

Research Study on 'The Determinants of Infant and Child Morbidity and Mortality in Myanmar, April, 2005

Executive Summary

This paper provides an in-depth analysis of infant and child morbidity and mortality in Myanmar using data from the 2001 Fertility and Reproductive Health Survey (FRHS). The paper examines different demographic and socio-economic factors and the relative importance that they have on the extent of childhood diarrhoea, how likely children with diarrhoea will receive Oral Rehydration Salt (ORS) treatment and the effects of these variables on the likelihood on child mortality.

Summary: Findings, Conclusion and Recommendations

Findings

In the two weeks and the 24 hours before the 2001 FRHS was undertaken, 4.9 and 2.1 percent of children aged five or younger suffered from diarrhoea. Of the children with diarrhoea, 37.6 percent received ORS treatment, while many, 18 percent, received no treatment at all. Myanmar's level of infant and child mortality is relatively high over 8 percent of children born in the five years before the 2001 FRHS had died before the survey was undertaken. In Myanmar mortality follows a pattern similar to other developing countries, with deaths heavily clustered in the first five years of life; and in particular in the first year.

The factors most strongly associated with a child experiencing an episode of diarrhoea in the two weeks before the surveys commenced were domain of residence of the child, the age and sex of the child, and the type of toilet facility available in the household. Diarrhoea is most common from the age of 6 to 23 months.

Household characteristics had a more significant impact on whether children received ORS for diarrhoea, than whether they had the disease or not. Children were more likely to receive ORS if they were living in households with more modern facilities. The type of drinking water, the type of roof and whether the household had electricity had a strong impact on whether children received ORS or not.

The probability of ORS treatment is closely related to the economic standing of households. The multivariate analysis suggest that the effect of the household variables reflects the ability of better off households to purchase or access treatment. Programme design for ORS treatment will significantly reduce the negative impacts and improve access to childhood diarrhoea. Another factor that clearly promotes ORS treatment is a child sick with diarrhoea being seen by a health provider. Efforts to educate parents about the importance of seeking health care for their children when they have diarrhoea will help increase the likelihood of use of ORS.

The analysis identified numerous factors that affect infant and child mortality. The results show a clear relationship between parity/birth interval (which is also known as reproductive patterns) and the likelihood of a child surviving his/her fifth birthday. The strongest effects are seen for the length of the previous interval. The odds of a child dying are almost 2.5 times higher for a child born after a previous interval of less than 2 years compared to child born after an interval of 3 or more years. Mothers in their twenties and

early thirties have the highest probabilities of their children surviving.

Ensuring that mothers have access to ante-natal care from the formal health system contributes to lower levels of infant and child mortality, although this variable was not affective when controlling for the length of the previous birth interval. The multivariate results show that the odds of a child death are reduced by almost one half if the mother lives in a household that has electricity. In this case, electricity is a proxy for the level of economic standing of the household. It is likely that children from households that are better off are more likely to receive better health care and have better nutrition, than children born into poorer households.

Conclusion

The results from this analysis are generally in the expected direction and consistent with the results of many other studies. Comprehensive reproductive health and child survival programmes should be undertaken to further improve child health and reduce infant and child mortality. In terms of policy interventions, prolonged breastfeeding, good ANC and PNC supported birth spacing and extensive use of modern medical care both for mothers and new born would certainly contribute to improvements of child morbidity and mortality in Myanmar.

Living conditions are a factor in determining levels of infant and child morbidity and mortality in Myanmar. Improving sanitation would reduce infant and child morbidity and result in decreased mortality. Although most of the socio-economic impacts on morbidity and mortality are mediated by sanitation, health, and reproductive patterns, improvements in socio-economic characteristics such as education will facilitate improvements in child survival.

Recommendations

- Great effort needs to be made to accurately measure levels of child survival in Myanmar. Further research is required on risk factors associated with a range of infant and child morbidity. For example, little is known about the health-seeking behaviours of mothers, and more research is needed in this area.
- It is also proposed that more proximate indicators of child health, such as birth weight and anthropometric factors such as weight and height measurement are included in future surveys.

Research Geographic Coverage by Area(s)

The 2001 Fertility and Reproductive Health Survey (2001 FRHS) was conducted in the fourteen states and divisions which were stratified into nine domains such as,

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| 1. Kachin/Kayah/Shan; | 4. Bago; | 7. Rakhine |
| 2. Kayin/Mon/Tanithayi; | 5. Magway | 8. Yangon |
| 3. Chin/Sagaing; | 6. Mandalay | 9. Ayeyarwady |

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