AMK (Abhoynagar, Mirsarai and Kamlapur) HDSS
BANGLADESH

Brief Description

The AMK HDSS has presently three active field sites, Abhoynagar, Mirsarai and Kamlapur. Abhoynagar, which includes its former comparison area Keshobpur, has a quarterly surveyed population of about thirty-four thousand. It is located in Khulna division in the southwest of Bangladesh, between Jessore and Khulna cities - about 30 kms away each. This division is the first in Bangladesh to reach the below replacement level fertility. Mirsarai is situated in southeast Bangladesh in the Chittagong Division on the Dhaka-Chittagong highway, about 60 kms north of the latter city and has around forty thousand quarterly surveyed persons. Many workers migrate abroad, mainly to the Gulf States. Kamlapur is a part of Dhaka city, located between the main railway station and a bus terminal, where surveillance for certain diseases and vaccine trials are already taking place. The area has presently about 200,000 inhabitants and is enumerated every two years. From 2008 a part of this population is visited every three months for recording health and demographic events.
Demographic Rates in Two Rural Sites

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<thead>
<tr>
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<th>Abhoynagar, 2010</th>
<th>Mirsarai, 2010</th>
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</thead>
<tbody>
<tr>
<td>Crude Birth Rate (CBR)</td>
<td>18.78 per 1000 population</td>
<td>21.64 per 1000 population</td>
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<tr>
<td>Total Fertility Rate (TFR)</td>
<td>2.08 per woman</td>
<td>2.16 per woman</td>
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<tr>
<td>Crude Death Rate (CDR)</td>
<td>5.84 per 1000 population</td>
<td>5.87 per 1000 population</td>
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<tr>
<td>Neonatal Mortality</td>
<td>44.41 per 1000 live births</td>
<td>27.25 per 1000 live births</td>
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<td>Post-neonatal Mortality</td>
<td>3.06 per 1000 live births</td>
<td>10.66 per 1000 live births</td>
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<td>Infant Mortality</td>
<td>47.47 per 1000 live births</td>
<td>37.91 per 1000 live births</td>
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<td>Child Mortality (1-4 years)</td>
<td>1.17 per 1000 children aged 1-4 years</td>
<td>2.75 per 1000 children aged 1-4 years</td>
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<td>Under Five Mortality</td>
<td>52.07 per 1000 live births</td>
<td>48.58 per 1000 live births</td>
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<tr>
<td>Rate of Natural Increase</td>
<td>12.94 per 1000 population</td>
<td>15.77 per 1000 population</td>
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Objectives
The AMK HDSS was originally set up for operations research. Apart from the routine surveillance, the rural sites are presently used for health systems research, while the urban site is more targeted at diseases surveillance and vaccine trials. Migration and urbanization research will also take place in the urban site. The objective of the surveillance is to provide reliable background data needed to translate the results of the research into better and more equitable health care for everyone, but especially in Bangladesh.
Priority Research Areas
The priority research areas are health systems, specifically in the areas of family planning, infant, child, adolescent and maternal health, and health equity, as well as infectious diseases like dengue, tuberculosis, rotavirus and other diarrhoeal diseases.

Maternity Care service
Analysis of the place of delivery information shows an increase in institution based deliveries from 5% in 2000 to 21% in 2009 in Abhoynagar. The respective figures for Misarai are 10% and 23%. Analysis by asset quintile of the women shows higher levels of institution based deliveries for women belonging to the less poor and least poor quintiles compared to women in the poorest and poorer quintiles in either area.

![Graph showing home-based and institution-based deliveries by asset quintiles, 2009](image)

Figure 1: Home-based and institution-based deliveries by asset quintiles, 2009

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  - Department for International Development, UK

Collaborators
- International Vaccine Institute (IVI)
- Centers for Disease Control (CDC)
- INDEPTH Network
Key Publications


Data entry clerks at work at AMK Health and Demographic Surveillance System