Headlines

- Modern house materials, electricity, telephone TVs and fridges more common.
- Major increase in proportion of women and men who have secondary education.
- Modern contraception more widely used.
- 4+ antenatal visits decreased, but post-natal care increased. Facility deliveries barely changed.

- Continued improvement in coverage of exclusive breastfeeding, Vitamin A and iodised salt. Very little change in child malnutrition.
- Insecticide-treated net use increased steeply and child anaemia reduced.
- Slight rise in vaccination coverage.
- Fewer children had respiratory infections, and were more likely to seek treatment.
- HIV testing vastly increased, particularly among women.
- Child survival greatly improved. Adult mortality also declined. Maternal mortality estimate is lower, but not significantly different from previous estimate.

Introduction

This issue of Spotlight highlights selected indicators in the Tanzania 2010 Demographic and Health Survey (DHS) that show major change (favourable or unfavourable) compared to the estimate from five years ago (TDHS 2004/5). Specifically, we highlight selected indicators where the new value shows a relative change of at least 20% change compared to the previous estimate. Unless otherwise stated, all estimates refer to Tanzania Mainland, excluding the islands of Zanzibar.

The survey was conducted by the Tanzania National Bureau of Statistics and IRC Macro (Measure DHS). The full survey report is available at http://www.measuredhs.com/publications/publication-fr243-dhs-final-reports.cfm
Household Characteristics

The major changes here were in house construction materials and selected household assets. There was an increase of 6% points in the proportion of households with modern floor and walls, and an 8% increase in those with modern roofing materials. The proportion of households with electricity rose from 11% to 15% and ownership of a television doubled, from 6% to 13%. There was a corresponding increase (17% to 24%) in the proportion of women aged 15-49 who watched television at least once a week. Their exposure to newspaper (~20%) and radio (~60%) remained unchanged.

Five years ago, only 9% of households owned a telephone. This has increased five-fold to 46%. There was a modest improvement (from 49% to 57%) in the proportion of households using a protected water source.

Educational Attainment

Recent increases in school enrolment are reflected in an increased proportion of men and women who have completed primary (and especially secondary) schooling. The increase is greatest in the younger age groups who have benefited most from the recent rise in enrolment. Literacy rates among adults aged 15-49 years have improved more among women (67% to 72%) than men (80%-82%), although a gender gap remains.

Fertility and Reproduction

The total fertility rate had a slight reduction (from 5.7 to 5.4 children per woman during her lifetime). There was no significant change in women’s median age at first sexual intercourse (17.4 years) or in the proportion of women that had begun motherhood by age 18yrs (29%). Current use of modern contraception methods increased from 18% to 29% among all women of reproductive age (from 20% to 34% for married women; 36% to 51% for sexually active unmarried women).

96% of women attended ANC at least once during their last pregnancy. However, the proportion that attended ANC at least four times declined – from 62% to 43%. There was no significant change in the proportion of women whose most recent delivery took place at a health facility (47% and 50% respectively).
Nutrition

The TDHS 2010 is the first one in Tanzania to use the new reference population for under-five malnutrition. For comparability to previous estimates, the new data must be tabulated using the old reference population. This shows no significant change in any of the three anthropometric indices (stunting, underweight or wasting).

### Nutritional Status of Children 0-59 months

<table>
<thead>
<tr>
<th></th>
<th>2004/5</th>
<th>2010 old reference population</th>
<th>2010 new reference population</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Stunted (&lt;-2SD)</td>
<td>38%</td>
<td>35%</td>
<td>42%</td>
</tr>
<tr>
<td>% Underweight (&lt;-2SD)</td>
<td>22%</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>% Wasted (&lt;-2SD)</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
</tr>
</tbody>
</table>

The median duration of exclusive breastfeeding increased from 1.8 months to 2.4 months. The proportion of children exclusively breastfed increased by around ten percentage points for children in each age bracket (0-1, 2-3, 4-5 months of age). This follows an increase of similar magnitude between 1999 and 2004/5.

The proportion of households with adequately iodised salt increased from 43% to 59%. There was a fifteen percentage-point change in the proportion of under-fives who had received Vitamin A supplementation in the past 6 months (from 46% to 61%).

Child Health

Vaccination coverage (children aged 12-23 months) increased modestly for each of the antigens, although the changes to not attain statistical significance.

There was no change in the proportion of children who were reported to have suffered fever in the two weeks prior to survey. However, the proportion of children who suffered acute respiratory infection (ARI) halved, from 8% to 4%. Moreover, there was an increase, from 57% to 71%, in the proportion of children with ARI who were taken to a health provider.

Malaria

The proportion of under-fives and pregnant women who slept under an insecticide-treated net increased dramatically compared to 2004/5. ITN use by pregnant women rose from 16% to 57% while use by under fives rose from 16% to 64%. The proportion of pregnant women who received 2 or more doses of preventive treatment for malaria increased slightly (from 22% to 26%) and a similar small increase was seen in the percentage of under-fives with fever who received recommended anti-malarial treatment the same/next day after fever onset (from 21% to 26%). Anaemia among children under-five (<10g/dl) declined from 43% to 29%.

HIV testing

There was a dramatic increase in the coverage of HIV testing, particularly for women. The proportion of 15-49 year olds “ever tested and received results” rose from 12% to 55% (women) and from 12% to 40% (men). Among sexually active 15-24 year-olds, 39% of women and 25% of men had tested and received the in the last 12 months (up from 6% and 7% respectively). The proportion of women who were tested at ANC and received results during their last pregnancy rose from 9% to 55%.
Mortality

Mortality of children before age five declined by more than a quarter between the 2004/5 survey [reflecting the period 2000-2004] and 2010 [reflecting the period 2005-2009]. There were declines of similar magnitude in the neonatal, infant, and child (age 1-4 years) age groups. Perinatal mortality (still births + neonatal deaths in first week) declined from 42 to 36 (expressed per 1000 pregnancies of 7+ months duration).

Adult mortality also declined by around one fifth. In this case, the mortality rates refer to the ten-year period prior to the 2010 and 2004/5 surveys. Among women aged 15-49 years, mortality per 1,000 person-years declined from 6.6 to 5.1. Among men aged 15-49 years the rate declined from 6.2 to 5.0.

The relative decline in maternal mortality (per 100,000 live births) – from 578 [95%CI: 466-690] to 454 [95%CI: 353-556] is of similar magnitude, but does not attain statistical significance.

Conclusion

There has been a major improvement in many indicators reported in the latest DHS survey. Among socio-economic variables, the most notable changes are in housing materials, telephone ownership and secondary education.

Use of modern contraception appears to have increased in the past five years. Exclusive breastfeeding is more common in all age brackets before age six months. Vaccination coverage rates were already high and may have improved slightly.

Among malaria-related indices, ITN use and anaemia prevalence among under-fives show the greatest gains over the past five years.

Mortality decline appears to have occurred in all age groups – adults and under-fives. The change in under-five mortality represents a 28% relative decline between the first half and second half of the decade to 2010.

Acknowledgements

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The *pdf version can be downloaded from our website: www.ihi.or.tz

References

Tanzania Demographic and Health Survey 2010. NBS and ICF Macro, 2011.