

# FACTORS AFFECTING USE OF ANTENATAL CARE, INSTITUTIONAL DELIVERY AND MATERNAL MORTALITY RATIO IN INDIA

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## Background information

- Taking care of a mother at the time of pregnancy and during child birth improves the maternal health. As Antenatal Care (ANC) and institutional delivery has a direct relationship with maternal mortality.
- ANC and institutional delivery reduce maternal mortality by reducing the risk factors associated with the maternity health

## Objective, Database and Methodology

### Objectives:

1. To find the relation of antenatal care and institutional delivery with maternal mortality.
2. To find the correlation of demographic and socio-economic characteristics of mother, like age at marriage, fertility rate, parity, education level, work-force participation, CPR, induced abortion, caste, tribe, and residents with ANC and Institutional delivery.

### Data Base:

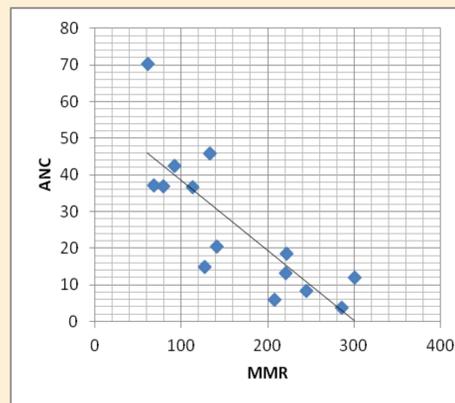
Study is based on DLHS 4 , SRS and census 2011.

### Methodology:

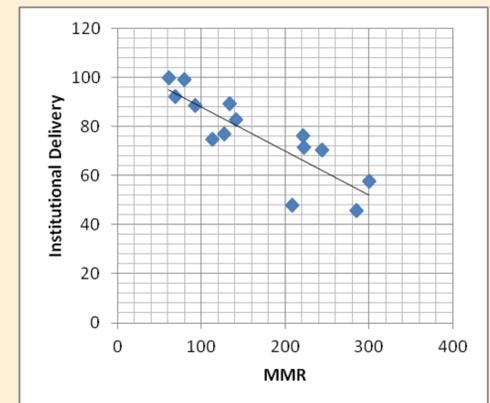
Correlation Coefficient

Linear Regression Analysis

## RELATIONSHIP OF ANTENATAL CARE AND INSTITUTIONAL DELIVERY WITH MATERNAL MORTALITY



Correlation coefficient: -0.81



Correlation coefficient: -0.85

## Effect of socio-economic variables on ANC and Institutional Delivery:

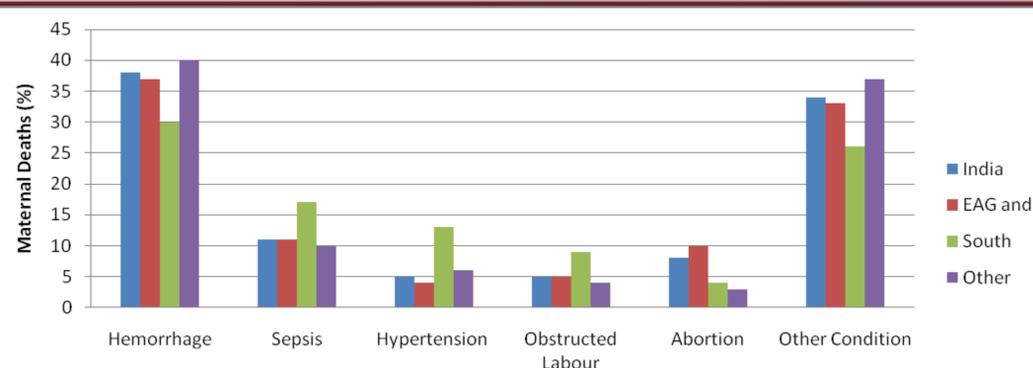
$$ANC = 82.54 - 12.515(TFR)^{**} + 0.161(WFPR)^{*} + 0.080(CPR)^{*} + 0.058(ST)^{*} - 1.173(SMAM)^{*}$$

R-Squared=0.546

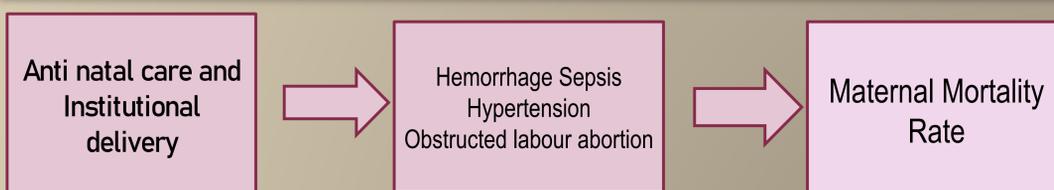
$$Inst. Delivery = 128.49 - 10.5(TFR)^{**} - 0.175(ST)^{**} + 0.356(WFPR)^{**} + 0.17(CPR)^{**} + 0.135(Urban)^{**} - 1.675(SMAM)^{**}$$

R-Squared=0.567

## Causes of Maternal Mortality in India, 2003



Source: Sample Registration System, 2001-2003



**ANC Component: Urine and blood test, Blood pressure, Breast Examination, Abdominal Examination, Weight**

## Conclusion:

- higher level of ANC and institutional delivery lead to reduce the level of MMR in a region.
- The use of medical facilities like Antenatal care and institutional delivery depends on the social and economic status of women.
- Most important factor that effects both ANC and institutional delivery is: TFR
- It is clear that ANC and Institutional delivery are affected by many socioeconomic factors which in turn affect MMR. Therefore, to improve MMR, not only health care facilities but socioeconomic conditions of women must also be improved.

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