA	Rapporteur
Prajita Subedi	PS	Rapporteur
Rajan Kandel	RK	Rapporteur
Ritika Upreti	RU	Rapporteur
Roji K.C	RKc	Rapporteur
Sabita Koirala	SkH	Rapporteur
Sadiksha Khatiwada	SK	Rapporteur
Shijan Acharya	SA	Rapporteur
Shreya Piya	SP	Rapporteur

## Volunteer's Team

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Ambika Neupane	Samana Gautam
Ishwori Basnet	Shivaun Karki
Khili Kumari Karki	Kabita Bhatta
Aishna Shrestha	Baikuntha Bhandari
Rojina Khadka	Sushmita Subba
Basanta Bhatta	Bhagirathi Bohara
Purindra Rawal	Swostika Bohara
Jamuna Bhattarai	Susma Sharma
Kabita Bhattarai	Swostika Bishokarma
Jagdish Dhami	