

# When Antibiotic should be taken:

## A Study of the Kanchanaburi Demographic Surveillance System, Thailand

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### • Background

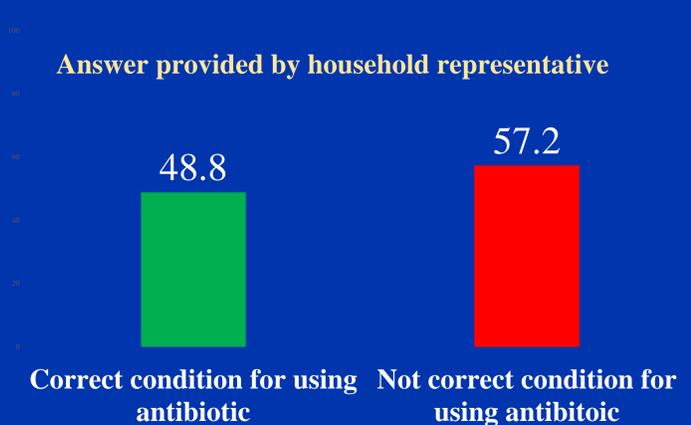
Inappropriate use of antibiotics causes antimicrobial resistance, which is a major concern for the shortcoming of antibiotics. This study aims to assess the prevalence of antibiotic use at the household level and the factors influencing the knowledge on the condition for using antibiotics.

### • Method

The study employed the household survey in the Kanchanaburi Demographic Surveillance System (KDSS). The sample was 1,059 households. The use of antibiotics in the past month of the household member was assessed. A question on “When do you think should antibiotics be taken?” was used to measure the knowledge on the condition for using antibiotics and the correct answer was for bladder infection. The respondents were representative of the household. Logistic regression is used.

### • Result

It was found that 27.9 % of households used antibiotics in the past month.



Only 48.8% of household representative provided a correct answer for the condition of using antibiotic.

Characteristics	Adjusted Odds Ratio	Robust S.E	P-value
<b>Sex (Male=ref)</b>			
Female	1.369	0.261	0.099
<b>Education(Primary school and lower=ref)</b>			
Lower secondary	1.222	0.321	0.445
Upper secondary	1.505	0.130	0.000
Vocational scholl	1.602	0.188	0.000
University	2.484	0.326	0.000
<b>Occupation (Agriculture=ref)</b>			
Sales and service	0.921	0.054	0.157
Government officer	2.084	0.685	0.025
Business owner	1.344	0.155	0.010
Others	1.826	0.271	0.000
<b>Relationship to household head (Being household head =ref)</b>			
Being household member	0.788	0.002	0.000
<b>Have children under 5 years old in the household (No=ref)</b>			
Yes	1.630	0.139	0.000
<b>Have member(s) used antibiotic in the past month (Yes=ref)</b>			
No	0.649	0.058	0.000
<b>Residential area (Urban=ref)</b>			
Simi-urban	1.213	0.018	0.000
<b>Constant</b>	0.399	0.085	0.000

Logistic regression shows that education, occupation, being household head, having children under 5 years old in the household, having members using antibiotics in the past month and living in semi-urban area are factors influencing knowledge on the condition for using antibiotics.

### • Conclusion

The findings suggest that the program to increase knowledge on the condition for using antibiotics for the community members in the KDSS is necessary.