**Health: Family issues in Timor-Leste**

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### Introduction

Timor-Leste has the highest maternal mortality rate in the region with an estimated 880 per 100,000 live births. Around half of births occur at home and access to obstetric care is limited. Under five child mortality is also extremely high, at around 82 per 1,000 births. In a forum focusing on health, family issues were seen as core to addressing these far-reaching concerns.

The Timor-Leste Demographic and Health Survey (DHS) was carried out by the Ministry of Health in Timor-Leste in 2002-2003 (see Utomo paper, this issue). This survey has informed the direction and implementation of programmes and interventions undertaken by the Ministry, particularly those focusing on women's and children's health. Men's participation and utilisation of health services, and their role in their family's utilisation of health services, are also relevant. Women's and children's health are addressed primarily through the Reproductive Health Strategy and Integrated Management of Childhood Illness (IMCI).

It is recognised that there are discrepancies between maternal and child health figures from different sources. In this document we refer to DHS data.

### The Demographic and Health Survey

This survey was the first comprehensive assessment of the demographic, health and nutrition status of the population of this newly independent state. The DHS was designed to fulfil the following specific objectives:

- provide data concerning the basic demographic profile of the country, including fertility and infant and child mortality rates needed for development planning;
- assess the nutritional and anaemic status of the adult and child populations to plan and prioritise future interventions;
- provide baseline information about health and nutritional status of the population and use of health services for future evaluation of national health programmes;
- provide baseline information about fertility and contraceptive prevalence rates to evaluate future child spacing programmes;
- analyse factors associated with fertility and use of family planning methods, maternal and child health, use of health services and adult illnesses;
- analyse factors associated with malnutrition and anaemia especially in women and children;
- assess men's participation and utilisation of health services, and their role in their family's utilisation of health services; and
- create standard demographic, health and nutrition indicators to facilitate cross-country comparisons for programme managers, policy makers and researchers.

A cross-sectional household survey was conducted May-August 2003, involving a cluster sample of 4,320 households from four different geographic areas in Timor-Leste. The survey was designed to provide estimates of key demographic, health status and health service usage indicators at national level, and for selected policy relevant subgroups of the population based on geographic location (west, central and east), the nature of the district (urban versus rural), and major agro-ecologic zones (lowlands and highlands).

### Maternal health

The total fertility rate of Timor-Leste registered as the world’s highest in 2003, according to the DHS, at an average of 7.8 children born per woman. Women wanting to control their fertility have had limited access to knowledge of how to do so, and limited access to safe acceptable methods of birth control.

<table>
<thead>
<tr>
<th>Table 1: Fertility and family planning</th>
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<tbody>
<tr>
<td><strong>Fertility</strong></td>
</tr>
<tr>
<td>Total fertility rate (children born per woman)</td>
</tr>
<tr>
<td>Median birth intervals (months)</td>
</tr>
<tr>
<td><strong>% of respondents</strong></td>
</tr>
<tr>
<td><strong>Men knowing any contraceptive method</strong></td>
</tr>
<tr>
<td><strong>Women currently using any method</strong></td>
</tr>
<tr>
<td><strong>Unmet need for family planning²</strong></td>
</tr>
</tbody>
</table>

Source: DHS 2004
To improve access to contraceptive supplies and widen information about family planning, a comprehensive programme of integrated reproductive health care was developed. It includes culturally and socially appropriate promotion of family planning options, and the provision of accessible contraceptive supplies and services for all women and men in Timor-Leste.

The vast majority of births in Timor-Leste occur in places with poor access to emergency obstetric care; less than 20 per cent of births are assisted by trained personnel. Undoubtedly, these factors contribute to the nation having the region’s highest maternal mortality rate. What is more, most pregnant women have nutritional deficiencies and short birth intervals.

As Table 2 shows, knowledge of HIV and AIDS and of ways to prevent transmission is extremely limited among married women and men. Health education needs to start with the basics: information about what HIV and AIDS mean, along with the dangers of HIV infection.

### Table 2: Safe motherhood and knowledge of HIV and AIDS

<table>
<thead>
<tr>
<th>Safe motherhood</th>
<th>%</th>
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<tbody>
<tr>
<td>Antenatal care from health providers</td>
<td>60.5</td>
</tr>
<tr>
<td>Women receiving tetanus toxoid two doses</td>
<td>42.5</td>
</tr>
<tr>
<td>Births delivered in a health facility</td>
<td>9.8</td>
</tr>
<tr>
<td>Mother with medical assistance at delivery</td>
<td>18.4</td>
</tr>
<tr>
<td>Pregnant women with anaemia (Hb&lt;120g/L)</td>
<td>36.5</td>
</tr>
<tr>
<td>Mothers receiving vitamin A postpartum</td>
<td>23.3</td>
</tr>
<tr>
<td>Non-pregnant women with low BMI (&lt;18.5kg/m²)</td>
<td>37.7</td>
</tr>
<tr>
<td>Non-pregnant women with anaemia (haemoglobin &lt;120g/L)</td>
<td>31.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIV and AIDS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Women having heard of HIV and AIDS</td>
<td>20.7</td>
</tr>
<tr>
<td>Women knowing two or three ways to avoid HIV infection</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Source: DHS 2004

Strategies developed to address the issues identified in Table 2 are:

- Family Planning Strategy, March 2004;
- Reproductive Health Strategy 2004 to 2015;
- Strategy for Health Promotion 2004 to 2010;
- Immunisation Strategy, July 2004;
- Nutritional Strategy, July 2004; and
- Strategy for Maternal Waiting House (draft in progress).

The government of Timor-Leste recognises the importance of the availability of quality health services to all women during pregnancy and childbirth. It pledges access to free basic and comprehensive maternity care — comprising quality antenatal care, clean and safe delivery, and postpartum care — for all pregnant women, whatever the circumstances of their pregnancy and delivery. As part of this, the Ministry of Health is promoting knowledge of pregnancy and childbirth issues as well as of available services. Emphasis is on birth spacing, maternal nutrition, timely referral to skilled birth attendants, clean delivery procedures, access to emergency obstetrical care, and involvement of husbands in supporting pregnant women through the pre- and post-partum period. To achieve its outcome, the Ministry has also devised the following strategies:

- improve quality and coverage of prenatal, delivery and postnatal care;
- improve accessibility of emergency obstetric care; and
- integrate the sexually transmitted infections (STI) and HIV programme into maternal and prenatal care.

### Implementation

Ministry of Health staff are implementing a range of education and communication strategies aimed at enabling women and their families to recognise complications and to encourage health promoting behaviors before, during and after pregnancy and delivery. In 2004, the Ministry launched its Safe Motherhood campaign focusing on the importance of at least four antenatal visits. More than 20 different kinds of promotional material have been distributed including Livinho Saude Inan ho Oan (Mother’s Health Book), and home-based maternal records with an integrated child growth monitoring and immunisation schedule.

Essential care standards have been developed, including midwifery standards of general, antenatal, intra-partum and postnatal care, as well as emergency obstetrical care at different levels of the health system. Antenatal care is used as an opportunity to detect and manage nutritional deficiencies and to treat endemic diseases such as malaria and STI. It also offers prophylaxis with tetanus toxoid, anaemia and iron/folate supplementation, planning for place of birth, and for informing women and their families about when and where to seek care. Postpartum care includes breastfeeding support and counselling, the prevention or early detection of maternal or newborn complications, as well as contraceptive advice and vitamin A supplementation.

Community based health posts and community based health care providers are important resources in improving maternal care. Currently, around 90 per cent of the population has access to health care facilities. All districts have ambulances, Community Health Centres have radios, and roads are in varying conditions for travel across the country. To ensure health services
are available as close as possible to people’s homes, peripheral facilities are being upgraded and Maternal Waiting Houses established. Improved quality care is being provided through district-based interventions — a Maternal and Child Health District Programme Officer is assigned to each district health team. Recruitment, in-service competency based training and initial midwifery education, and deployment of skilled attendants is underway in a drive to make trained assistance available for every birth. There are currently 274 midwives in Timor-Leste.

**Family planning programme**

In July 2003, a national workshop on the draft Family Planning Policy was conducted, following feedback on an earlier draft from representatives of 13 district-level communities. Almost a year later, the policy was accepted by the Council of Ministers. The Timor-Leste government recognises the importance of spacing births and reducing the extremely high birth rate as a means of reaching its goals of eradicating poverty, reducing the country’s high levels of maternal and child mortality, and improving the health of mothers and children.

Family planning, (including natural family planning), information, counselling and services are accessible at all levels of the public health system so that all couples and individuals in Timor-Leste will have the means and information needed to make informed and free choices about the number and spacing of their children.

To ensure such services are client centered and adhere to the highest professional standards, ongoing training and information to relevant health care providers will be provided, and the supply and effective distribution of the widest possible range of contraceptives will be secured. The strategies for the Policy’s implementation are:

- increase knowledge of birth spacing;
- improve accessibility of contraceptive services and widen the range of contraceptive options;
- increase the active participation of men in reproductive health issues and promote the use of male contraceptive methods; and
- integrate STI programmes into family planning services.

**Implementation**

Culturally and religiously sensitive information, education and communication on family planning materials, which respect people's individual choices, are in the process of development. These include flip charts, posters and brochures on family planning including natural methods. Each family planning service delivery point must:

- provide complete and accurate information about all available methods. At least three different modern methods of contraception must be offered or referred. Advice on natural methods along with condoms, oral and injectable contraceptives will be made available at health post level; contraceptive subdermal implants and intra-uterine devices (IUDs) will be added from the level of Community Health Centres; and sterilisation will be available at referral hospitals and higher level health centres with appropriate equipment and trained staff;
- provide services to all who require them regardless of age, gender, marital status, ethnicity, knowledge of languages, income level, or any other criteria; and
- all health facilities will have allocated private space for family planning counselling and be equipped to provide clinical care.

Thirteen midwives and one general practitioner received training for national master trainers on family planning counselling and clinical skills, with support from the United Nations Population Fund (UNFPA). Ongoing training of health providers on family planning counselling and clinical skills is done by the national master trainers. They also train health care providers on the technical and managerial aspects of contraception and on appropriate interpersonal communication and counselling skills. Two years of funding for contraceptive devices has been requested from UNFPA ($138,000), assuming a contraceptive usage rise from 11 to 15 per cent. These materials include Depo-Provera, contraceptive pills, IUDs, intra-dermal implants and condoms.

**Infant and child health**

In Timor-Leste, there are critical infant and child health concerns. There is a very high under-five mortality (125 per 1,000 live births reported 1989-1993) and a severe shortage of doctors. All of the major childhood diseases are common including acute respiratory infection, malaria and other fevers, diarrhoeal diseases, and nutritional disorders. Table 3 outlines these concerns.

Malnutrition is a major problem, resulting in underweight children as well as wasting and stunting. Wasting is associated with undernutrition and failure to recover from frequent illness; stunting is a result of chronic undernutrition during infancy and childhood.

- wasting: 12-18 per cent children (0.5-5 years);
- underweight: 43-60 per cent; and
- stunting: 47-55 per cent.

An integrated approach to child health focusing on the well-being of the whole child, IMCI, has been adopted by the
Ministry of Health as a key strategy to deal with infant and child health concerns. IMCI’s strategy is the only current child policy document, though there are references to child health in the Expanded Programme on Immunisation (EPI), Nutrition, and Reproductive Health Policies. IMCI aims to reduce death, illness and disability, and to promote improved growth and development among children under five years of age. IMCI includes both preventive and curative elements that are implemented by families and communities as well as by health facilities. The IMCI approach enables health staff and communities to address the most common childhood problems. It also seeks to provide guidelines for referral to specialised health services.

Table 3: Child health statistics

<table>
<thead>
<tr>
<th>Infant and child mortality</th>
<th>per 1,000 births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonatal mortality rate</td>
<td>42</td>
</tr>
<tr>
<td>Infant mortality rate (&lt;1 year, 1999-2003 DHS)</td>
<td>60</td>
</tr>
<tr>
<td>Under five mortality rate (1999-2003 DHS)</td>
<td>83</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child health and immunisations</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children 12-23 months fully immunised</td>
<td>17.8</td>
</tr>
<tr>
<td>Children with acute respiratory infection symptoms</td>
<td>treated in health care facility</td>
</tr>
<tr>
<td>Children with diarrhoea treated with oral rehydration salts</td>
<td>59.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nutrition and anaemia*</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children exclusively breastfed, &lt;4 months (% in sample)</td>
<td>39</td>
</tr>
<tr>
<td>Median duration of any breastfeeding (months)</td>
<td>17.7</td>
</tr>
<tr>
<td>Children 6-59 months receiving vitamin A supplementation (% in sample)</td>
<td>34.2</td>
</tr>
<tr>
<td>Children with anaemia, haemoglobin &lt;110g/L, (% in sample)</td>
<td>31.5</td>
</tr>
</tbody>
</table>

Source: DHS 2004

The Ministry of Health embraced the philosophy of IMCI and made a commitment to programme implementation in 2000-2001. Implementation was well established by 2002-2003 and IMCI, along with EPI, led the development of the child health strategy in the new health system. Since 1993, there has been a reported decline in under-five mortality. Across Timor-Leste, more than 80 per cent of children aged 12 to 23 months are not fully vaccinated against all six common vaccine-preventable childhood illnesses. Coverage with individual vaccines, according to the most recent EPI Survey (WHO/UNICEF 2004), showed the anti-TB BCG at 72 per cent, tetanus and polio (DPT3/OPV3), 57 per cent, measles, 55 per cent, and tetanus (TT2) at 60 per cent.

IMCI strategic goal

The strategic goal of IMCI is to improve the health and well-being of children under five through the introduction of a comprehensive integrated package of health care services, as a component of the Basic Package of Services available in all Ministry of Health facilities. The objectives of this strategy are:

- provide a comprehensive package of health care services to sick children aged one week to five years;
- strengthen the health system for a more efficient and effective delivery of health care services;
- improve the linkage of the health facilities to the communities they serve; and
- enable the empowerment of families and communities to identify the health needs and care for the health of their children.

Implementation

There are three programme components:

- improving staff case management skills;
- improving the health system for effective management of childhood illness; and
- improving family and community practices (CIMCI).

Overall, the first and second components of the programme are in the expansion phase. A midterm review was held in June 2003 following the end of the early implementation phase, while the expansion phase is ongoing. The third component, CIMCI, is only implemented in a very limited fashion although a strategic guideline for implementation exists.

The following is a summary of achievements towards IMCI’s first component involving the training of first level health workers — nurses and midwives from community health centres, hospitals, the National Centre for Health Education and Training, and the National Hospital in Dili:

- 381 individuals received training, the majority of whom are government staff;
- ten districts completed staff training (another three underway);
- 27 facilitators trained;
- follow-up training conducted six to eight weeks after every training; and
- ongoing supervision by the District Health Management Team has continued at three-monthly intervals after training.

It is important to point out that the implementation of IMCI in Timor-Leste is unique in that it has occurred concurrently with the redevelopment of a health system that was destroyed in 1999. IMCI thus guided development of several health system issues, particularly child health, for example medication (Essential Medicines List), indicators (Health Management and Information Systems [HMIS]) and supervision tools.
Other specific achievements, relevant to the second component, include:
- support to the national immunisation programme;
- adaptation and production of child health record and growth card; and
- support to health promotion activities: vitamin A, de-worming and growth monitoring.

The third component is still being implemented. However, achievements to date include a strategy for developing implementation guidelines for CIMCI. Some NGOs (such as CARE and World Vision) are implementing CIMCI in selected districts but this is not a standardised programme. The CIMCI flipchart has been adapted for use in health promotion.

**Other IMCI-related successes**

IMCI was one of the earliest programmes implemented by the new Timor-Leste Ministry of Health. Thus IMCI served a very important role in providing a leading example of how to:
- adapt a programme for Timor-Leste;
- integrate a programme;
- conduct training of trainers and other training;
- establish supervision procedures;
- commence data collection (before HMIS); and
- conduct a programme review meeting.

Other successes, associated with the handover of the programme from WHO to the Ministry in mid-2004, were ownership, commitment and leadership. However, many challenges remain.

**Challenges**

There are a limited number of facilitators for training and the same pool of trainers train many other programmes. In the second component, supervision needs strengthening. Clinic management skills remain very weak, impairing IMCI implementation. There are ongoing problems with drugs/supplies management and with staff not implementing IMCI. HMIS are not fully implemented and clinics still lack fundamentals: water, power, communication, and transportation are still very limited and some clinics are inaccessible in the wet season and cannot refer.

The third component is not yet effectively implemented. Strategies to develop guidelines exist, but have not been implemented. Inter-sectoral collaboration and the Community Health Worker system are still relatively new concepts. Overall, there is weak district level ownership and management:
- until recently there were no district level personnel for IMCI;
- the District Health Management Team is not strong in IMCI, thus cannot provide good support;
- the IMCI programme is not well integrated with Communicable Disease Control, malaria, nutrition and EPI.

The distance of isolated health posts poses enormous difficulties. In some case there is only one person to supply all services with no electricity, radio or water. Getting IMCI and other important programmes to these isolated areas is a major challenge.

Currently UNICEF and WHO, along with CARE International and Cooperative Café Timor are partners in the IMCI programme. Further partnerships are planned with BASICS (a US funded body with a focus on child survival) and Health Alliance International (which focuses on neonatal care and IMCI).

Future plans include:
- complete full training and implementation of IMCI;
- conduct ongoing activities related to the second component of IMCI;
- further develop CIMCI; and
- link IMCI to the Health Promotion strategy and development of the Community Health Worker system;

A final IMCI evaluation is planned for mid 2006. Full implementation nationwide including CIMCI is expected within five years; however, there is little or no in-country experience of this. There are other challenges to be met in the future: no broader child health policy is yet developed and referral care and neonatal IMCI, although planned, has not yet commenced implementation.

**Notes**

1. Beverley Snell and Clement Malau, Centre for International Health, Macfarlane Burnet Institute for Medical Research and Public Health; Lidia Gomes, Misliza Vital and Odete Maria Freitas Belo, Ministry of Health, Timor-Leste; Michael Dibley, University of Newcastle; Sarah Moon, Australian Red Cross; Nelson Martins, Universidade da Paz, Timor-Leste.

2. This refers to the percentage of currently married women (interviewed) who either did not want any more children or wanted to wait before having their next birth, but were not using any family planning method.

**References**

