A STRATEGIC ASSESSMENT OF REPRODUCTIVE HEALTH IN THE LAO PEOPLE’S DEMOCRATIC REPUBLIC

Ministry of Public Health, The Lao PDR.

Institute of Maternal and Child Health

In collaboration with

World Health Organization
Family Care International/New York
Population Council/Bangkok
International Council on the Management of Population Programmes

Reproductive Health and Research
World Health Organization
1211 Geneva 27
Switzerland
# A Strategic Assessment of Reproductive Health in the Lao People’s Democratic Republic

Report of a Strategic Assessment Undertaken by:

**Ministry of Public Health**
- Institute of Maternal and Child Health
  - Phonethep Pholsena
  - Pany Sananikhom
  - Khonesavanh Pholsyna
  - Khamseng Philavong
  - Manisone Oudom
  - Saysouda Sayasene
  - Oudone Southalack
  - Somphathai Bouathong
  - Nirabonh Chanlivong
  - Chanthavone Louangkhot

**National Centre for Control of AIDS**
- Phouthaly Keomoukda

**Centre for Education and Information for Health**
- Vanmaly Svanmaly

**College of Health Technology**
- Sengmany Nochaleun

**Lao Youth Union**
- Sompheng Phamixay

**World Health Organization**
- Agostino Borra
  - Giovanni Deodato
  - Peter Fajans
  - Richard J. Guidotti
  - Kevin O'Reilly

**Family Care International**
- Ietje Reerink

**International Council on Management of Population Programmes**
- Jay Satia

**Population Council**
- Christopher Elias
EXECUTIVE SUMMARY

1 INTRODUCTION

1.1 STRATEGIC ASSESSMENT IN REPRODUCTIVE HEALTH

1.2 STRATEGIC ASSESSMENT METHODOLOGY

1.3 NATIONAL CONTEXT

1.4 HEALTH SECTOR PROFILE

1.5 PUBLIC HEALTH SECTOR

1.6 PUBLIC HEALTH PERSONNEL

1.7 PRIVATE HEALTH SECTOR

1.8 REPRODUCTIVE HEALTH STATUS

1.9 GOVERNMENT POLICIES ON REPRODUCTIVE HEALTH

1.10 CURRENT ACTIVITIES IN REPRODUCTIVE HEALTH

2 CRITICAL ISSUES ON REPRODUCTIVE HEALTH

2.1 MATERNAL HEALTH

2.1.1 Maternal Health Needs Assessment

2.1.2 Strategic Assessment Recommendations

2.2 BIRTH SPACING

2.2.1 National Birth Spacing Policy and Programme

2.2.2 Provision of Contraceptives under the Birth Spacing Programme

2.2.3 Contraceptive Knowledge

2.2.4 Demand for Contraception

2.2.5 Contraceptive Use

2.2.6 Sources and Supply of Contraceptive Methods

2.2.7 Access to Contraceptive Services

2.2.8 Affordability of Contraceptives

2.2.9 Quality of Care

2.2.10 Reasons for Use and Non-Use of Contraception

2.2.11 Users’ Experiences and Perceptions about Contraceptive Methods

2.2.12 Strategic Assessment Recommendations

2.3 REPRODUCTIVE TRACT INFECTIONS

2.3.1 Overview of RTI Prevalence

2.3.2 Community Knowledge and Perceptions

2.3.3 Care Seeking Behaviour

2.3.4 Public Sector Service Delivery

2.3.5 Role of Pharmacies and Other Private Providers

2.3.6 Strategic Assessment Recommendations

2.4 ADOLESCENT HEALTH

2.4.1 Adolescent Pregnancy

2.4.2 Pregnancy in Unmarried Adolescents

2.4.3 Community Perceptions Related to Adolescent Pregnancy

2.4.4 High Risk Sexual Behaviour

2.4.5 Other Reproductive Health Problem

2.4.6 Access to and Use of Reproductive Health Information and Services

2.4.7 Community Perceptions about Adolescent Health

2.4.8 Strategic Assessment Recommendations
3 PROPOSED STRATEGIC ACTION ................................................................. 64
   3.1 PRIORITY INTERVENTIONS ................................................................. 65
   3.2 PROGRAMME STRATEGY DEVELOPMENT ....................................... 66
   3.3 POLICY AND PROGRAMME DEVELOPMENT ..................................... 67
   3.4 RESEARCH FOR POLICY AND PROGRAMME DEVELOPMENT .......... 71
   3.5 DEVELOPING A COMPREHENSIVE REPRODUCTIVE HEALTH POLICY 72
   3.6 PROVIDING INTEGRATED REPRODUCTIVE HEALTH CARE ................ 73

4 CONCLUSION ......................................................................................... 75

ANNEX I: PEOPLE INTERVIEWED, DISTRICTS AND VILLAGES VISITED DURING THE
STRATEGIC ASSESSMENT ........................................................................... 76

ANNEX II: LIST OF STRATEGIC ASSESSMENT TEAM MEMBERS ..................... 79

ANNEX III: OVERVIEW OF SELECTED REPRODUCTIVE HEALTH SERVICES TO BE
PROVIDED AT DIFFERENT LEVELS OF THE HEALTH SYSTEM ...................... 81

REFERENCES ......................................................................................... 85
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Expanded Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immunodeficiency Syndrome</td>
</tr>
<tr>
<td>ARI</td>
<td>Acute Respiratory Infection</td>
</tr>
<tr>
<td>DMPA</td>
<td>Depomedroxyprogesterone Acetate</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>EOC</td>
<td>Essential Obstetric Care</td>
</tr>
<tr>
<td>EPI</td>
<td>Expanded Programme on Immunization</td>
</tr>
<tr>
<td>FBSS</td>
<td>Fertility and Birth Spacing Survey</td>
</tr>
<tr>
<td>FCI</td>
<td>Family Care International</td>
</tr>
<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
</tr>
<tr>
<td>ICPD</td>
<td>International Conference on Population and Development</td>
</tr>
<tr>
<td>IMCH</td>
<td>Institute of Maternal and Child Health</td>
</tr>
<tr>
<td>IMPE</td>
<td>Institute of Malariology, Parasitology and Entomology</td>
</tr>
<tr>
<td>IUD</td>
<td>Intrauterine Device</td>
</tr>
<tr>
<td>JOICFP</td>
<td>Japanese Organization for International Co-operation in Family Planning</td>
</tr>
<tr>
<td>KAP</td>
<td>Knowledge, Attitude and Practice</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Lao People’s Democratic Republic</td>
</tr>
<tr>
<td>LWU</td>
<td>Lao Women’s Union</td>
</tr>
<tr>
<td>LYU</td>
<td>Lao Youth Union</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal and Child Health</td>
</tr>
<tr>
<td>MMR</td>
<td>Maternal Mortality Ratio</td>
</tr>
<tr>
<td>MOPH</td>
<td>Ministry of Public Health</td>
</tr>
<tr>
<td>NCCA</td>
<td>National Committee for the Control of AIDS</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
</tr>
<tr>
<td>OC</td>
<td>Oral Contraceptives</td>
</tr>
<tr>
<td>OPD</td>
<td>Out Patient Department</td>
</tr>
<tr>
<td>RTI</td>
<td>Reproductive Tract Infection</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmitted Infection</td>
</tr>
<tr>
<td>STEM</td>
<td>STD Training and Educational Materials</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
<tr>
<td>VDRL</td>
<td>Venereal Disease Research Laboratories</td>
</tr>
<tr>
<td>VHV</td>
<td>Village Health Volunteer</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>PSI</td>
<td>Population Services International</td>
</tr>
<tr>
<td>POP</td>
<td>Progestogen Only Pills</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Overview of Reproductive Health in the Lao PDR

In the Lao People’s Democratic Republic (PDR), the status of women’s reproductive health remains a serious problem. Although data on reproductive health are generally scarce, it is estimated that maternal death rates are extremely high, up to 900 maternal deaths per 100,000 live births in remote parts of the country. The country’s total fertility rates are also high, ranging from 4.7 for urban women to 7.8 for rural women. Only limited data exist on the incidence and prevalence of reproductive tract infections (RTIs) and sexually transmitted Infections (STIs), but anecdotal evidence suggests that the magnitude of these problems is likely to be great. Abortion and adolescent reproductive health remain politically sensitive issues that are not adequately addressed by existing programmes. Information on other reproductive health problems such as infertility, sexual or domestic violence and reproductive cancers is virtually non-existent.

To help respond to the high unmet need for contraception (average desired family size was 4.2 for the period 1990-1995), the Ministry of Public Health developed an official birth spacing programme in 1995 and began nationwide implementation in 1996. The government has also recently developed Safe Motherhood and STI policies that are expected to lead to programme interventions. Overall, little is known about the impact of these policies and programmes on reproductive health as most have only recently been introduced and no comprehensive monitoring, evaluation or surveillance systems are in place.

It is generally understood that programme activities in reproductive health have not reached ethnic minority populations living in isolated mountainous regions of the Lao PDR. These populations suffer from very poor reproductive health as a result of geographic, socio-cultural and financial barriers. Poor communication and transportation limit rural women’s access to health services. Utilization of health facilities is very low, and most facilities report occupancy rates of less than 10% (MOPH/UNICEF, 1998). Poor linkages between the periphery and higher levels of care, fragmented service delivery, and inadequate quality of care pose other serious challenges for the effective delivery of reproductive health information and services.

Strategic Assessment of Reproductive Health

Given the considerable need for both comprehensive information on reproductive health and action strategies, the Lao PDR (MOPH) conducted a strategic assessment of reproductive health in March and April 1999, in collaboration with the World Health Organization (WHO). Professionals from Family Care International, the International Committee on Management of Population Programmes, and the Population Council, Bangkok also provided technical assistance to this effort. The assessment built on previous experiences with similar reproductive health assessments in Myanmar and Viet Nam. The Lao PDR strategic assessment had the following objectives:

- to fill information gaps about selected reproductive health issues;
- to help identify priority areas for programme intervention and research in reproductive health; and
- to provide recommendations for strengthening reproductive health services and improving quality of care.
Additionally, the strategic assessment was intended to serve as input to the MOPH in its efforts to develop an integrated approach to reproductive health service delivery. It sought to involve key stakeholders in reproductive health, so as to reach consensus on priority interventions and coordinate follow-up actions.

Assessment activities were carried out by a multidisciplinary team, composed of 12 Lao nationals and three expatriate consultants over a one-month period in March 1999 and included:

- Preparation of a background paper providing an overview of available information concerning the reproductive health situation;
- Organization of a national planning workshop to consult a multi-sectorial group of reproductive health programme planners and policy makers on RH issues to be included in the strategic assessment;
- Rapid assessment of user needs and health system capacity (resources, management, technologies) for the implementation of new or altered strategies to improve the quality of care and enhance reproductive health service delivery; and
- Organization of a national dissemination workshop attended by a large group of stakeholders to reach consensus about findings and recommendations from the strategic assessment, and to provide input to the development of action plans for programme and policy interventions.

Participants at the national planning workshop agreed on four critical reproductive health issues to be addressed by the strategic assessment, given the severity of the problem and/or the limited availability of information. Selected reproductive health topics were maternal health, including abortion; birth spacing; RTIs; and adolescent health. This executive summary presents a framework for proposed strategic actions in reproductive health, based on the findings and recommendations from the strategic assessment.

Three provinces were selected for the assessment: Saravane in the South, Khammouane in Central Lao and Xieng Khouang in the North. The team visited two districts in each province and in each district, visited a variable number of villages (a total of 35 villages). Service delivery environments and access to services varied widely between and within each district. In each field site, the teams completed a series of in-depth individual or group interviews with community members (men, women, adolescents, traditional healers, birth attendants, village elders) and different categories of public sector health providers at various levels of the system (provincial, district, dispensary and community). In small towns, the team also gathered information from private providers and drug store owners.

Upon completion of the field interviews and observations, the team reconvened for five days to synthesize field observations, and work on prioritization of the recommendations according to the following three criteria: potential impact on reproductive health; consistency with current government policies; and operational viability. The team identified several policy barriers (related to HIV/AIDS, unsafe abortion and female sterilization) that should be considered in suggesting recommendations for improving reproductive health. The team found many opportunities to strengthen maternal health and birth spacing programmes, and to improve diagnosis and treatment of RTIs. For adolescent health, it was found that more extensive research is needed and some small-scale initiatives should be expanded. There is currently no policy on integrated reproductive health care. In its absence, there exist many opportunities to better link existing services. While there is an official policy on RTIs, it is only being used/implemented in
areas with high suspected prevalence of STIs, and integration with MCH activities is highly
dependent on local collaboration between the different programmes.

A very brief summary of the main observations follows for the four critical Reproductive Health
issues addressed by the assessment. Proposed strategic actions – including recommendations for
priority interventions with an immediate or lifesaving impact, more general strengthening of
programmes and services, and policy and programme development – are presented later in this
summary document. While the assessment findings are not intended to be nationally
representative, they are consistent with those of other studies and were reinforced by discussions
with a variety of policy makers and health professionals.

**Maternal health**

Community members, including many women interviewed during the assessment, did not appear
to recognize the risks associated with pregnancy and childbirth. Very few community members,
including members of the Lao Women’s Union (LWU), recognized the risk of first pregnancy,
and none seemed aware of the particular health risks related to adolescent pregnancy. When
women spoke of the importance of prenatal care, they were not aware of the danger signs and
symptoms that call for immediate referral. Respondents in both urban and rural areas showed
limited awareness of the importance of postpartum care.

The magnitude and causes of maternal deaths were not well understood by health service
providers (most mentioned only those complications they see in health facilities). Although
postpartum haemorrhage and retained placenta appear to be major causes of maternal mortality,
the large majority of health facilities were not adequately prepared to manage these complications
(for example, the assessment found that oxytocin was not present in the majority of the facilities
visited). Health staff often lacked the required skills to stabilize a woman’s condition in case
referral to a higher level facility was necessary. In areas where malaria is endemic, it is perceived
by both providers and community leaders to be a major cause of maternal deaths. Malaria
prophylaxis or intermittent treatment, however, were not found to be commonly provided during
routine prenatal care services in these areas.

Given that 10-15% of pregnancies will require some higher level care, the proportion of
pregnancy complications attended at health facilities is small, indicating that many complications
of pregnancy go unattended.

A large number of the country’s 126 district hospitals have very limited resources, equipment
and drugs to provide adequate maternal health care. District hospitals that have received project
support were better prepared as first level referral facilities to provide basic
essential obstetric care* (EOC), yet utilization of services remains very low. The assessment team
found that district hospitals, including those that were better equipped, were providing
substandard care with little attention to providing quality of care. Staff were providing little if
any counselling and, indeed, had not been trained in counselling skills. There are currently no ob-
gyn specialists working at the provincial levels. Given that women with serious obstetric
complications are referred to the provincial hospitals, there is a need for strong professional
leadership in obstetric and gynaecological care. There is also a need to strengthen the obstetric

---

* Essential obstetric care (EOC) at the health centre level includes the parenteral administration of
antibiotics, oxytocsics, anticonvulsants and sedatives for eclampsia, manual removal of retained placenta or
retained products and assisted normal delivery; while comprehensive essential obstetric care at the district
hospital (first referral level) includes all of these services plus blood transfusion, anaesthesia and surgery
(caesarean section).
knowledge and skills of midwives. Health providers at all levels of the system were largely unaware of the existence of a Safe Motherhood policy, perhaps because it was disseminated only in May 1999, after the assessment activities had been completed.

Anecdotal data from the assessment and several other studies suggest that induced abortion is common among both married and unmarried women. Many of these women go for abortions to private clinics (often across the border in Thailand) or unqualified providers. Abortions are often performed under unsafe and unhygienic circumstances, and it can be assumed that complications from unsafe abortion are common. There is currently no comprehensive health policy on the prevention and management of complications resulting from unsafe or incomplete abortion.

**Birth spacing**

There is a great demand for and interest in birth spacing among women and men in the community. Many women interviewed expressed the desire to have fewer children and to have them with longer birth intervals. Health providers tell stories of women who travel from very remote areas in order to receive birth spacing services. Community acceptance of birth spacing methods was high nearly everywhere the team visited.

The most common contraceptive methods people report using are oral contraceptives, injectables and IUDs. Many misconceptions exist, however, and unwanted side-effects account for high rates of method discontinuation and frequent method switching. Some women know about sterilization and those who can afford it seek services in Thailand where services are cheaper, more easily available and of better quality. Tubal ligation is hard to obtain in the Lao PDR. Criteria for selection vary greatly per province and include age, parity, and health criteria. The procedure for obtaining permission is complicated, and discourages many women who are illiterate or do not have their husband or family’s support.

Male use of contraceptives is extremely low. Vasectomy is not available and condom use is very low. Condoms are generally perceived as useful for prevention of STIs rather than for birth spacing.

Training of health providers on the different contraceptive methods seemed adequate where the programme had been introduced, but client counselling (for new and repeated clients) was limited. The team found providers rather passive about promoting birth spacing among potential or interested clients, and the team indicated that there were many missed opportunities where information on contraception could be given (e.g. in prenatal care services; delivery and postpartum care; Expanded Programme on Immunization (EPI) outreach activities; and postabortion care).

The assessment team found no leaflets or brochures on birth spacing that could help clients make an informed choice or use a method properly. Generally, Information, Education and Communication (IEC) was very limited; most facilities and some villages had only a poster that described and showed pictures of the different contraceptive methods. Often outreach workers work without IEC materials and spend only limited time on method demonstration.

The team found that despite these limitations, there is increasing demand for contraceptive services. However, there is no consistent community-based distribution system in place to meet this demand. Besides geographic and cost barriers, there are unnecessary medical barriers to contraceptive use. For many women in rural communities, the mandatory first visit to a district hospital, to obtain any contraceptive method represents a serious challenge due to limited transportation and its related costs.
Contraceptive access and use among women who live in more isolated areas and belong to ethnic minority groups is considerably lower, as a result of less awareness on available methods, language and social barriers with health providers, less outreach by health workers and more community resistance. Men in these populations appeared to be the main decision-makers on contraceptive acceptance and use.

Young people’s access to contraceptive methods appears greatly restricted. At the Maternal and Child Health (MCH) clinics, contraceptives are generally not available to unmarried youth. As part of community outreach by MCH personnel, EPI or Lao Women’s Union (LWU) staff, often only specific groups are targeted (such as LWU members or village elders) and rarely include young people or mixed audiences.

RTIs/STIs

The assessment team consistently found that many people (men and women, young and old) lacked critical health information concerning reproductive tract infections (RTIs). The gaps in knowledge included basic facts regarding the difference between non-sexually transmitted infection and sexually transmitted Infections (STIs), the various causes and associated risk behaviours, and the appropriate health seeking responses to symptoms or signs of disease. Front-line providers of health education and services also lacked necessary information.

Men in particular lacked basic information concerning STIs, including HIV/AIDS. They were unaware that many STIs, including HIV, are often asymptomatic and can be spread easily. For some, the lack of such information contributed to persistent high-risk behaviours (such as visiting bar girls) and a low probability of partner referral in the event of infection. The team documented behavioural patterns known to increase the risk of sexually transmitted infection. This included commercial sexual activity and multiple sex partners among men and youth who frequently travel within and outside of the Lao PDR.

Access to appropriate treatment for symptomatic infection was found to be seriously limited in many areas. This was a result of several factors, including long distances between women’s homes and health care facilities, difficulties in reaching facilities due to lack of transport, and the inability of first line health facilities to provide appropriate services to men and women presenting with symptoms of RTIs.

The team indicated that even in health facilities that provide treatment for RTI symptoms, practices for treating common symptoms were not standardized or applied in a systematic way. In the absence of laboratory facilities, a wide variety of providers are treating symptomatic individuals using a range of antibiotic, traditional, and hygienic therapies. Often clients received the inappropriate drugs, in the wrong doses, and for inadequate periods of time. Adherence with prescribed therapy also appeared to be highly variable.

Given that prenatal care is available at most health facilities, including dispensaries, and that the facilities that conduct VDRL testing are located at provincial hospitals, pregnant women are not adequately screened for syphilis infection. Similarly, the use of prophylaxis for ophthalmia neonatorium is not routine and in many areas is not practised.
Adolescent health
Adolescents often marry at a very young age and express a desire for children right after marriage. Adolescent boys and girls interviewed were not aware of, or informed about the risks related to early pregnancy and childbirth. In several of the communities visited, many girls marry between ages 10-13 and start childbearing immediately.

The assessment team also found that there is virtually no awareness or understanding of the different reproductive health needs of adolescents among community leaders, traditional healers, men and women interviewed.

Despite teenage pregnancies and risky sexual behaviour being common, adolescents’ knowledge regarding reproductive health, including contraception, was very limited. Unmarried adolescents have little or no access to health education, from health staff or from radio and television. Printed information is also very rare. Generally adolescent girls hear about contraception and other reproductive health issues from older women in the community who are using contraceptive methods. Adult-youth communication on reproductive and sexual health issues is rare in highland communities and remains limited in urban areas.

Adolescents have almost no access to contraception, including condoms. Most drug stores that sell condoms are hesitant to sell them to adolescents. Although the national policy on birth spacing stipulates the provision of birth spacing methods to those in need irrespective of their marital or social status, health staff generally do not provide such services to unmarried adolescents. Health providers and clients lack any information on emergency contraception.

The team reported that adolescents appear to seek abortion-related care from private providers (or in Thailand) and that they seem largely unaware of the risks associated with unsafe abortion practices.

Only the Lao Youth Union (LYU) has carried out some IEC activities in selected districts on HIV/AIDS. This included educational sessions at the higher secondary schools and some community education. There are no IEC or outreach activities aimed at reaching out-of-school youth with essential reproductive health information.

Proposed Strategic Actions
In order to address the reproductive health problems outlined above, it is necessary to design a comprehensive set of policy and programme interventions. Such reproductive health interventions should reflect local priorities and socio-cultural realities, consider cost and resource constraints, and aim to solidify government and Nongovernmental (NGO) partnerships. A proposed framework for integrated reproductive health programming to guide future activities is presented next, based on a three-way classification of recommendations: priority interventions with immediate impact; strengthening existing programmes; and policy or programme development.

Priority interventions with an immediate or life saving impact
The team classified the following five interventions as priorities:

- **Management of postpartum haemorrhage**: Community-based health workers in villages with relatively good access to higher levels of care should be prepared to refer a woman with complications from retained placenta and postpartum or postabortion haemorrhage to a first-level referral facility where oxytocin and IV fluids can be administered. The knowledge and skills of health staff should be upgraded and necessary supplies and equipment made available for administration of oxytocin and IV fluids following delivery, if required.
- *Routine prophylaxis or intermittent treatment of primigravida pregnant women for malaria* in endemic areas is an essential intervention. Since malaria is an important cause of both maternal morbidity and mortality, as well as low birth weight, malaria prophylaxis or treatment should be included as an integral component of standard prenatal care in those areas of the country where this parasitic infection is endemic.

- *The district health level should be strengthened* to perform its functions as a first-level referral for women with complications from pregnancy, delivery or postpartum, and the management of complications related to unsafe/incomplete abortion. District hospital staff’s skills should be upgraded to include knowledge and skills for essential obstetric care. Training curricula for all health staff should include a strong midwifery component.

- *Village health volunteers and LWU representatives should be trained to enable them to motivate and support women (and men) to delay their age at marriage and to space births for an interval of between 24 and 36 months.* As part of this effort, oral contraceptives and condoms should be made widely available at the village level.

- *Case management of STIs, including syndromic diagnosis, should be standardized* according to clear guidelines and protocols, and all providers should be trained in their use. This includes early and appropriate treatment of STDs, accompanied by partner referral and condom promotion.

**Strengthening existing programmes**

The strategic assessment found that there remains a need to strengthen existing reproductive health programmes, as follows:

- **Safe motherhood programme.** The safe motherhood programme could make a greater contribution to reducing maternal morbidity/mortality by: (a) strengthening the early recognition in the community of danger signs/symptoms of pregnancy, delivery and the postpartum period and ensuring timely referral to higher levels of care, (b) helping communities plan for emergency transport if needed; (c) increasing awareness of village committees, LWU, LYU of the health risks of unsafe abortion and improving access at the village level to family planning methods for women at risk of unwanted pregnancy; (d) upgrading skills of health centre staff in the initial management of pregnancy and childbirth complications; and, (e) equipping and preparing the district hospitals to provide quality normal delivery care and basic essential obstetric care (EOC).

- **Birth spacing programme.** The team observed that the effectiveness of the national birth spacing programme could be enhanced by: (a) stronger IEC efforts with more materials and the training of service providers in their use; (b) reaching men, particularly in ethnic minority populations, through making better use of village committees/networks; (c) strengthening the training of service providers in counselling and addressing side-effects and misconceptions about different contraceptive methods; and (d) placing strong emphasis on community-based distribution of contraception, especially in more remote parts of the country. Young people’s access to contraception should also be improved by informing providers about adolescent reproductive health needs, and of the birth spacing policy’s stipulation that all people should have access to confidential sources of contraception, irrespective of marital status or age.

- **STI programme.** Enhanced IEC is also required to strengthen the national RTI/STI programme, as follows: (a) the VHV/LWU/LYU/village committee need to be trained on reproductive tract infections, including those that are sexually transmitted, and providing IEC to the community; (b) men should be reached with essential information; and (c) targeted interventions to reach men and women in especially vulnerable groups, especially those who go to work in neighbouring countries. The team also recommends that to reduce
stigmatisation of STI clients, all health staff at the first point of contact should be trained in standardized case management of STIs, including syndromic diagnosis, partner referral and condom promotion. The government should also consider training private providers in the management of RTIs.

- **Adolescent reproductive health.** The HIV/AIDS programme of the LYU should be broadened to cover both family life education in schools and recruitment and training of peer educators to reach out-of-school youth. Other participatory methods to reach youth should be explored. Given the very limited activities directed at youth and their considerable reproductive health needs, LYU activities in reproductive health should be expanded nationwide.

- **Establishing stronger linkages among these programmes.** The effectiveness of each of these programmes will be greatly enhanced if coordination among each of them is reinforced at the national level, while their services are being linked at the field level. In essence, any opportunity for the public health system to come in contact with clients should be utilized for reproductive health education and service provision.

The assessment team believes that the above measures, when fully implemented, would considerably improve reproductive health status. For sustained improvement, however, further policy and programme development is needed.

### Policy and programme development

- **Health system:** As a result of systemic weaknesses in the health system, health services at all levels are under-utilised, which in turn compromises their ability to provide quality health care, including for reproductive health. It is widely acknowledged that overall programme management capacity needs to be strengthened. For this process to be initiated, it is necessary that: (a) the health system at all levels has a stronger public health focus and responds more efficiently, and with a focus on quality of care, to those who seek services; and (b) data are collected and used for planning and management.

- **Outreach:** In view of the difficult access to health services and the limited availability of services at the periphery, community linkages with the health system are essential to improving reproductive health. It is recommended that alternative models of health outreach be tested to devise cost-effective and sustainable means to expand health system outreach. Essential activities that need to be conducted at the village level include IEC activities, support for the VHV/LWU or other village level volunteers and a variety of preventive health services – for example, sales of bed-nets for the prevention of malaria, prenatal care, including malaria prophylaxis/treatment, iron folate supplementation and tetanus toxoid immunization, postpartum and post-abortion counselling and the provision of contraception. The feasibility and effectiveness of various models of providing outreach services to communities should be tested. Alternatives include adding an MCH health staff to existing outreach teams, creating a district level mobile outreach team that can integrate multiple reproductive health care services, or providing limited local outreach through staff in the health centres. A long-term effort will be required to develop a health service delivery system for extremely remote areas.

- **Professional competence:** It is recommended that the MOH develop a training plan to better use existing human resources for health, and evaluate the need to establish a national training centre for continuous skills development. Also, the nursing curriculum should include a strong component on midwifery, emphasizing both knowledge and skills. Over the long-term, it is important for the health system that professional competence in obstetrics and gynaecology be significantly enhanced. It is recommended that one doctor from selected
provincial hospitals receives specialized training in obstetrics and gynaecology so as to be able to provide clinical leadership.

- **Research:** The strategic assessment pointed to a variety of research needs. These include:
  - examine the feasibility of alternative approaches to the provision and utilization of safe delivery kits;
  - test the effectiveness of alternative approaches for reproductive health outreach services; (iii) formative research on innovative community approaches to emergency transport for obstetric emergencies;
  - exploring the involvement of the private sector in improving services for reproductive health (e.g. social marketing);
  - epidemiological and behavioural surveillance for RTIs and STIs including HIV/AIDS;
  - research to better define the reproductive health needs of adolescents and to develop and test innovative approaches to improving adolescent health (e.g. utilizing peer educators, role models, or participatory approaches); and (vii) operations research to develop and evaluate approaches to strengthening the delivery of services.

### Developing a comprehensive reproductive health policy

To guide the development of interventions for the provision of quality reproductive health services, it is highly recommended that the government develop a comprehensive reproductive health policy. The formulation of such a policy will facilitate linkages of related reproductive health services. It should also consider more sensitive issues, such as establishing appropriate criteria for approval of induced abortion and female sterilization, the introduction of emergency contraception and adolescent health needs.

Such a comprehensive reproductive health policy would need to include:

- an affirmation of national consensus and commitment to improve the population’s reproductive health status;
- strategies for improving reproductive health;
- organizational mechanisms for implementation of such strategies;
- delineation of services to be provided at each level of service delivery;
- the human and financial resources required;
- an outline of the role of private sector and NGOs, and a commitment to intersectoral collaboration;
- procedures to monitor and evaluate implementation of the policy; and
- identification of key indicators to measure progress in reproductive health status over time.

### Moving toward integrated reproductive health services

At the moment, the concept of ‘reproductive health’ and its implications at the various levels of health services is not well understood by many health providers and programme planners. The move toward integration will take time and needs to proceed in an incremental manner, building
on already existing programme activities and policy commitments. The following steps are suggested:

- **Develop a comprehensive RH policy building on existing policy documents.** Elaborating an integrated RH policy would be a key initial step in moving towards a system of integrated reproductive health care.

- **Orientation of staff on reproductive health.** While high-level health authorities have considerable appreciation of the new reproductive health approach, most service providers have not yet fully understood the new concept or the rationale for providing integrated services. It is suggested that staff receive training on a range of reproductive health issues, presented through an integrated curriculum.

- **Link services to the extent possible.** It is important to establish formal service linkages between related reproductive health service components, as indicated in the previous section. Starting with basic linkages will facilitate a gradual move toward a more fully integrated reproductive health programme.

- **Ensure functioning of the MCH centre at the provincial hospital as the first level for integrated reproductive health care.** When services are provided through a linked approach, it will be possible for the MCH clinics at the provincial hospitals to function as integrated reproductive health centres. In subsequent stages, provincial level MCH clinics could provide guidance and support to district hospitals and health centres.

- **Create appropriate organizational structures.** Perhaps the most difficult step in the process of integrating reproductive health care is to create an appropriate organizational structure within the MOH that can co-ordinate various programmes and establish a council/committee with representation of public sector institutions involved in reproductive health.

**Conclusion**

In recent times, the Lao PDR government has demonstrated its commitment to improving the reproductive health of its population. Important strides have been made as policies to guide selected reproductive health components have been formulated and are being translated into field-based programme activities.

In-country capacity to develop an integrated approach to reproductive health care will need strengthening, and long-term interventions are necessary to realise marked improvements in reproductive health. However, there exist excellent opportunities to enhance service delivery and quality of care. As many international agencies are collaborating with the government in implementing specific reproductive health programmes, it will be beneficial to all stakeholders to build consensus for a co-ordinated and integrated approach through a consultative process. It is hoped that the strategic framework and actions presented in this document may serve as a basis for such dialogue, and may contribute to programme and policy development toward integrated reproductive health care.
1 INTRODUCTION

Over the past several years, the Lao People’s Democratic Republic (Lao PDR) government has articulated its commitment to expanding and improving its primary health care system, and to exploring ways to better meet the health needs of its population, including those in reproductive health. Acknowledging the importance of improved reproductive health for human resource development, and thus the need to plan and initiate a systematic transition to broader reproductive health programming, the government decided to carry out a strategic assessment in reproductive health. This strategic assessment was designed to identify reproductive health priorities and needs within the existing service delivery models, and to set priorities for intervention. As such, it represents an important first step toward the development of an integrated approach to reproductive health.

1.1 Strategic Assessment in Reproductive Health

In March-April 1999, the Lao PDR Ministry of Public Health conducted a strategic reproductive health assessment in selected parts of the Lao PDR, in close collaboration with a team representing the World Health Organization (WHO). Considering the limited availability of information on reproductive and sexual health, the assessment sought to: (i) fill existing information gaps about key areas in reproductive health; (ii) help identify priority areas for research or subsequent programme interventions; and (iii) provide recommendations for the further improvement of reproductive health in the Lao PDR. The MOPH also sought guidance on how to develop an integrated reproductive health policy framework with specific system recommendations for improved service delivery and effective programme implementation.

Actual field work was preceded by a three-day planning workshop in February 1999, organized by the Institute of Maternal and Child Health (IMCH), that brought together high level health officials, programme planners and key stake-holders in reproductive health. The objective of the workshop was to decide on priority reproductive health issues to be addressed in the assessment. A team of two facilitators from WHO/Geneva and the Population Council/Bangkok assisted in organising and conducting the workshop. Following this workshop, a smaller national working group developed the field guides for the interviews and observations.

Field work was conducted by a multidisciplinary team of 13 members, drawn from different MOPH institutions (for example, the IMCH, the Centre for Information and Education on Health, the National Committee for the Control of AIDS), mass organizations (the Lao Youth Union), and the College of Health Technology. A team of consultants from WHO/Geneva, Population Council/Bangkok, Family Care International/New York, and the International Council on the Management of Population Programmes/Kuala Lumpur facilitated data collection in the field and assisted the team in synthesising their observations.

The field team was split into two subteams to allow for rapid data collection in different parts of the country. In total, the two teams visited six districts in three provinces over a three-week period in March 1999. The selection of field sites was based on several criteria, including:
- geography (the three provinces were located in the Southern, Central and Northern parts of the country);
- diversity in basic health and social indicators;
- diversity in access to health facilities and communication/transportation infrastructure; and
- the presence of ethnic minority groups (two of the three provinces have high proportions of ethnic minorities in the population).

Provinces included in other recent assessments, and in particular the maternal health needs assessment (MOPH/UNICEF, 1998) were not included in the present study. Distance and road conditions were also considered in selecting the field sites, to allow the team to travel to relatively remote sites within a reasonable time frame.

Within each province, provincial health staff together with the national team members selected the districts and villages to be visited in the strategic assessment. To the extent possible, the districts presented a mix of service delivery environments; in most of the districts, the national birth spacing programme had been implemented in recent years. Some districts had relatively good linkages (road/transport) to provincial-level health facilities, others were much further removed from provincial towns. Villages were selected based on: distance and access to health facilities; the presence of ethnic groups living in the village; NGO or other organizations’ activities in health (for example, CARE and the Asian Development Bank’s primary health care activities); and the presence of different categories of community-based health workers (village health volunteers; trained birth attendants; Lao Women’s Union). In total, the team visited 35 villages in Khammouane, Saravane and Xieng Khouang provinces (for a complete list of districts and villages visited refer to annex I.)

Upon completion of the fieldwork, the teams reconvened to share observations related to service delivery, quality of care and client perceptions on reproductive health, and discussed their relevance for policy and programme interventions. Subsequently, recommendations were drafted through a five-day consultative process that included all members of the national team and provincial level health staff that had accompanied the teams during the fieldwork. In drawing up recommendations for strategic actions, consideration was given to the policy environment, existing system capabilities, user perspectives on various reproductive health issues, and the broader socio-cultural context. Once the team had formulated a set of initial recommendations, the consultants facilitated a prioritising exercise that ranked each recommendation according to three criteria including: potential for impact; operational feasibility of the intervention/strategy (system and resource capacity); and policy congruence (see chapter 3 of this report for a full discussion of these recommendations.)

During the planning workshop, stakeholders agreed that priority reproductive health issues to be included in the strategic assessment were: contraceptive use and demand/unmet need for contraception; maternal health, including abortion; RTIs/STIs; and adolescent health. Preliminary findings and recommendations of the strategic assessment were shared with high-level MOPH officials and representatives of different UN agencies. The next section provides more details on the methodology that was used to conduct the strategic reproductive health assessment.
1.2 Strategic Assessment Methodology

WHO’s experience with the development of a strategic approach to contraceptive introduction has led to this approach being broadened to address a wider range of reproductive health issues. These include recent strategic assessments in Ethiopia\(^2\) and Myanmar\(^3\) (1997-1998) Both assessments identified a host of issues related to service delivery, client perceptions and quality of care that required attention before new interventions could be effectively introduced. The approach is based on a three-stage process that places policy and programme choices and the identification of research needs in the context of the overall service delivery capacities and users’ needs.

The first stage is an assessment of user and service delivery needs available reproductive health technologies, programmes and policies, and the potential constraints for the development and implementation of additional reproductive health services. Central to this approach is a concern with quality of care. In addition to filling important information gaps, the principal aim in this stage is to identify and suggest programme, policy and research needs that are subsequently tested in the second stage of the process. Stage I typically involves the use of rapid and qualitative methodologies for data collection in a number of diverse settings within a country. Data are gathered through in-depth interviews with men, women and young people, community leaders and groups, service providers and programme managers at various levels of the health structure.

Assessments follow four key principles, namely:

- an emphasis on user perspectives and quality of care;
- they are participatory, country-led and conducted by a multidisciplinary team;
- they include consideration of management, service delivery capacity and availability of resources, to ensure appropriate and feasible recommendations; and
- (they focus on the interaction between users, providers and reproductive health technologies.

Essential stage I activities typically include:

- Preparation of a comprehensive background paper providing an overview of available information concerning the reproductive health situation. This synthesises existing information and provides those involved in the assessment with a common body of knowledge.

- Organization of a national planning workshop to consult a multi-sectoral group of reproductive health programme planners and policy makers on RH issues to be included in the strategic assessment;

- a rapid qualitative assessment of user needs and health system capacity (resources, management, technologies) for the implementation of new or altered strategies to improve the quality of care and enhance reproductive health service delivery; and

- organization of a national dissemination workshop attended by a large group of stakeholders to reach consensus about findings and recommendations from the strategic assessment, and to provide input to the development of action plans for programme and policy.
In the second stage of the process, strategic actions proposed during the assessment are tested and applied. This may involve introducing some small-scale programme activities in limited geographic areas, and/or operation research to test the feasibility, relevance and effectiveness of the interventions undertaken.

During Stage III, experiences and lessons learned from the previous stages are analysed, and where/when successful, activities are scaled up for wider implementation.

Subsequent sections of this report present preliminary findings of the Stage I of the reproductive health strategic assessment in the Lao PDR.

1.3 National Context

The Lao PDR is one of the world’s least developed countries, with an average per capita income of US$350 (UNFPA, 1997). While the country has been undertaking major economic reforms since the mid 1980s, shifting its economy from a centrally based one to a largely free market system, it is estimated that 46% of the country’s total population of 4.8 million live below the poverty line. Human development indicators in the Lao PDR are among the lowest in South Asia, with an average life expectancy of 51 years and high fertility and mortality rates. Children typically receive less than three years of formal schooling. Female literacy is considerably lower (42%) than male literacy (64%).

As in many transitional economies, structural adjustments have focused more on economic factors than on social ones, often with negative consequences, particularly for those with the least ability to take advantage of new economic opportunities – namely the rural poor, women and children. The promotion of private enterprise and foreign investment have exposed considerable development gaps in human resource capacity and skills training. In addition, the severe reduction in state subsidies for social services, including health and education, without the provision of alternative social safety nets has exacerbated problems of chronic poverty and widening social disparities (UNICEF, 1996).

The Lao PDR is landlocked and much of the country’s western border is defined by the Mekong River. Over 65% of the population lives along the Mekong and in the lowlands. Population density is among the lowest in the Mekong region. The Lao PDR is largely a rural society and people rely on subsistence agriculture (rice production and livestock) to meet their basic socio-economic needs. Most of the country’s poor (83%) reside in rural areas. Administratively, the country is divided into 17 provinces and one special zone. Each province is further subdivided into 3-13 districts, totalling 133 districts.

The Lao PDR has a highly diverse population, with more than 68 ethnic minority groups who mostly live in geographically isolated mountain areas. A broad division of the population into three main categories can be made based on language and location: the majority (68%) Lao Loum, or low-landers who live mainly in the Mekong basin and who speak the official language (Lao); the Lao Theung (22%), or mid-landers who speak Mon-Khmer languages and live on higher elevations; and the Lao Soung, or high-landers, who engage in slash-and-burn agriculture on high mountain slopes and speak Tibeto-Burmese languages.

1.4 Health sector profile

The Lao PDR government has committed itself to target 20% of public expenditures for health and education by the year 2000. It has also indicated that, "the improvement of social conditions
and the creation of income, especially in rural areas” is a high priority (Lao Government Report, MOPH 1997). While government investments in health have increased over the last few years, the country’s health and development sectors are likely to remain highly dependent on external support, with more than 42% of health funds coming from donor assistance (UNFPA 1997). Limited financial and human resources have resulted in inadequate planning, management and delivery of public services, including for health. Health expenditure at the central level is allocated largely to hospitals, training centres and health institutions. Approximately 55-60% of the MOPH budget goes to the provinces and operating funds at the district level and below are typically insufficient to provide basic services needed.

### 1.5 Public health sector

Public health services in the Lao PDR are provided through a three-tiered system. At the central level, the Ministry of Public Health is responsible for the management of health services throughout the country. This Ministry consists of various departments each with specific tasks and responsibilities, including human resource development, prevention and hygiene, curative care, the council of medical sciences (research), food and drugs, and the cabinet of health. Under the current structure, health services are mostly provided through vertical, centrally planned programmes.

At the provincial level, services are co-ordinated by the provincial health office, and include service provision through provincial hospitals (45-240 beds) and supervising/supporting district health offices. District hospitals have between 15-25 beds and provide care for a population of about 300,000 people (UNFPA 1996). The World Bank (1994) reports that in 1994 only 20 of the 117 district hospitals were fully operational in terms of human resources, equipment and drugs. The provincial health system is mirrored at the district level, where the district health office oversees services provided at the district hospitals and supports service delivery at the health post or dispensary level.

There are more than 700 dispensaries in villages throughout the Lao PDR but very few are fully operational. The functions and operational capacity of the health posts appear variable throughout the country. Some function with support from donors and seem to benefit from more qualified or motivated staff, better equipment and supplies and somewhat higher utilisation. Staff at the dispensary level seem not to be linked in any formal way to other health workers, such as community-based health volunteers or the Lao Women’s Union (LWU). Most services in the rural areas are provided through an informal network that includes private drug sellers, village health volunteers (VHV), traditional healers and traditional birth attendants. The latter provide maternal health care to an estimated 15% of women.

It is estimated that only 26% of the population live within a three-kilometre radius of a health facility, and more than two-thirds of the population have limited or no access to health services (MOPH/UNICEF 1998). In most of the Lao PDR, basic infrastructure is weak, and much of the country is without transportation or communication systems, especially during the rainy season.

### 1.6 Public health personnel

Categories of health personnel in the Lao PDR can be classified into three levels: higher-level staff with more than five years of medical training (physicians, pharmacists, dentists); middle-level staff with three years of professional training; and lower-level staff who have two years or less of clinical training. There is very little clinical supervision or in-service training of staff, and this, in combination with low utilisation of services (occupancy rates are estimated at less than 10% nationally), has resulted in gradual deterioration of skills. Health personnel generally lack
management skills and few staff have received training in interpersonal communication or
counselling (MOPH/UNICEF, 1998)\(^1\).

Low government salaries and difficult working conditions, especially in the more isolated parts of
the country, contribute to high turn-over rates and low staff morale. There is a reported shortage
of health personnel working at the district and dispensary levels, and the country lacks a
comprehensive human resource strategy that would help alleviate these problems. At the
dispensary level, most of the staff are nurses and it is not uncommon for health posts to be staffed
by only one person. Difficult access from the district level facilities helps explain why district
staff rarely visit more rural facilities, and why, when they do, they have limited time for proper
monitoring and supervision.

A national midwifery training programme operated briefly (1987-1990) but was abolished and its
curriculum merged with that of the official nursing programme to train nurse-midwives. At
present, nursing staff fall into two categories: diploma nurse-midwives who have received three
years of training, including 288 hours of practicum in obstetrics; and first-level nurse-midwives.
Since there are no posts for qualified nurse-midwives below the district hospitals, there are only
enough positions to place half of all trained nurse-midwives in the private or public health sector
(Karel et al., 1997)\(^9\).

1.7 Private health sector

In addition to public health facilities, there are more than 900 private clinics, most of which are
located in the capital, Vientiane, and almost 2,000 registered pharmacies, located mostly in urban
areas in close proximity to district or provincial hospitals. The government anticipated that
competition created by private enterprise in the health sector would help improve quality of
health care in both public and private systems, but due to a lack of regulatory procedures and
national norms and standards, this expectation has not been realised. Additionally, according to
the Ministry of Public Health, several system-wide weaknesses exist that prohibit efficient
delivery of health care, including providers who practice or prescribe medicine without an official
license or qualifications, high costs of private consultation, inaccurate prescription of medicine
and low quality of drugs.

1.8 Reproductive Health Status

Women in the Lao PDR suffer from poor reproductive health. Unequal gender relations limit
their access to resources and information, including for health and social services. At the national
level, there is limited awareness of the need to introduce a gender perspective to guide policy
making, programme design and service delivery of reproductive health services. Inadequate
quality of services and fragmented service delivery systems that do not necessarily respond to the
needs and socio-cultural reality of women also contribute to their poor health status, and are
likely to account for very low utilisation of existing reproductive health services.

The distance women have to travel in order to access services, and the poor road conditions they
encounter, are major constraints to utilisation of health services, as is women’s lack of money.
Communication and transportation difficulties due to the country’s geography pose additional
challenges to the delivery of reproductive health care and the dissemination of health messages,
supplies, equipment and drugs. Poor linkages between the different levels of care, including
community-based health workers and the periphery, further hinder efforts to provide routine
MCH and life-saving care to women with obstetric emergencies.
Overall, relatively little is known about the state of women’s reproductive health in the Lao PDR. Available data on maternal mortality and coverage of maternal health services, the incidence of abortion, fertility and family planning use, and reproductive tract infections give some indication of the magnitude of the problem, and are discussed in the section below. In terms of other indicators of reproductive health, data are very limited. For example, no data are available on the incidence of sexual or domestic violence, infertility and reproductive cancers. Only a handful of studies have looked at abortion, as it remains a highly sensitive issue in the Lao PDR that many people, including policy makers, health care providers and women themselves, are reluctant to discuss.

**Maternal mortality and maternal health**

The maternal mortality ratio (MMR) of women in the Lao PDR is estimated to be 656/100,000 live births, the second highest rate in Asia. In rural areas where health care services are non-accessible or non-available, the MMR is estimated to be even higher, up to 900/100,000 live births. The major causes of maternal deaths are postpartum haemorrhage, retained placenta, eclampsia, obstructed labour, sepsis, induced abortion, malaria and uterine inertia. While no comprehensive information exists on maternal morbidity – illnesses and injuries as a result of pregnancy and childbirth – their toll and scope is believed to be considerable, given that global estimates suggest that as many as 100 women have life-long negative health consequences for every woman who dies due to pregnancy complications (Family Care International (FCI) and the Inter-agency group for Safe Motherhood 1998). Factors contributing to the country’s high maternal mortality include: early and late pregnancy with short birth intervals and overall high fertility among women from the ethnic minority groups; severe anaemia; endemic malaria; inadequate prenatal care coverage; and a very low incidence of institutional births attended by skilled staff.

Very few women in the Lao PDR, receive appropriate care during pregnancy and childbirth. United Nations Population Fund (UNFPA) estimates that more than 73% of all pregnant women do not receive any prenatal care (1997). For the five years preceding the 1995 Fertility and Birth Spacing Survey (FBSS), less than 7% of births were delivered in a health facility, with 91% of deliveries taking place at home. Less than 14% of births were attended by trained medical personnel; 15% were attended by birth attendants in the community (trained and untrained); and 70% by relatives or friends. Information on the provision of postpartum care is virtually non-existent but it is estimated that fewer than 10% of women attend postpartum care services. As a result, many of the estimated 15% of pregnant women who develop serious obstetric complications had no one with them who could recognise these complications and refer them for appropriate care at a health facility (FCI and the Inter-Agency group for Safe Motherhood, 1998; MOPH/UNICEF, 1998).

**Abortion**

Data on abortion is not readily available in the Lao PDR. Abortion is illegal but anecdotal evidence suggests that many induced abortions are nevertheless performed clandestinely, often under unhygienic and unsafe conditions. A report from a small scale survey conducted by Japanese Organization for International Co-operation in Family Planning (JOICFP) 1997) in three districts showed that the abortion rate was 101.1/1000 pregnancies and that 25% (114 out of 457 people) reported having had an abortion (Podhisita 1997).

The FBSS also provides information about the reported incidence of abortion among married women. Out of a sample of 5,878 married women, nearly 6% reported having had an induced
abortion. Most of them were urban women with relatively high levels of education. Knowledge about induced abortion was slightly higher among women over 30 years old, much higher for urban women (78% versus only 29% for rural women) and increased with higher levels of education. Among the 108 married women who had had an induced abortion, 32% of the abortions were performed at the provincial hospitals, while 68% occurred in other places (private clinics or unreported sources). Of these 108 women, 65% did not use any contraceptive method, while 35% reported using contraception. This finding, among others, reiterates the urgent need for quality birth spacing services and post-abortion care and counselling.

**Fertility and contraceptive use**

Estimates of total fertility rates in the Lao PDR vary from 4.7 live births for urban women to 7.8 for rural women and from 8.4 for uneducated women to 4.7 for educated women. Average desired family size is 4.2 live births. According to the 1995 (FBSS), only a small percentage (15%) of married women of reproductive age were using a modern contraceptive, and only 25% of married women in this age group had ever used a birth spacing method. More than two-thirds of currently married women indicated a desire to either stop childbearing or to space their next child two years apart, demonstrating a large unmet need for contraceptive methods. The country’s suspected high rate of induced abortion also serves as a proxy measure of unwanted pregnancy.

**Reproductive tract infections**

Limited data exist on the prevalence of RTIs/STIs, but anecdotal evidence suggests that they are prevalent, underreported and often misdiagnosed. No comprehensive surveillance system exists to monitor the extent and health impact of STI's nationwide, however, data from several hospitals confirm that STI's are more widespread than is commonly believed. As a result of the high incidence of RTIs/STIs, secondary infertility is likely to be a serious problem, but to date services to investigate and treat infertility are non-existent.

It is also difficult to obtain accurate data on the extent of the HIV/AIDS epidemic in the Lao PDR, but given that it borders countries with known high levels of HIV infection, (Cambodia, Myanmar and Thailand), it may be assumed that levels of infection are increasing and pose a growing threat to the health of the population.

**Adolescent health**

As in most countries that have only recently begun addressing adolescent health, improving adolescent reproductive health in the Lao PDR presents both challenges and opportunities. The major risk factors for adverse reproductive health status among adolescents result from: cultural practices that promote early marriage and pregnancy;

- high risk sexual behaviour that appears more common than is acknowledged, both by the community and service providers;

- women’s low social status, particularly among ethnic minorities; and

- adolescents’ lack of access to essential RH information and services.

At the same time, there are several important and timely opportunities to educate young people about reproductive health. These include, among others: making better and more extensive use of the vast network of the Lao Youth Union (LYU); expanding use of the media for dissemination
of essential RH messages; increasing educational levels of young people; and promoting an already growing recognition of the problem by policy makers.

1.9 Government Policies on Reproductive Health

The Government of the Lao PDR has recognised the need for comprehensive policies on priority reproductive health issues, even in the absence of a formal policy on integrated reproductive health care. The national policy on birth spacing was formally introduced in 1995, in recognition of the need to reduce the country’s high fertility and maternal mortality rates and to maintain a balance between population growth and overall socio-economic development. More details on this policy are presented in chapter 2.2 of this report.

The country’s official safe motherhood policy was officially launched in May 1999. Before further dissemination, it was suggested that the policy undergo another round of review, in order to better reflect the most up-to-date international knowledge and experience on cost-effective strategies to reduce maternal mortality and morbidity. The Ministry has outlined targets for improvements in selected maternal health indicators under its current National Five Year Plan (1996-2000). The Plan calls for the reduction of maternal mortality rates from 650 maternal deaths/100,000 live births to 455 maternal deaths/100,000 live births. It also aims to increase prenatal coverage (a minimum of three visits) to 60% of urban women and 30% of rural women, and to increase institutional deliveries to 70% of deliveries in urban areas and 40% in rural areas.

In addition to birth spacing and safe motherhood policies, the Lao PDR also has a national HIV/AIDS plan (1997)\textsuperscript{12}, which outlines a multisectoral approach to address the problem and includes the development and implementation of provincial-level work plans to monitor HIV infection, and a national policy on STIs (MOPH 1998)\textsuperscript{13}. This long-term policy forms part of the country’s overall public health policy, and aims to reduce the prevalence of STIs by 20% over the next two decades. By 2005, the goal of the policy is to make available effective and acceptable STD services to 30% of the population.

Ministry of Public Health institutions supporting reproductive health

The Institute for Maternal and Child Health (IMCH) was established in 1989 under the Department of Preventive Health Services. Its primary responsibilities include formulating maternal and child health policies and programmes, and coordinating the nationwide provision of maternal and child health services. This includes prioritising interventions, monitoring progress towards targets and coordinating national, NGO and donor activities in maternal and child health.

The National Committee for the Control of AIDS (NCCA) was recently established in November 1998 as the body responsible for planning, coordination, resource allocation, management and administration of the National HIV/AIDS Plan. The Committee consists of representatives from all relevant ministries and mass organisations in Laos, such as the Lao Women’s Union (LWU) and the Lao Youth Union (LYU). Each province has its own multisectoral committee with similar responsibilities and representation among members to those of the Central Committee.

The STD Programme Management Unit of the NCAA is preparing national strategies for STI prevention and control that include a training curriculum on syndromic case management to be included as part of the country’s primary health care training.

The Centre of Information and Education for Health was established in 1989 with the objective to provide essential health information and education to the population. It publishes information on
local and international health activities, and promotes health through radio and TV programmes and printed materials. In addition, the Centre is involved in school health promotion.

1.10 Current Activities in Reproductive Health

A vast array of bilateral, multilateral and international NGOs are working in the field of women’s reproductive health in the Lao PDR. However, there are no national NGOs involved in reproductive health, with the exception of mass organizations such as the Lao Women’s Union, the Lao Youth Union and the Lao Red Cross. These organizations function as collaborating or implementing partners for a large number of project interventions.
2 CRITICAL ISSUES ON REPRODUCTIVE HEALTH

2.1 Maternal Health

Poor maternal health is a serious problem in the Lao PDR and maternal death rates are estimated to be among the highest in the world. Every year, many Laotian women lose their lives because of the lack of good quality maternal health services, including essential obstetric care, trained assistance at birth and functioning referral systems.

Given the limited availability of data on existing maternal health services, the MOPH conducted a comprehensive maternal health needs assessment in 1998, in collaboration with UNICEF/ and Family Care International (FCI) (MOPH-UNICEF 1998). The strategic assessment of reproductive health relied strongly on the quantitative data from this maternal health assessment, including information on the capacity of the health system to provide adequate MCH care, the availability of basic equipment, supplies and drugs, the functioning of supervision and monitoring systems, to define its own thematic priorities within the larger maternal health context. Thus, abortion and adolescent pregnancy (see chapter 2.4) were selected as priority areas of attention in the strategic assessment since the maternal health needs assessment had not systematically addressed these issues.

A summary of the main findings of the maternal health needs assessment is described below, followed by the results of the strategic reproductive health assessment.

2.1.1 Maternal Health Needs Assessment

The maternal health needs assessment examined the availability, quality and utilisation of maternal health services in selected provinces and districts of the Lao PDR. It included a detailed assessment of 22 health facilities on a variety of indicators – including the availability of drugs, supplies, equipment and clinical guidelines for the delivery of maternal health services – in-depth interviews with health personnel and clients at the health facilities, clinical record reviews and community-based focus group discussions with men and women on beliefs and practices related to maternal health.

System capacity
The maternal health assessment found that the consistency and quality of routine MCH services varied considerably. For example, of the 22 health facilities visited, few had adequate supplies and equipment to provide quality pregnancy-related care, including care for women with obstetric emergencies. While most facilities had some basic equipment and limited equipment for normal or complicated deliveries, none of the facilities surveyed met WHO’s minimum standards for obstetric care.

The study found that health personnel generally lacked clinical and management skills and that most had not received any comprehensive in-service training in recent years (except in specific programme components such as breast-feeding or birth spacing). Knowledge of prenatal and postpartum care, and interpersonal communication and counselling also needed reinforcement. In the absence of clinical guidelines or protocols for the provision of normal delivery care and the proper management of obstetric complications, the assessment indicated a strong need for standards and protocols to delineate which services should be provided at each level.
**Routine MCH services**

Ideally, integrated maternal health services should be available at appropriate levels of the health system. Such services include for example: prenatal care (including treatment of anaemia and tetanus toxoid immunisations); normal delivery care, postpartum care, basic childcare and family planning services. Related reproductive health services, such as treatment and detection of RTIs should also be offered routinely.

The maternal health needs assessment found that prenatal care, normal delivery care and family planning were provided at the provincial hospitals and to a lesser degree at the district level. Most often, however, routine service delivery did not include postpartum care and counselling, and screening for RTIs. Basic childcare was not always provided in the same facility.

Although the study found that, in theory, most of the routine prenatal care services (such as measuring blood pressure, checking the abdomen and the fetal heart beat, and immunisation with tetanus toxoid) were available and provided on a daily basis, the quality and consistency of prenatal care varied considerably as illustrated by the data presented in Table 1.

**Table 1:** Routine Services Provided During Prenatal Visits at Selected Health Facilities in the Lao PDR

<table>
<thead>
<tr>
<th>Component of Prenatal Care Received, As reported by women</th>
<th>% of women at Provincial Hospitals (N=34)</th>
<th>% of women at District Hospitals (N=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met health worker in private</td>
<td>32%</td>
<td>36%</td>
</tr>
<tr>
<td>Discussed progress of pregnancy</td>
<td>65%</td>
<td>56%</td>
</tr>
<tr>
<td>Medical history taken</td>
<td>50%</td>
<td>53%</td>
</tr>
<tr>
<td>Blood sample taken</td>
<td>32%</td>
<td>28%</td>
</tr>
<tr>
<td>Urine sample taken</td>
<td>18%</td>
<td>0</td>
</tr>
<tr>
<td>Iron supplementation provided</td>
<td>47%</td>
<td>44%</td>
</tr>
<tr>
<td>Given advice on diet/nutrition</td>
<td>71%</td>
<td>50%</td>
</tr>
<tr>
<td>Discussed place of birth</td>
<td>71%</td>
<td>58%</td>
</tr>
<tr>
<td>Discussed benefits of institutional delivery</td>
<td>62%</td>
<td>64%</td>
</tr>
<tr>
<td>Given advice on institutional birth</td>
<td>53%</td>
<td>56%</td>
</tr>
<tr>
<td>Given advice on complications</td>
<td>56%</td>
<td>39%</td>
</tr>
<tr>
<td>Malaria prophylaxis</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Discussed birth spacing</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>Discussed breastfeeding</td>
<td>65%</td>
<td>61%</td>
</tr>
<tr>
<td>Discussed STIs/HIV</td>
<td>36%</td>
<td>28%</td>
</tr>
<tr>
<td>Advised on care for the newborn</td>
<td>62%</td>
<td>47%</td>
</tr>
<tr>
<td>Discussed emergency transport</td>
<td>53%</td>
<td>50%</td>
</tr>
<tr>
<td>Advised to return for additional visit</td>
<td>91%</td>
<td>89%</td>
</tr>
</tbody>
</table>
In most instances, routine maternity services were often not available during the weekends and by night at district and provincial levels.

**Referral systems**

In the Lao PDR, the problem of poor access to health care is compounded by the fact that essential obstetric care (EOC) services at the health facilities are generally inadequate, and that referral systems linking the community or periphery with higher levels of care are virtually non-existent or largely non-functional. The maternal health needs assessment identified inadequate referral and communication systems as an important barrier that deterred women’s access to quality obstetric care and trained attendance at birth.

Although many cases of pregnancy-related complications are referred from the health centre or district hospital to the provincial level (since most of these complications can not be adequately managed at lower levels due to inadequate equipment, supplies, drugs and inexperienced staff), none of the facilities visited had the necessary capacity to ensure adequate and timely referral, including telephones or transmitters to contact district or provincial hospitals in case of obstetric emergencies. None of the district hospitals visited had an ambulance or a means of communication to refer women with obstetric complications. As a result, patients have to make their own transportation arrangements in case of emergency, which is a challenge as very few private vehicles exist in rural parts of the Lao PDR.

**Strategic Assessment Findings**

Given the comprehensive data collected by the maternal health needs assessment, the strategic assessment sought to build on its findings and conclusions, and to compliment existing information. This was done through in-depth discussions and systematic observations of service provision for selected maternal health issues highlighted in the following sections.

**Community awareness and beliefs**

In most communities in the Lao PDR, pregnancy is not expected to interfere with a woman’s daily chores and she may expect little help or support from her family members to alleviate her workload. Laotian women spend long hours in the fields and take care of the family at home, and thus they have little time to take care of themselves. In many communities it is expected that women will resume their work in the fields only a few days after delivery. Community members interviewed indicated that the role of women in decision-making about their own health care is minimal. Husbands and other family members, often the in-laws, determine whether or not a woman will be able to seek care at a health facility, even in case of life-threatening complications.

**Pregnancy-related complications**

The strategic assessment found that many women, men and village leaders were not aware of the danger signs and symptoms during pregnancy and childbirth. This was most often the case for ethnic minority groups, where awareness was found to be very low, and for villagers in more remote areas. The most frequently mentioned signs of complications were bleeding, retained placenta, prolonged labour (although the moment when the decision would be made to refer was often after more than 18-20 hours of labour) and abdominal pain. Some groups mentioned obstructed labour and postpartum haemorrhage as other common complications. Few people recognised edema as a risk sign, as they consider it normal during pregnancy. The team found

---

Essential obstetric care (EOC) at the health centre level includes the parenteral administration of antibiotics, oxytoics, anticonvulsants and sedatives for eclampsia, manual removal of retained placenta or retained products and assisted normal delivery, while comprehensive essential obstetric care at the district hospital (first referral level) includes all of these services plus blood transfusion, anaesthesia and surgery (caesarean section).
that there was little awareness among villagers about the elevated risks of malaria among pregnant women. According to one team member, people interviewed said: “Pregnant women? They never buy chloroquine.”

**Childbirth**

Most deliveries in the Lao PDR occur at home, in both urban and rural areas. Sometimes the woman delivers alone, sometimes with assistance from the husband or in the presence of family members. Among Lao Theung groups, women deliver by themselves, as the villagers believe that childbirth is “dirty”, due to the associated bleeding. Delivery inside the house is not allowed, and many women therefore deliver in the forest or field behind the house. More recently, some women are delivering in a small hut near the house, or underneath the house. In case of complications, a village birth attendant may be contacted or the woman may be referred to the hospital. The husband appears to be the main decision-maker on place and attendant at delivery.

The strategic assessment teams reported that nearly all women, both from peri-urban areas and rural areas, prefer to give birth at home, even when institutional care is available. The women mentioned that the main reasons for home delivery included: their belief that delivery is not anything “unusual” and thus does not warrant any special attention; the costs associated with delivery care (in some hospitals, supplies and drugs for normal delivery can cost a woman up to 40,000 kip); the additional associated costs (time, travel, childcare arrangements, food); and the perceived low quality of care and the absence of drugs at health facilities.

**Postpartum period**

The strategic assessment team was only able to interview one postpartum client. She was interviewed two days postpartum in her village, and had given birth in the district hospital. She had a second-degree laceration but staff sent her home the day of delivery because there were no sutures. It is not surprising, perhaps, that only one postpartum client was interviewed, given the extremely low utilisation of postpartum care nationally. Women interviewed were not aware of the need for routine postpartum care, except in the case of serious complications, such as profuse bleeding. Interviews further revealed that if a woman feels well after delivery the community does not see any reason for her to visit a health facility. Such a visit is costly, time consuming and many women are shy.

Strong food taboos and community traditions and practices were found to exist during the postpartum period. Postpartum food taboos were mentioned by women in all three provinces. In one province, women only ate salt and galanga for 15 days postpartum (sometimes with some ginger). Most have sex within the 1st month after delivery. If a woman does not follow the most common food restrictions, she could get “phit kam” or very sick as a punishment.

In nearly all villages the teams visited, following delivery women would sit near the fire or have hot coals underneath their cot to “make them feel healthy.” Villagers and especially traditional healers talked about women receiving this “flowing fire” if she was very tired following birth and wanted to sleep due to blood loss. This could last for up to four weeks according to the traditions of the village elders.

**Abortion**

Most women and some village leaders perceived spontaneous abortions as common and attributed them to women’s hard physical labour. There was little mention at community level of induced abortions, though health care providers and national team members felt that these happen
regularly. One team member remarked: “A case of (induced or spontaneous) abortion seemed to have happened recently in each village that I visited.”

Since abortion is illegal under most circumstances, in general people do not want to talk about it and were somewhat hesitant to provide information. To a large extent, women who seek an abortion keep this quiet. While community members appeared shy to talk, there was a general openness and willingness to share observations and stories. This was especially the case for those areas where criteria for having an abortion at a health facility and related procedures were least restrictive.

The general feeling among health providers and community members was that the birth spacing programme had made an impact on the prevalence of, and demand for, abortion. Most health providers commented that demand for abortion had decreased since the birth spacing programme started in 1996.

**Utilisation of Maternal Health Services**

*Reasons for use or non-use of maternal health services*

Whilst women may be aware of the advantages of prenatal care, they are often shy, unable to afford, or too busy to go to the health facilities, and the majority only go to the hospital if there are problems. The teams reported that use of health services was greatly influenced by women’s expectations of the services and whether those expectations were met. Some women said that they sought prenatal care and MCH services because they expected the facilities to have drugs and supplies. Others thought that staff were knowledgeable and could provide useful advice on self-care during pregnancy (peri-urban women).

Team members observed that utilisation of prenatal care services appeared very low, except in provincial and district towns where women who live nearby were found to regularly attend prenatal care. Clients interviewed at the health facilities generally reported living within close proximity of the facility. It is unlikely that women from more remote areas attend regular prenatal care at district or provincial hospitals, given the considerable distance and transportation problems. Staff at district hospitals reportedly see between 7 to 65 prenatal care clients per month.

Women mentioned three main reasons for infrequent or non-utilisation of MCH services:

- not understanding the need or importance of prenatal care;
- the costs associated with transportation, drugs and supplies; and
- the distance to facilities. Women also mentioned being shy and not having the time and resources to attend services on a routine basis. One woman said, “we will go to the hospital (for prenatal care) when we are sick or have a fever and our heads stick to the pillow.” These observations are confirmed by the findings of the maternal health needs assessment (interviews with 70 prenatal clients and 18 focus group discussions with women in different villages).

The strategic assessment teams found that lack of referral and communication between the periphery and higher levels of care was an important obstacle to providing those women who need essential obstetric care with adequate services. Transportation costs associated with delivery care varied between districts, but in nearly all instances, community members perceived them as high. The team visited only one district where free transport to the provincial hospital
was provided in case of emergencies. Cost of transportation to the district or provincial hospital ranged from 2,000/3,000 kip (less than 8 km) to 60,000 kip when the village was further away (more than 70 km). In one province, emergency transport to the provincial hospital was reported to cost up to 100,000 kip.

Costs related to normal delivery in the three provinces were 15,000 kip in Xieng Khouang and Saravane, and 70,000 kip in Khammounane (depending on supplies and drugs needed). These costs did not include those related to caesarean sections, in which case costs can go up to 150,000 kip.

**Socio-cultural barriers to use**

In addition to geographic and cost barriers, cultural beliefs also have a strong influence on whether or not women use existing MCH services. The teams did not collect comprehensive information about the traditional practices of the different ethnic minority groups, but there are often strong food taboos and postpartum practices as mentioned previously. Anecdotal information indicated that some traditions persist that may be directly contradictory to those advocated by the biomedical health staff. These traditions include giving food to the newborn two days after birth or not until much later when the child is able to feed him/herself; initiating breastfeeding only after three days postpartum, etc. Thus, women may be reluctant to seek care or assistance out of fear that health service staff will try to influence their practices.

Miscommunication and poor interactions between clients and health providers presented another barrier to utilisation of public health services. Among minority groups, language barriers constituted an important reason for non-use of health facilities. Few members of ethnic minorities attain positions of responsibility within the public health system. This means that patients are rarely able to communicate directly with health staff. One woman interviewed said, “I would like to receive prenatal care services at the hospital but I am illiterate and I don’t speak Lao Loum.”

There are no IEC materials available in minority languages, which hinders efforts to target these groups through community-based health education and information activities. Staff at MCH clinics visited by the assessment teams reported having no take-home leaflets or brochures in any language for clients who come for prenatal or other related reproductive health care.

**Service provision and quality of care**

*Overview*

In general, health workers seemed motivated and concerned about the quality of services they were able to offer to clients. There were several examples where health staff were performing complicated tasks to take care of patients without having the required back up of drugs, supplies and equipment. The team commented that nearly all of the provincial MCH clinics seemed well organized and reasonably well equipped (resources, staff) to provide quality care, especially for birth spacing. Nevertheless, important opportunities exist to improve the quality of some aspects of MCH services (for example, provider counselling skills, gender or cultural sensitivity, health education and information, and time spent with clients). Privacy and confidentiality of services may also not always be respected.

---

* At the time of the strategic assessment, 1 US$ equaled approximately 6,500 kip. Recent high levels of inflation as a result of the Asian economic crisis resulted in a continuous devaluation of the currency, bringing many people, including high level health officials, to perceive this as one of the main problems facing the health system.
It is important to reiterate the challenges health workers face in trying to provide maternal health services, as a result of the low demand and utilisation of services. This appears to be the case even for facilities that have been upgraded as part of nation-wide efforts to improve the primary health care system. The following box describes some of the day-to-day realities of health staff working in rural areas of the Lao PDR.

In one village 1 km down the road from a district hospital, people report that they rarely use existing health services. People only go to the hospital when there are drugs available. Malaria and obstetric complications are the main causes of maternal deaths both at the hospital and at home. In 1998 in this one village, eight women had died of malaria during pregnancy. Three more had died of pregnancy- or delivery-related complications. None had gone to the hospital for care.

The MCH clinic at this hospital assists about three or four deliveries per month, all of which are complicated (abnormal lies, placenta previa, retained placenta, bleeding). Staff in the clinic reported having no forceps or vacuum extractor to provide essential obstetric care. The team did find specula (2), forceps they used for removing retained placenta, a stethoscope and oxytocin. To sterilise or disinfect the equipment, staff boil it for 20 minutes. The hospital had no magnesium sulphate available but staff uses IV-diazepam instead. The head of the MCH clinic has never seen a case of eclampsia or provided care to a woman who died during pregnancy. All the deaths she has seen occurred in the hospital during delivery or the postpartum period. Sometimes she is called to nearby villages to assist if there are complications.

Community-based MCH services and outreach
Members of mass organizations, such as the Lao Women’s Union (LWU) and village health volunteers (VHV) provide basic information about maternal health and encourage utilisation of prenatal care services, but give little or no detailed information on warning signs of pregnancy-related complications, postpartum care or the importance of clean delivery. Often LWU representatives lacked accurate and comprehensive information on maternal health. Nearly everywhere the team noted that community-based health workers worked without IEC materials. All expressed great interest in having IEC materials for use in their communities. Some asked for a manual that they could use as a reference when talking about maternal health issues. Others preferred having health staff come to the village to explain about maternal health and birth spacing, and to provide them with posters, flipcharts and leaflets to distribute among community members.

Most VHVs talk about nutrition and growth monitoring during pregnancy in their health education sessions with the community, but the team found no evidence that they provide information on danger signs during pregnancy or what to do and where to go in case of an obstetric emergency. MCH outreach activities were virtually unheard of, and only seemed to have taken place when EPI teams were accompanied by MCH staff during their community visits. Community members reported that EPI teams provide some information on birth spacing and motivate women to attend prenatal care. An MCH staff involved with outreach activities from the district hospitals said that, “in the village I provide tetanus toxoid for pregnant women and advise them on nutrition. I also tell them to go for prenatal care at the hospital.” Another
health staff said, “I provided immunisation for people in the village, including pregnant women. I also tell them to visit the hospital for prenatal and delivery care.”

In many villages, particularly in the South, malaria among pregnant women remains very common. There are often no drugs in the village, health centres, towns or hospitals to treat malaria. Malaria outreach teams do reach most of the villages with some regularity (approximately four visits per year), but the majority of outreach activities focus on the prevention of malaria through the sales and promotion of bed-nets. Chloroquine tablets are not routinely distributed to pregnant women, as pregnant women are not yet included as a target group in the current Institute for Malariology, Passitology and Entomology (IMPE) guidelines. Although these guidelines may be changed in the near future.

**Prenatal care**

As shown in the maternal health needs assessment neither the provincial nor district hospitals provide comprehensive service covering all the areas required in a prenatal consultation. Generally, the content of standard prenatal care at the MCH clinics (district and provinces) includes an examination of the abdomen, measuring of blood pressure, checking the fetal heartbeat, taking weight and height measurements, and providing tetanus toxoid immunization. Examination of the clients did not include checking conjunctiva for anemia, testing of the urine for protein, or routine screening for antenatal syphilis at hospitals where laboratory facilities were available. If drugs are available, some staff will also give sufficient malaria prophylaxis, up to three weeks. Iron and folic acid (IFA) is given if sufficient supplies are available. Some health workers said they only provide IFA to women who are “pale.” Overall, only a minority of women received a private consultation covering topics such as STDs/HIV or information on complications of pregnancy. Only half of the women received information on birth spacing, which is a serious missed opportunity when most women will deliver at home without further contact with the health facility.

**Delivery care**

Staff in most of the delivery wards reported serious shortages of essential drugs, supplies and equipment. Moreover, team observations suggest that quality of care was substandard in terms of monitoring of the patient’s condition, clinical management of normal delivery, postpartum follow-up and patient counselling.

A simple and effective tool to facilitate monitoring the progress of labour, the partograph, has recently been introduced in the Lao PDR. The team found that it was being used at some of the provincial hospitals but at none of the district hospitals. Since there were often no women in the delivery wards for delivery, the teams only interviewed very few (less than ten) women who had given birth in the hospital. At one district hospital, the team paid repeated visits to a pregnant woman in labour whose condition had been monitored only once in approximately 12 hours. No time was spent explaining physical exams and other procedures to the woman.

In general, record keeping on delivery care was inadequate. In most cases, routine data on coverage and performance are collected at the health facilities, but staff reported that use of data for programme planning and management, as well as prioritising of interventions/activities is very limited. Moreover, the team reported several occasions where staff had never received feedback from provincial or central level health authorities on performance and progress indicators for selected service delivery components, including normal delivery and emergency obstetric care.
Emergency obstetric care

Obstetric emergencies at the community or health centre level are referred to the district or provincial hospital, since there are virtually no equipment, drugs or trained staff to handle obstetric emergencies below the district level. Major complications cannot be managed at the district level and are referred directly to the provincial hospitals. The team witnessed several instances where a woman with complications during delivery was brought to the district hospital but subsequently referred on to the provincial hospital. In one case, the complication was a retained placenta, a condition that a district hospital should be routinely prepared to manage (the only medical doctor on staff felt there was not enough equipment to provide her with the necessary care). The woman arrived by a “tractor” in the night-time from her village about 10 km away.

In the Lao PDR, there are no trained staff for specialised obstetric and gynaecology care. The team met only very few health professionals who had received a 1-to-3 month specialised training in obstetrics and gynaecology.

The box below gives some indication of the EOC situation in health facilities visited by the strategic assessment teams.

In one district hospital, staff attend about Ten births per month. When asked about common complications, staff stated that women with severe bleeding rarely present to the hospital, but that they have seen cases of eclampsia and obstructed labour. There is no oxytocin or magnesium sulphate in the delivery ward, but syntocin and IV diazepam are available in another room with the emergency drugs that are available only for night-calls and are locked in a cabinet. Only the medical doctor has the key, and in his absence, patients buy the necessary drugs in the hospital pharmacy or at the drugstore. The ob-gyn ward did not have a blood pressure instrument, which staff had to borrow from the MCH clinic. It also lacked delivery forceps. Staff had a manual vacuum extractor but it has been broken for 2 years. The team reported the availability of both fetal and regular stethoscopes. When patients arrive with emergency obstetric complications that staff are not prepared or unable to handle, including cases of malaria, eclampsia, and prolonged or obstructed labour, the women are referred for care to the provincial hospital. Referral involves organising some form of public transportation for which the patient will have to pay. The nurse would reportedly accompany the patient to the provincial hospital.

None of the ob-gyn wards visited had the necessary emergency drugs available. The most common drugs found at these wards included: paracetamol, methergin, and diazepam (only at Xieng Khouang provincial hospital were drugs available through the hospital pharmacy). In some health facilities, the teams observed additional drugs such as ampicillin, Ringer’s lactate IV solution and penicillin.

Caesarean sections are only performed at the provincial hospitals where a surgical theatre, blood transfusion and an anaesthetist are available. In 1998, provincial hospitals performed 20-30 Caesarian sections each. This ranged between 4% -13% of the total number of hospital deliveries. According to staff, criteria for Caesarean section included: women having had an “accident”; elderly women; prolonged labour; abnormal lie; and ruptured uterus.
Neonatal care
At the health facilities, the team observed little care for the neonate, and generally neonatal and perinatal deaths rates appeared to be high. As with maternal deaths, most of these deaths are likely to take place in the home and may never be reported or documented. The maternal health needs assessment found that health facilities had very limited basic equipment or drugs for the newborn (including silver-nitrate, tetracycline ointment, mucus extractors, or a bag and mask for neonatal resuscitation), and the strategic assessment teams’ observations confirmed the lack of these items in the hospitals visited.

In one provincial hospital, hospital staff were very concerned about perinatal deaths, and asked for training of staff to provide better care to newborn. One of the principal concerns of the chief of the provincial hospital had to do with having very modern equipment (two brand-new donated incubators) but had no staff trained in how to use it.

Abortion
Perceptions of the frequency of both spontaneous and induced abortions vary considerably. According to health staff, spontaneous abortion is very common among married women who work very hard in the fields before delivery. In one district, this seemed especially true for second and third wives of Lao Theung husbands who perform more demanding physical labour than the first wife. Health staff also mentioned that many women start smoking at a very young age and continue through pregnancy, which they believed had an effect on adverse pregnancy outcomes, including spontaneous abortion. Only very few people talked about fever or malaria as being a likely cause.

Some induced abortions occur in provincial hospitals following medical indications to protect a woman’s health. One of the provincial hospitals received more than 300 letters from women requesting an abortion in 1998, and performed about 200 abortions that year. Team members reported that in this province many women (mostly peri-urban) were informed and knew about the procedure and the criteria to obtain permission for an induced abortion. This procedure was perceived to be relatively easy as only the husband, the village and the provincial hospital needed to consent. According to some health staff, permission may be granted in a few days. In most areas, however, district and provincial health authorities are involved, and this makes getting official permission more time-consuming and difficult. Here the process is likely to take at least two weeks. One provincial hospital charges 20,000 kip. In another province, providers indicated that an abortion costs approximately 50,000 kip for drugs and general anaesthesia.

Anecdotal evidence suggests that the majority of induced abortions are performed in private clinics in Thailand or the Lao PDR. Thai clinics are mainly accessible for women who live near the Thai-Lao border but unmarried women reportedly prefer to go to Thailand. Prices for abortion in Thailand are around 1,000 bahtd (during the first month of pregnancy) and go up at a rate of 1,000 baht per month of gestation. Women report that this is considerably cheaper than in private clinics in the Lao PDR. One private clinic reportedly charged up to 120,000 kip for women who request an abortion after the first trimester of pregnancy; some people reported additional charges of 28,000 kip per month of gestation. Such prices seem prohibitively expensive for most women, and especially for adolescents.

According to community members, women who may be denied an abortion at the provincial hospital may go to great lengths to have an induced abortion. Women reported receiving no health information or education on the risks of unsafe abortion. Given the sensitivity of the issue,

---

d $1=35 baht at the time of the Strategic Assessment.
it is difficult to monitor the quality of abortion-related services provided through the private sector. It is likely that unqualified professionals operate in some clinics and charge high fees for women seeking this service. The care they provide is often of questionable quality. The team interviewed one woman who had an abortion at a private clinic but ended up keeping the child as the procedure failed.

Abortion-related complications are not noted as such in most of the registers at the various health facilities. The team did see some registers that had information about patients with complications from abortion. In most cases, these were older married women, and the majority of the abortions were registered spontaneous abortions. However, staff report that treatment of abortion-related complications is relatively common at the provincial hospitals, and most were related to induced abortion. Staff at various hospitals reported attending 7-20 women per month with complications from abortions (registers had no information to confirm this number). Many were cases of severe haemorrhage and some for infection. Most were diagnosed as complications from induced abortion, and seemed to be adolescents. Some women may also use traditional medicine to treat abortion-related complications, such as the herbal “tiger” brand that is readily available in private drug stores.

It is interesting to compare the different perspectives on abortion that a range of health providers and community members shared with the teams. In one district, drug sellers commented that both induced and spontaneous abortions take place. They thought that married women with many children who did not know about birth spacing were most likely to have an abortion. In Saravane, most of these women were believed to go to Pakse (Champasak province) or to Thailand. In another isolated district, villagers interviewed mentioned that there is no information about abortion (or birth spacing) and women do not know where to go for an abortion. Lao Theung women are also afraid to “kill” a foetus, whereas Lao Loum women were thought to be too shy to seek services. And in yet another district, people believed there were too many abortions being performed (more than 300 per year). In a close-by district, health providers estimated that about 10-15 women per year have an induced abortion.

As these examples indicate, opinions and perspectives on induced abortion vary considerable and accurate or reliable data on the incidence of abortion are difficult to collect, particularly for unmarried women and adolescents.

**Maternal Deaths**

Despite the country’s high maternal mortality rate, maternal deaths in health facilities and recorded maternal deaths in the community are relatively uncommon events. Given the large percentage of deliveries that take place in the home, it is believed that the great majority of maternal deaths occur in the home, and that many of these deaths go unreported. None of the health staff interviewed had information about maternal mortality/morbidity in their working areas. In one provincial hospital, no maternal deaths were registered for 1998. One woman died in early 1999 as a result of postpartum haemorrhage (she was referred from the village but came too late). In the other provincial hospitals, four maternal deaths were reported for 1998. District health facilities reported equally low incidences of maternal deaths.

In some of the villages visited by the teams, especially in one remote district, several maternal deaths were reported in 1998; in one village, for example, three women died because of postpartum haemorrhage and in another village, in 1998 three women had died following delivery, and by mid-March, 1999 two maternal deaths had already occurred in this community of less than 200 households where malaria is reportedly a common cause of maternal death.
2.1.2 Strategic Assessment Recommendations

Programme development and implementation

In endemic areas, malaria prophylaxis and treatment should be included as a routine component of any contact between pregnant women (primigravidae) and the health system. There should be coordination between health staff and the IMPE to ensure that MCH staff has clear guidelines and adequate supplies for this activity, according to the IMPE guidelines.

- Village health volunteers or LWU representatives in villages with relatively good access to higher levels of care should be trained to recognise danger signs and to refer a woman with complications from prolonged labour, postpartum haemorrhage, retained placenta, sepsis, severe pre-eclampsia/eclampsia or complications of abortion to a first-level referral facility where essential obstetric care is available.

- The skills of health staff should be upgraded to provide integrated management of pregnancy and childbirth, in particular for: (a) the management of postpartum or postabortion haemorrhage, including the administration of oxytocin and IV fluids, if required, in the immediate postpartum period; (b) initiation of antibiotic treatment for puerperal sepsis; (c) initial treatment with anticonvulsants for severe pre-eclampsia and eclampsia; and (d) diagnosis and referral of prolonged or obstructed labour. Complications related to unsafe or incomplete abortion (e.g. haemorrhage and/or sepsis) should be treated to the extent possible and subsequently referred.

- Where access to higher level facilities is extremely difficult, a long-term special effort may be required to make sure health centres in remote areas are prepared to handle normal and complicated deliveries that do not require a surgical theatre.

- District hospitals should be able to provide normal delivery care and basic EOC (treatment of complications that do not require a surgical theatre, for example vacuum extraction or manual vacuum aspiration of retained placenta). Although the provision of basic EOC at the district level is part of the National Policy on Maternal and Child Health, its implementation on a wider scale requires urgent attention. There is a need for clear guidelines, standards and norms for the provision of normal and complicated delivery care. International standards should be locally adapted and made available in service sites. Health professionals should be trained in their use during basic and in-service training. Necessary drugs and equipment to provide EOC must be available in sufficient quantities.

- There is a strong need for professional leadership to improve quality of care and promote safe motherhood activities. To ensure quality care, ob-gyn specialists should be posted at selected provincial hospitals, all physicians and midwives should be trained in EOC, and the training of skilled attendants for all births contemplated.

Information, Education and Communication

Health care providers at all levels need to be sensitised to the importance and relevance of community education, mobilisation and awareness raising on maternal health.

- IEC is needed to create awareness about the recognition of danger signs and symptoms during pregnancy, delivery, and the postpartum period. Community members need to be educated about the health and social risks associated with adolescent pregnancy. A special effort should be made to use the extensive network of LWU and the LYU volunteers, who should also be trained in recognition of danger signs, the need for timely referral of obstetric emergencies and the development of community plans for emergency transport.

- As both prenatal and postpartum coverage is low nationally, routine use of appropriate prenatal and postpartum care should be promoted, particularly in rural areas through
various IEC activities. These should include media activities and community motivation through networks of health volunteers, the LWU and the LYU (for adolescent pregnancy). As part of this effort, health centres should be better prepared (e.g. have staff with counselling skills and required equipment and supplies) to provide services to clients who cannot travel to district hospitals.

- Village-based committees and mass organisations such as the LWU and LYU should be aware of the health risks associated with unsafe or incomplete abortion and should encourage the use of birth spacing methods among women who are at risk for high parity pregnancy and among adolescents to prevent (unwanted) pregnancy before marriage.

**Training**
Considering the importance of midwifery knowledge and skills at all levels of the health system, in particular at the district and health centre level, it is recommended that the nursing curriculum include a strong component on midwifery skills and knowledge to ensure adequate provision of care.

- Refresher training courses are needed for MCH staff at district and health centre level on safe motherhood, including EOC and the integration of birth spacing and RTI services into routine maternal health services.

**Policy**
There is currently no policy on integrated reproductive health care. In its absence, there exist many opportunities to better link existing services to the provision of MCH. While there is an official policy on RTIs, it is only being implemented in areas with high suspected prevalence of STDs, and integration with MCH activities is highly dependent on local collaboration between the different programmes. Guidelines are needed to encourage linking other reproductive health services to MCH.

- The Safe Motherhood Policy was officially disseminated in May 1999. The operational implications of identifying district hospitals as the most important level for managing obstetric emergencies need to be addressed through concerted efforts to upgrade their capacity, with appropriate support from provincial and central levels (human resources, training, equipment, staff).

- Critical issues related to maternal health that may be considered for inclusion in the Safe Motherhood Policy are:

  - management of complications related to unsafe or incomplete abortion and post-abortion care;
  - linkages and coordination with the national birth spacing policy and activities;

- linkages with STD control programmes, including the National Committee for the Control of AIDS; and

- issues related to adolescent pregnancy.

- In view of the considerable risks to maternal health, the Lao PDR government may consider reviewing the criteria for access to abortion where there are health and/or social reasons. Simplifying the process of obtaining access to safe abortions will help reduce the number of women who rely on abortion services of uncertain quality through the private sector or
unqualified professionals, and reduce maternal morbidity/mortality resulting from unsafe or incomplete abortion.

Advocacy
- *Increased advocacy for and dissemination of the national Safe Motherhood Policy should be conducted.* Appropriate support for implementation of the policy should be provided in the form of a national multisectoral task force or working group to monitor small-scale initiatives that seek to improve maternal health, and to adapt lessons learned into the national programme.

Research
*Operations research should be carried out to promote the use of safe delivery kits* as a means to reduce neonatal mortality and maternal morbidity. Such research should aim to identify the best way to produce and distribute these kits (community-based distribution, social marketing or commercial marketing) and to ensure their use in the community.
- *There is a need to develop and test innovative community approaches to emergency transport for women in need of emergency obstetrical care.*

2.2 Birth Spacing

Available statistics on fertility in the Lao PDR give an indication of the extent of women’s reproductive health problems. Early marriage and childbearing are the norm, and most women are married before age 20. Moreover, data from the 1995 Fertility and Birth Spacing Survey (FBSS) report that by this age, nearly a third of all women have already had their first child. Fertility rates range from 7.8 for rural women to 4.7 for urban women, although the reported desired family size is 4.2.

The government has made great strides in the provision of contraceptive services since the introduction of an official birth spacing policy and programme, but many women who are not using contraception do not want another child, or would like to space their next birth, indicating a persistent need to improve access to contraceptive services.

2.2.1 National Birth Spacing Policy and Programme

Given the country’s low population density, the long period of war and the shortage of manpower, the Government of the Lao PDR has long promoted a pro-natalist policy. Recent data (UNFPA 1996) indicate that the country’s population is growing at a rapid rate of 2.4% per annum and is expected to double within the next 29 years. As a result of the government’s growing awareness on the inter-related nature of population, development and environmental issues, birth spacing was officially introduced in 1988, followed several years later by a national birth spacing programme to provide information on, and enhance access to, contraception.

Since 1996, the Ministry of Public Health, under the leadership of the Institute of Maternal and Child Health (IMCH), has been implementing a national birth spacing programme. The programme aims to help reduce infant and maternal mortality rates, maintain population growth for social and economic development, and improve the quality of family life. Provincial and district-level staff attend courses in birth spacing methods at regional training centres located in Vientiane, Luang Prabang and Savannakhet provinces. To date, more than 300 health staff have
received training. By the end of its first phase (1996-1998), the programme covered 835 villages in 71 districts and 13 provinces of the Lao PDR.

At the time of the assessment the programme was in its second phase, (and had plans to expand to all 18 provinces and 81 districts by the end of 1999). The strategic assessment teams visited districts in Saravane and Khammouane provinces where the birth spacing programme had not been introduced yet. In Saravane province, 5 out of the 8 districts are included as part of the national birth spacing programme (introduced there in 1996). In Khammouane province, the programme is functioning in 7 out of the 9 districts, and will be expanded in 1999 to include all 9 districts. In Xieng Khouang province, the national birth spacing programme has reached 7 out of 8 districts (this includes districts that are part of the Asian Development Bank’s primary health care activities).

Birth spacing is also an essential component of primary health care activities that are supported by a variety of donors and NGOs, including the Asian Development Bank, AusAID, Save the Children UK, and Save the Children, Australia. Together these efforts are contributing to a growing demand for, and use of contraception, which is being reinforced by the increased availability of contraceptives through an expanding private sector.

2.2.2 Provision of Contraceptives under the Birth Spacing Programme

According to the national birth spacing policy, contraception is available from the MCH clinics at the provincial and district level, including IUD insertion, sterilization (provincial hospital only), Depomedroxyprogesterone Acetate (DMPA), condoms and oral contraceptives (OCs). Oral contraceptives and condoms are also available at the village level through mass organizations (LWU, LYU) and village health volunteers or committee leaders who have received basic training.

With UNFPA support, more than 3,800 LWU members have been trained to provide information about birth spacing and distribute OCs and condoms. The assessment teams visited several districts where the LWU has conducted motivational outreach. Their motivational work, however, was often not combined with distribution of OCs and condoms. Some villages had trained village health volunteers who provide condoms and dispense the second cycle of oral contraceptives (at present the first cycle has to be dispensed at the MCH clinic, as a medical screening is required). In total, UNFPA reports having trained 1,500 village health volunteers in basic contraceptive knowledge and skills.

According to government data, the programme covers some 70% of the population, although little is known about the relative successes of the programme in different regions of the country. The programme has not been evaluated with regard to its impact on contraceptive prevalence, or the quality of its services. It is not clear what percentage of the population has reasonable access to contraceptive methods at either the community or the health facility level.

The following section provides information on birth spacing issues from the three provinces visited by the strategic assessment teams, complimented by national data from the FBSS on selected quantitative indicators.
2.2.3 Contraceptive Knowledge

The assessment team found generally high levels of knowledge and awareness about contraception, except in more remote districts that had not been reached by the national birth spacing programme. This was consistent with the 1995 FBSS which showed that in general, the level of knowledge about the different birth spacing methods among women of reproductive age was relatively high - 66% knew about pills, 61% about female sterilisation and 60% about IUD and 58% about injectables. Knowledge about modern contraceptive methods among married women was nearly universal in urban areas (96%), compared to 62% of married women in rural areas. There was a greater difference in knowledge about sources of contraceptive methods: 73% of married women in urban areas knew where to get contraceptive services versus only 28% in rural areas. Awareness among adolescents was more limited (see chapter 2.4). As discussed later in this chapter, knowledge about each of the different methods was often not comprehensive. Both users and non-users seemed to lack detailed information about the different contraceptives available.

Most community members mentioned the LWU representatives as their main source of information about contraception. In some villages, the LWU had created considerable demand for contraception, but there remained a lack of availability of contraceptives at the community level. An example of LWU involvement, and their need for more support, is described in the box below.

In one remote district that has not yet been reached by the national birth spacing program, none of the villagers had heard about birth spacing, except for some general information provided by district-level LWU staff. The LWU had started going to villages 2 years ago to talk about birth spacing. Each village was visited only once, and most people interviewed by the team did not seem to remember the content of the messages. The LWU representatives had no IEC materials to demonstrate or describe the different contraceptive methods. During the meeting with the strategic assessment team, the district head of the LWU asked for commodities to provide to people who come to this type of community outreach. She herself had never seen any birth spacing method. She learned about the different methods from the LWU manual, a copy of which is given to each village even though illiteracy rates are very high for women in most rural parts of the Lao PDR. According to her, villagers interested in spacing or limiting births can only use the calendar method (natural method of periodic abstinence). She herself has had ten pregnancies and has five living children.

2.2.4 Demand for Contraception

Several studies provide strong evidence of unmet need for contraception in the Lao PDR. The FBSS (1995) revealed a contraceptive prevalence rate of 20% among ever married women (15% for any modern method), and only a quarter of married women have ever used a birth spacing method. It also reported that 55% of women interviewed wanted to stop childbearing, and another 27% wanted to have their next child after more than two years.

The strategic assessment confirmed that there is great interest in more detailed information about contraception and high demand for contraception among both men and women in towns and villages visited. Community acceptance of birth spacing methods appeared high nearly
everywhere. Many women with four or five living children said that, “birth spacing came too late.” One woman said, “the birth spacing programme came too late. We have so many children at our age (30-40 years old) but the younger generation at least will have only two or three children.” In one group discussion, a woman commented, “Since 1996 more and more women in the village are practising contraception. We are very happy because now we have time to earn money and work in the field.” Health providers and community members confirmed that large numbers of current users and non-users are requesting information about contraceptive methods.

Health providers told many stories of women who travel from very remote areas in order to receive information and contraceptives. This was also the case in areas where the birth spacing programme has not yet been implemented, as the following quote from a woman in a remote district illustrates: “We have many children and want to stop childbearing. We do not know how and only heard one time from EPI staff about contraception. We came to the hospital to get more information.”

2.2.5 Contraceptive Use

The 1995 FBSS estimated that 20% of women of reproductive age were using some form of contraception and 15% were using modern supply-based methods. A large difference was found in urban and rural use of modern methods, 31% in urban areas compared to 11% in rural areas. Respective percentages of modern method use were: oral contraceptives (32%, of which up to 13% were estimated to be the monthly pill manufactured in China); female sterilisation (18%); injectables (11%); and Intrauterine Devices IUDs (11%). Condom use represented less than 1% of modern methods, and male sterilisation is rare. The strategic assessment teams found a similar pattern of method preference in the three provinces visited.

2.2.6 Sources and Supply of Contraceptive Methods

Data from the FBSS indicate that the private sector is more utilised than the public sector as a source for contraceptive methods, presumably because of better services or inadequacies in government services. Earlier in the national programme, stock-outs of certain contraceptive methods may have been more common as distribution systems were still in the early stages of development. The strategic assessment found that that none of the provincial and district level health facilities visited had stock-outs (for any method). However, several health facilities had excess stock of some methods (e.g. large quantities of IUDs that were expiring within a few months).

The following table with data from the 1995 FBSS shows that pharmacies are a major source for contraception, particularly for OCs and injectables. About 41% of users went to pharmacies to obtain contraceptives and 10% used private doctors. As may be expected, the role of the private sector is particularly important in areas where the national birth spacing programme has not yet been implemented.

<table>
<thead>
<tr>
<th>Contraceptive Methods</th>
<th>Sources of Contraception</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First place</td>
</tr>
<tr>
<td>OCs</td>
<td>Pharmacy (77.3%)</td>
</tr>
<tr>
<td>Injectables</td>
<td>Pharmacy (42.3%)</td>
</tr>
</tbody>
</table>
2.2.7 Access to Contraceptive Services

Physical access to contraceptives is an important factor in determining method selection. While IUD insertion and injectables are only provided at MCH centres at hospitals, these methods require fewer visits to health facilities than OCs or condoms, which increases their use among women from villages where no community-based distribution system exists. The assessment teams found that many women without adequate transportation or who were unable to afford transportation were concerned with having to make a first visit to a health facility in order to obtain contraception. Teams observed that while there are many pharmacies and private drug stores in small towns that sell contraceptives, there is an urgent need to expand community-based distribution of contraceptives to the village level.

The team noted that women from ethnic minority groups faced additional barriers to contraceptive use, including limited information and awareness, and the absence of IEC materials in languages other than Lao. While women in Lao Loum communities often initiate discussions with their husbands about the use of contraceptive methods, in Lao Soung or Lao Theung communities men make the decisions on family size and birth intervals. As one Lao Theung woman said, “our husbands want to have many children but we don’t. We have to work very hard and are very tired. We are also afraid to give birth.”

2.2.8 Affordability of Contraceptives

Although in theory contraception is provided free of charge at the MCH clinics, many women choose to obtain contraceptives from the private sector and pay a small amount of money (see Table 2 for prices for methods as reported by users). Even in the public sector, prices for contraceptives seem to vary. Most people recognise that contraceptive methods are cheap, and generally, costs are not perceived as a significant barrier to contraceptive use. It was observed that the introduction of revolving drug funds in some villages has made people more accustomed to pay for medicine and contraception.

The 1997 JOICFP survey also indicated that most respondents did not object to paying public sector providers for contraceptive services because the contraceptives (OCs and injectables) were still cheaper than those provided through private sources.

<table>
<thead>
<tr>
<th>Contraceptive method</th>
<th>Condom</th>
<th>OCs</th>
<th>Injectable</th>
<th>IUD</th>
<th>Sterilisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xieng Khouang province</td>
<td></td>
<td>100 kip/pack</td>
<td>200 kip/cycle</td>
<td>300 kip/each</td>
<td>2.800 kip/each</td>
</tr>
<tr>
<td></td>
<td>12 kip each</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khoune district, (Xieng Khouang)</td>
<td>500 kip/pack</td>
<td>500 kip/cycle</td>
<td>1.000 kip/each</td>
<td>2.500 kip/each</td>
<td>--</td>
</tr>
<tr>
<td>Private pharmacy</td>
<td>300 kip/pack</td>
<td>1000-1500</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 2: Sources and Prices for Contraceptive Methods as Reported by Health Providers and Users
### Contraceptive Method Costs

<table>
<thead>
<tr>
<th>Contraceptive method</th>
<th>Condom</th>
<th>OCs</th>
<th>Injectable</th>
<th>IUD</th>
<th>Sterilisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Xieng Khouan)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>kip/cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(other pharmacies: 500 kip/cycle)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khammouane province</td>
<td>500 kip/pack</td>
<td>500 kip/cycle</td>
<td>1200 kip/each (district)</td>
<td>2000 kip/each</td>
<td>--</td>
</tr>
<tr>
<td>Khongsedone district hospital pharmacy (Saravane)</td>
<td>1000 kip</td>
<td>1500 kip/cycle</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Khongsedone district hospital (SV)</td>
<td>300 kip/pack</td>
<td>300 kip/cycle</td>
<td>500-1000 kip/each</td>
<td>1000 kip/each</td>
<td>200,000 kip</td>
</tr>
</tbody>
</table>


### 2.2.9 Quality of Care

The quality of contraceptive services depends on a variety of factors, including: technical competence of providers, choice of, and information about the different methods, attention to client needs and the quality of counselling, client follow-up and privacy and confidentiality of services.

#### Technical competence

Providers’ knowledge of the different contraceptive methods, their side-effects, and the appropriate management of side-effects were generally adequate. Most staff had been trained in the last three years at the provincial level or had received a three-day training in Vientiane (with a subsequent five-day refresher course). Interviews with health providers showed that they were largely aware of the correct procedure to follow in the case of a woman coming late for an injectable. Most providers performed a careful physical check-up before insertion of an IUD. The team observed that some health providers did not complete a full medical check-up of new IUD or injectable users, but concluded that this was rare.

Among staff at the district hospitals who had been trained in IUD insertion, most reported having received a two-week training at the provincial hospitals. However, some providers expressed doubts about being able to insert IUDs correctly, and consequently, they were less likely to suggest this method to new users. Providers’ lack of confidence may be related to their limited practical training and experience with IUD insertion and removal.

Overall, the team found that providers were rather passive about promoting contraception among potential users, and that there were many missed opportunities to provide women with information about contraception (for example, during prenatal care services, following postabortion care, or through EPI outreach activities for mothers with young children).

#### Choice of contraceptive methods

At present there are four contraceptive methods widely available in areas covered by the national birth spacing programme, namely OCs, DMPA, IUDs and condoms. There is some indication that users’ choice of contraception is highly influenced by the service provider.

As mentioned before, the most commonly used non-permanent contraceptive methods are oral contraceptives, injectables and IUDs (order of preference and rate of use depended on the site visited). For each of these methods, but particularly for IUDs, many misconceptions exist, and
fear of unwanted side-effects seems to account for unnecessary method drop-out and method switching (see section on users’ experiences and perceptions).

In general, the team found that oral contraceptives and condoms were not available through the public sector at village level. Health facilities mostly had two main brands of oral contraceptives, the progestin-only Microval for women who are breastfeeding and the combined OC, Microgynon which providers prefer because it includes iron tablets in the cycle. Injectables (DMPA) and IUDs (TCu 380A) are available only from hospitals where trained staff can insert them and where equipment can be disinfected.

Female sterilisation is available at provincial hospitals, but there are official restrictions on who can receive sterilisation. Eligibility criteria vary per province, and include age, parity, and the presence of serious health problems. Some health professionals perceive the procedure to obtain permission as cumbersome and time consuming. Moreover, they think that it may discourage women who are illiterate or do not have their husband or family’s support. There appears to be a great demand for female sterilisation and many women who live near the border or have the financial resources go to Thailand, where the services are seen to be cheaper and presumed to be of better quality. A 1997 small-scale survey by JOICFP confirmed this finding. It is estimated that that many other women for whom sterilisation is their preferred method of choice do not have access to sterilisation.

Health officials interviewed during the strategic assessment reported that no vasectomy had been performed in their respective provinces, except for one case in Xieng Khouang. Male sterilisation is virtually unheard of in the Lao PDR due to strong cultural resistance.

Information and education
The teams found that information provided to new users is sometimes driven by individual providers; who may not always discuss or offer women the whole range of methods. There were many women who said that, “the health staff made the decision for me” when asked why they were using a particular method. Service providers are not trained in interpersonal counselling skills and while they seem aware of the importance to spend time talking to clients, they often appeared rushed and spent limited time with each client. The teams reported that women appeared shy and intimidated to ask questions, even though they wanted to know more about different methods and their side-effects. Provider training, particularly on IUD insertion, focuses mostly on technical skills and as a result, health staff are often not aware of or very sensitive to women’s concerns. Counselling of new users about all methods and of women who come with side-effects or requests to switch methods needs to be strengthened throughout the health system. Provision of counselling for different ethnic groups is limited. In one Lao Theung village, women said that, “We are illiterate and can not understand all the things health workers tell us. We forget their explanations. Five of us who used injectables became pregnant because of this.”

The team did not observe any IEC materials in the community, nor did they find leaflets or brochures on birth spacing at the health facilities to help users make an informed choice or to use the method properly. The team located only one type of IEC material at most health facilities and in some villages, namely a poster that described and showed pictures of the different methods. It seems likely, given the generally accurate information health staff provide to users, that the lack of IEC partly accounts for the persistence of some misconceptions about different contraceptive methods.
Confidentiality and privacy of services
Most health providers recognise that confidential counselling is not available for women seeking contraceptive information or services. The teams observed individual counselling often occurred in rooms where staff and clients were moving in and out. Some MCH facilities did not have the physical space for private consultations. The lack of confidentiality is especially a problem for unmarried people and adolescents.

2.2.10 Reasons for Use and Non-Use of Contraception

The FBSS reported that among the 1,248 women included in the survey, the most common reasons for non-use of contraception were found to be: the desire for additional children (51%), the lack of knowledge (11.6%), menopause or hysterectomy (7.8%), side-effects or health concerns (7%), and difficult access to contraception (5.3%). These observations are largely confirmed by the strategic assessment.

Results from the assessment indicate that for those women using modern contraceptive methods, possible side-effects, convenience, the recommendation of health workers and the desire for more effective and convenient methods were the main reasons for the selection of a specific method.

As mentioned earlier, contraceptive use among women who live in isolated areas of the country and/or belong to ethnic minority groups is considerably lower (even if these areas have been reached by the national birth spacing programme). These women typically have less awareness on available methods, face language and social barriers with health providers, benefit from less outreach by health workers and encounter more community resistance. Women from Lao Theung villages visited during the strategic assessment mentioned that they had missed several appointments for injectables due to language difficulties and not understanding the information provided by health staff.

2.2.11 Users’ Experiences and Perceptions about Contraceptive Methods

Injectables and implants.
Most women feel injectables are convenient, but they worry about method failure. It was common to encounter people who could cite several examples of women experiencing method failure. One possible reason may be that at several health facilities, sedimentation in the neck of DMPA vials seemed to persist after shaking, although storage conditions at the point of delivery were generally adequate. This persistent sedimentation of the injectables may result in a substandard dose being delivered and may be partly responsible for method failure.

The interviews showed that women who have only one or two children are less likely to use injectables because many younger women fear infertility. One user of pills mentioned that she was interested in Norplant (two women in her village were using this method which they obtained in Thailand) but she had heard about women having severe side-effects such as bleeding and headaches. She was also afraid Norplant might move throughout her body.

Most women mentioned not being too worried about amenorrhea because the health worker had offered sufficient counselling and information. Potential side-effects that did seem to worry many women include: gaining or losing weight; prolonged or shortened menstrual period; and headaches. The team visited one village where women had stopped using injectables because two women had reported considerable weight-loss.
Oral contraceptives.
OC use in the villages is mainly based on a network of satisfied users. It is common that women talk about minor side-effects related to OCs, including headaches, insomnia, dizziness, spotting, nausea, spots on the face and weight-loss. Some health providers tell new users that these problems are likely to disappear after three cycles. There were also women with concerns about more severe negative health effects, including: fear of breast or uterine tumours; fear of dying; and persistent itching in the genital area. Many users switch methods if they are not satisfied with OCs.

In some villages, method failure seemed quite common. Women gave the following reasons: not realising that a pill has to be taken every day, lack of money to buy sufficient cycles, and therefore only taking pills whenever there was money to buy them, and forgetfulness. At times method failure seems directly related to poor counselling and lack of sufficient or accurate information. One woman interviewed, for example, believed one cycle of pills would last for the rest of her life. After she got pregnant she decided never to trust birth spacing methods.

The teams encountered a few women using the monthly pill from China. Some users had perceived the negative side-effects as serious and had stopped taking the monthly pill for fear of symptoms getting worse. In one village a woman had died while using the monthly pill. People in this village believed that the monthly pill was the cause of her death and now most people there said that they, “prefer to have many children instead of dying from the use of birth spacing methods”.

Other groups had a very different experience; for example, in one village six women who participated in a focus group discussion seemed very pleased with OCs. Health staff had offered information on all four methods, but they chose oral contraceptives fearing the unpleasant side-effects of injectables, and in particular amenorrhea.

IUDs
The team found that women in rural areas feared that an IUD was not suitable for them as they thought it would interfere with their ability to perform hard work. Many rumours exist related to IUDs, largely associated with the traditional Laotian concept of the uterus as a moving organ. Women also mentioned shyness of being examined, particularly by male providers, fear of insertion of a foreign object into the body or fear that the IUD may fall out during hard work (especially when carrying heavy loads). Other perceived negative health consequences of IUD use included weight-loss, back or abdominal pain, discharge and painful sexual intercourse. It seems that once an IUD has been correctly inserted, women like the convenience of the method. One IUD user expressed satisfaction with the method and the counselling of health staff, as illustrated in the box below.
The team interviewed a 19-year old woman with a two month-old child who was coming for an IUD insertion at the provincial hospital. She had never used contraceptives and heard about IUDs from health staff while she attended prenatal care. She also looked at the posters hanging on the walls of the MCH clinic. Health personnel explained the different methods to her and before deciding on IUDs she discussed her decision with them. She would have liked some more information about the other methods but felt reasonably sure of her decision. Staff showed her the IUD and told her how it would be inserted into the womb. She was told that certain side-effects such as pain and bleeding are common but that she should return if they became severe. A routine follow-up visit was suggested 1 month following the insertion. The woman paid 2,800 kip for the IUD insertion, in addition to 5,000 kip to travel to and from the health facility. She was clearly satisfied with the attention and planned to follow health staff’s advice to return for a follow-up visit.

Providers recommend several follow-up visits for new users, at one month, three months and six months after insertion. They also provide women with an appointment card. It was not clear to what extent women complied with the advice to come for a check-up following IUD insertion.

**Sterilisation.**

Tubal ligation remains fairly infrequent, despite an apparent demand. The team interviewed many women, particularly in rural areas, who had more than five living children and were using temporary methods, but wanted to limit or stop childbearing. Most of them were not aware of permanent methods.

In peri-urban areas, women know about sterilisation, and those who live close to the border go to Thailand where sterilisation is cheaper and services are believed to be of better quality. In one village it was said that ten women had gone to Thailand for this reason; costs of being sterilised were approximately 100-200 Baht. In another village 38 women had been sterilised in Thailand. The team heard a variety of persistent rumours about women having had a sterilisation that were mostly related to general fears of an operation. Misinformation existed about the effects of sterilisation on women’s health. A few women believed that sterilisation may interfere with a woman’s ability to work hard and her sexual desires. Some groups thought sterilisation would reduce both men’s and women’s sexual pleasure, whereas others thought women’s sexual pleasure would increase and lead to promiscuity.

The box below describes two examples of users’ experiences with contraceptive methods, and the difficulty women have to access sterilisation.

The team interviewed a 30-year old woman with three kids who was sterilised in Thailand. She used injectables to space the interval between her second and third child, which she bought at a drug store for 30 baht per injection. She did this for more than four years. She decided to get sterilised following malpresentations in two subsequent pregnancies. Another woman, the wife of the deputy chief of a village, had stopped using injectables because of long-term amenorrhea. Additionally, they made her fat and gave her headaches. She reported not using any contraception for eight months, except occasional condom use. She did not like IUDs as they had given her prolonged bleeding for more than six months. After the IUD had been removed, she started using condoms before switching to injectables. Now she is back to using condoms. She would like to be sterilised but her husband does not agree.
Natural methods or periodic abstinence.
The use of periodic abstinence to space births remains widespread in the Lao PDR (15% of FP users FBSS 1995). Women’s experiences with this method present a mixed picture; some women favour it because it does not involve any hormones, others talk about high method failure. Incorrect information about the fertile period of a woman’s cycle may be partly responsible for this. For reasons that are not clear, it was noted that many health providers appear to particularly recommend the natural method to women who came to the MCH clinics.

Male methods
Vasectomy is not provided in the Lao PDR. Condoms are not widely used partly because they have not been socially accepted. If they are used, it is primarily for the prevention of STDs and not for birth spacing. Health workers recommend condom use to contraceptive users for the “in-between” period (after quitting use of one method and before starting use of another method). Men do not like to use condoms because they fear condoms will interfere with their sexual desire, and many people think they are unnatural barriers that may cause cervical ulcers. They also complained about the Indian condoms as they are said to smell bad and to have too much lubrication (see also chapter 2.3).

Information and awareness about condoms, both for preventing STDs and unwanted pregnancy, varied considerably between urban and rural areas. In some villages, health staff or LWU/LYU representatives had discussed condoms, but this discussion did not involve method demonstration. Additionally, there seems to be a strong belief that condoms are used by “bad” people who have multiple sex partners or are otherwise engaged in high-risk sexual activity. Even health staff appeared reluctant to use condoms and according to some staff, their use remains associated with having an STD. A health provider worried that proposing condom use to his wife would imply he had been unfaithful to her.

2.2.12 Strategic Assessment Recommendations

IEC and Outreach/Community Based Activities
Village health volunteers and LWU representatives should be trained to enable them to educate and motivate women (and men) to space births. To facilitate the task of promoting the use of contraceptive methods in the community, each LWU member should have a checklist of key messages about contraception and other reproductive health topics for referral. Contraceptives including oral contraceptives and condoms should be made readily available at the village level. To facilitate community based distribution a screening checklist for new OC users should be developed for use by village level volunteers.

- There is a need for more IEC materials on contraceptive methods, presented in a user-friendly and easy-to-understand manner. To reach illiterate populations, an effort should be made to include illustrations or pictures that present key information on each method. IEC messages should address the common misconceptions and myths about each method.

- IEC materials such as flip charts should be developed for providers, including LWU and VHV, to use in community education. The use of non-print media such as radio spots or dramas and video spots for use by the mobile teams should be promoted where feasible.

- Health staff should be provided with a comprehensive technical manual on reproductive health that provides detailed information about the different contraceptive methods and about counselling. The manual should describe the advantages and disadvantages of the different
methods, their contraindications, their possible side-effects, the appropriate provision of the method and the management of their side effects, the necessary follow-up and the information to be provided to users, including the protection they provide against STDs.

- Packaging of OCs and condoms should include key information on appropriate method use targeted to illiterate or semi-literate audiences. For example instructions with OCs should cover topics such as common side-effects, what to do in case the user forgets to take a pill, etc.

- A special effort should be made to reach men through village committees and the LYU, particularly among ethnic minorities. To the extent possible, men should be involved in the promotion of contraceptives in the community.

- Provision of quality services

- Although MCH and FP services are often provided by the same staff at the same time, education about contraception is not systematically provided. *Education about the different methods should form an integral part of reproductive health services*, and comprehensive information should be provided at all levels of the health system.

- *Counselling about all methods needs to be strengthened for new users and for women who have side-effects or who request a change in method. There is a need for health providers to be able to educate and counsel women about the misconceptions and myths related to the health effects of family planning methods.*

Training

- *Counselling should be an integral part of providers’ training.* They must also be taught to be sensitive to women’s concerns. Health providers counselling on family planning methods should include information on RTIs and dual protection.

- *Providers’ skills in using IEC materials should be improved.* Demonstration of methods should be included as part of both routine community outreach activities and of client counselling at health facilities.

- At the district level at least one female health staff should be trained in IUD insertion, as women are often shy to be examined by male providers. *Providers should inform new users about IUDs,* and their confidence in recommending and providing IUDs should be enhanced by ensuring sufficient practice during training.

Policy

- Unnecessary medical barriers to contraceptive use should be eliminated. The policy that first time users of oral contraceptives should receive a check-up at a health facility should be modified to reflect the best and latest international knowledge on the provision of oral contraceptives.

- Although the national birth spacing policy calls for the provision of oral contraceptives and condoms for people irrespective of marital status, currently access is restricted to married couples. *Providers of contraceptive methods should be better informed of this aspect of the policy.*
Given the bottlenecks in obtaining permission for sterilisation and the fear of an operation prevalent in the community, sterilisation is not utilised even where it is the preferred method of choice. *It is recommended that access and procedural requirements are simplified and the criteria for sterilisation reviewed.*

The arbitrary distinction between condoms provided by the birth spacing programme and the National Programme for the Control of AIDS should be discontinued. The dual protection of condoms should be better appreciated by health providers and the general population, and more widely promoted. Since many private drug stores sell condoms, social marketing schemes for condoms could be implemented (including the sales of condoms at subsidised price levels).

### 2.3 Reproductive Tract Infections

The term “reproductive tract infection” refers to a variety of infectious conditions that affect the reproductive tract of both men and women. These include sexually transmitted diseases, as well as endogenous and iatrogenic infections. Iatrogenic infections are those associated with medical procedures, most typically transcervical procedures such as IUD insertion, menstrual regulation, or abortion. Endogenous infections occur primarily among women and result from a disturbance of the normal genital tract flora. Common examples of endogenous infection are candidiasis (yeast infection) and bacterial vaginosis. A wide range of sexually transmitted pathogens also cause RTIs, including viral, bacterial, and parasitic pathogens. The wide range of causes potentially able to result in infection of the reproductive tract presents a serious challenge for prevention and treatment programmes.

Adding to this complex challenge has been the emergence of HIV. HIV infection represents the most recent and, potentially, the most devastating sexually transmitted disease. While HIV is most commonly transmitted via heterosexual intercourse and, hence, is an infection primarily transmitted via the reproductive tract, persons most often remain asymptomatic until immune suppression occurs and the diverse symptoms of AIDS appear some years later. Further, recent data indicate that other infections of the reproductive tract may significantly augment the transmission of HIV among those exposed via sexual activity. Complementary studies suggest that treating common RTIs may significantly reduce the rate of HIV transmission among vulnerable populations. This underscores the programmatic significance of preventing and treating the full range of RTIs. Consequently, the strategic assessment of the reproductive health situation in the Lao PDR devoted considerable attention to the issue of RTI.

#### 2.3.1 Overview of RTI Prevalence

There are very few data available concerning the prevalence of RTIs in the Lao PDR. The team was unable to find any studies documenting the prevalence of any specific infections other than HIV. The data for HIV are themselves very incomplete as a comprehensive sentinel surveillance system for this infection has yet to be established in the country. A sample of the limited data available for HIV is presented in Table 3. These data show generally low prevalence rates, however, the figures are almost impossible to interpret or generalise given the very small sample sizes and the lack of any consistent longitudinal sampling strategy. The most notable aspect of Table 3 is, in fact, how little testing has been carried out, even among groups generally
considered to be at significant risk of acquiring this infection. The National Committee for the Control of AIDS (NCCA) has recently begun to plan for the establishment of a more comprehensive sentinel surveillance system for HIV. Until such a system is established, however, it is impossible to conclude much about the actual prevalence of HIV or AIDS in the Lao PDR.

Based on the findings of the assessment team, it is unlikely that the prevalence will be as low as some of the figures in Table 3 would suggest. Almost everywhere the assessment team went, people could cite one or more instances of persons living or dying with AIDS that they were aware of in their communities. Almost invariably, these were reported to be individuals who had returned from working in neighbouring countries with well-documented HIV epidemics. In some cases respondents reported further spread of HIV within the family once a man or youth had returned from abroad. In remote areas, many people had never heard of HIV or AIDS and, consequently, were unaware of any persons living with HIV/AIDS in their communities. Generally, respondents thought Lao Loum were at greater risk of HIV infection than the Lao Theung or Lao Soung because of their more frequent travel to Thailand.

Table 3: HIV Seroprevalence Surveys in Lao PDR: 1990 to 1998

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Donors</td>
<td>0/10790</td>
<td>12/3564</td>
<td>3/4349</td>
<td>1/10444</td>
<td>2/2171</td>
<td>18/31318</td>
</tr>
<tr>
<td>Hospital patients</td>
<td>12/170</td>
<td>28/308</td>
<td>81/729</td>
<td>48/513</td>
<td>169/1720</td>
<td></td>
</tr>
<tr>
<td>Volunteers</td>
<td>23/2411</td>
<td>2/337</td>
<td>9/543</td>
<td>5/234</td>
<td>13/314</td>
<td>52/3839</td>
</tr>
<tr>
<td>Barworkers</td>
<td>4/814</td>
<td>0/303</td>
<td>1/421</td>
<td>2/137</td>
<td>0/21</td>
<td>7/1696</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>0/140</td>
<td>1/4</td>
<td>2/502</td>
<td>0/80</td>
<td>0/15</td>
<td>3/741</td>
</tr>
<tr>
<td>Military</td>
<td>0/159</td>
<td>0/266</td>
<td>0/38</td>
<td>0/1</td>
<td>1/14</td>
<td>1/478</td>
</tr>
</tbody>
</table>


Discussions with various respondents concerning other reproductive tract infections revealed considerable variability in the perceived occurrence of such infections. It is clear that such RTIs are not a common topic of conversation and, when experienced, are treated with a fair degree of secrecy. Most respondents acknowledged that there were some infections in their community, but did not think they were common. In some remote areas, respondents specifically said they were more concerned about other endemic diseases, such as liver cancer caused by parasitic infections, than about STDs. They associated the likelihood of getting an infection with travel, tourism and migration (either to urban areas or neighbouring countries). Among health providers, it is interesting to note that public sector providers generally thought that such infections were uncommon, whereas private providers (both General Practitioners in urban areas and “phet gao” (old doctors) in rural areas) reported that symptoms of vaginal or urethral discharge were quite common reasons for outpatient consultation. Their ability to readily recite a variety of remedies for such conditions suggests that they comprise a considerable portion of their caseload.

One quantitative estimate of the number of men and women consulting health providers for RTI symptoms comes from a recent evaluation conducted by CARE International. An evaluation of Care’s project “STI Training and Educational Materials” (STEM), carried out in Louang Prabang and Oudamxay provinces, requested providers to record how many consultations they had performed for symptoms of potential STIs, as well as overall patient visits. In Louang Prabang province, nineteen trained providers collectively saw a total of 331 patients with RTI symptoms over a four-month period. This comprised 7.5% of their reported caseload. There was wide variability in the number of STI patients seen by different providers and, overall, there were
approximately equal numbers of male and female clients. Genital discharge syndromes were the most common complaints.

2.3.2 Community Knowledge and Perceptions

Awareness of RTI and the risks associated with acquiring both sexually transmitted and endogenous infections was generally low in the community. Both men and women often had no idea about the causes of endogenous infection and only a very superficial understanding of STI risk factors. This was compounded by a general denial of any risky sexual behaviour in the community. For example, when asked about infections among adolescents, many community leaders reported that “if there is no sex, then there are no STIs”, implying, in essence, that since adolescents don’t have sex, therefore, they do not have STIs. This perception, however, was contradicted by many other statements concerning the sexual behaviour of adolescents and, in particular, several reports that sex among adolescents was generally accepted as long as the youth have plans to marry (see chapter 2.4). Some additional data may soon be available, as Medecins sans Frontieres are planning a Knowledge, Attitude and Practice(KAP) survey focusing on STI/HIV among vulnerable people in three provinces.

Symptoms of RTIs

Most people believe that genital discharge symptoms among both women and men are due primarily to STDs. A few respondents recognised that there are non-STD causes as well, particularly among women with vaginal discharge. Vaginal discharge accompanied by genital itching, however, was perceived by many as a sign indicative of sexually transmitted infection. [Itching is, in fact, a common symptom among women with candidiasis; an endogenous infection often caused by the indiscriminate use of broad spectrum antibiotics.] The widespread perception that most vaginal discharge symptoms were caused by STDs resulted in a fair degree of stigmatisation of these conditions. It was commonly reported that women would often not seek care for such symptoms because they were “shy” to admit that they had problems and, when they did seek care, would often travel outside their local area in order to obtain services in a more anonymous setting. There was a general confusion of sexually transmitted and endogenous infections and some respondents reported that “good hygiene” was an important strategy for preventing both types of infection.

Several respondents reported that vaginal discharge was particularly common among older women. This was because spousal infidelity was perceived to be more common among older men and, consequently, such women had to be “afraid of infection from the husband” – a fear implying that their male partner had sexual relations with other women. Women generally thought that men would not inform them if they had symptoms of STDs, but would rather just treat themselves or visit a drug shop for some type of remedy. The women’s fears were corroborated in interviews with men, where they showed limited awareness of the likelihood of transmitting an infection to their spouses that they might acquire in external partnerships. This was partly because STIs were associated with “bad women” and, in particular, bar girls. While men were aware that they could potentially acquire an infection from such women, they had less awareness of the possibility of transmitting such an infection to their spouses. Knowledge of congenital infection with STI pathogens, including HIV, was also quite limited.

Men were reported to have multiple partners “in town”. There are apparently many bar girls in town, whose clients are primarily married men. It was reported to be less common for youth to visit bar girls because they have less money. On the other hand, some reported that for many young men their first sexual experience is likely to be with a bar girl. It was also reported that
when men go to work in Viet Nam or the provincial capital they would also visit bar girls. Bar girls in the district capitals apparently charge 10,000-20,000 kip ($2-$4) per client. Even in villages, there may be women selling sexual services. Often, according to the health staff, such girls/women are not official “bar girls” but women who sometimes accept money for sexual favours, especially from older men.

As noted, women appeared more aware of the broader dangers of sexually transmitted infection. For example, in one instance, a man had sex with another partner and developed urethral discharge. Subsequently, his wife also developed a genital discharge. At the woman’s insistence, the couple decided to go jointly for treatment after consulting with the woman’s parents. According to her, people do not talk about these issues easily, and will only come for help or treatment if the problem is really serious.

The team found that, while many respondents had heard about STIs, few could remember any details about specific infections other than HIV. Awareness of syphilis was more common among older people, possibly due to the fact that it used to be more prevalent than at present. There is a very vague understanding about different symptoms of RTI or where to go for evaluation or treatment other than the traditional healer.

Most people had heard of HIV and AIDS, but there were several village leaders (generally older men) who had no specific information about HIV/AIDS. While almost everyone had heard of HIV and AIDS and knew that it was a deadly disease, a significant number of respondents reported not knowing what the name or terms meant. There was little distinction between HIV and AIDS and the natural course of HIV-related disease was poorly understood. There was limited awareness of the “window period” wherein an individual with recent exposure to HIV might be infected, but still test negative on an HIV screening test. Like other STDs, the knowledge of most community members regarding HIV was fairly superficial. Many lacked detailed information on routes of transmission or prevention strategies. For example, some thought that HIV could be acquired through various routes involving casual contact and there were few people who understood that treating other RTIs is an important primary prevention strategy for HIV. For instance, adolescent girls in one group discussion thought that HIV was a “social disease.” Another girl thought that it was a skin disease. Some thought AIDS could be spread by sharing latrines. One older woman thought that the vaccination given to pregnant women (i.e. tetanus toxoid) was for prevention of AIDS.

As with other STIs and perhaps more so, there was a significant degree of stigmatisation expressed toward those individuals living with HIV. It appears that the health education efforts undertaken to date have succeeded in raising a general fear of AIDS, but having left significant gaps in knowledge at the community level, many respondents would “prefer not to live around people with HIV”. Several said that infected individuals should “be made to live outside the village”. When asked to describe their perception of HIV risk factors, most people reported that HIV was common among those having multiple sex partners or “among people returning from Thailand”. Several respondents claimed that “society is changing” in dangerous ways and referred specifically to increases in alcohol use, especially among youth, as an emerging risk factor for STIs, including HIV.

**Condom use**

Condom use was recognised by many as an important strategy for preventing sexually transmitted infections, including HIV. Condom use was uniformly reported to be quite uncommon, however. For example, according to adolescent girls in one village, condoms can be used for protection against HIV/AIDS, but boys/men do not use them because they do not like them (because they
reduce sexual pleasure) and they do not know how to use them. There were also significant problems of condom accessibility reported. While many people had heard of condoms, they often had not actually seen them. This was especially the case for adolescents. Among those familiar with condoms, they were strongly associated with risky sexual encounters and the prevention of STIs. Family planning providers, on the other hand, focused primarily on the use of condoms for contraception and emphasised their utility for women who had some contraindication to hormonal contraception (such as a goiter). Contraceptive condom supplies were distributed almost exclusively to married women. When asked about the potential for distributing condoms to adolescents for preventing STIs as well as unwanted pregnancy, one MCH provider said simply that there was no policy that allowed distribution to unmarried individuals. However, this issue may be changing, as Population Services International (PSI) has already started a programme for social marketing of condoms, conducted through the National Committee for the Control of AIDS, which may be expanded to include social marketing of condoms for the birth spacing programme as well.

A condom purchased at a pharmacy in one district costs about 1,000 kip ($0.20). Prices varied considerably and were higher in private pharmacies than in government services where they were either free or cost-subsidised. Some respondents did report brand preferences – i.e. preferring the “green brand from Indonesia” or condoms “from Thailand”, but disliking “thick condoms from India.”

Many respondents felt that condoms would be difficult to introduce into a stable partnership since they are generally perceived as a sign of infidelity or having visited bar girls. Some respondents thought that bar girls might try to use condoms, but that such girls would often agree not to use condoms if the clients paid more money. Unfortunately, the team did not have the opportunity to directly interview any bar girls during the assessment.

**Sources of information**

Generally information on HIV/AIDS comes from health staff, activities of the National Committee on the Control of AIDS (through posters and educational events at festivals), through people talking in the village, as well as from the radio and the television. Some had heard about HIV/AIDS from Lao and Thai radio. Generally the information communicated was limited to simple messages such as the fact that AIDS is a dangerous disease and that condoms can be used to protect oneself. In many villages, health staff from the provincial hospital had also come to give a talk about HIV/AIDS and explain about condoms (including showing and demonstrating how to use condoms). The emphasis of such health education efforts seems to have been almost exclusively on HIV/AIDS, however, with little attention paid to other, curable STDs and no information concerning endogenous causes of RTI. There were no health education materials available in ethnic minority languages, and the team noted a scarcity of appropriate IEC for low-literacy populations.

For instance, one woman had heard about HIV/AIDS and mentioned possible routes of transmission including intercourse, needle use and blood transfusions. She received this information from television and health talks. She had not heard anything on the radio, but was also not particularly interested in listening to informative programmes/talks on the radio, preferring music. Often respondents had very limited information about STDs or appropriate care seeking, despite having acquired a fairly detailed knowledge concerning HIV.

The Lao Youth Union and other organizations, such as the Lao Red Cross, have been active in IEC for HIV/AIDS. In some districts, they have carried out educational activities in schools and the community. They are, however, short of IEC materials. In one district, the youth union had
only one set of posters. In some provinces, the youth union had also carried out educational activities for bar girls encouraging them to use condoms, and broadcast some TV spots on the local station on HIV/AIDS. In some areas video presentations had been used to raise community awareness. There were also some lectures on HIV/AIDS in senior high schools.

2.3.3 Care Seeking Behaviour

For women the first recourse for treating bothersome symptoms potentially related to RTIs was the traditional healer. Many women reported treating vaginal discharge with traditional medicine and mentioned some sort of topical treatment (for example, boiling tree roots to obtain a decoction for soaking the genital area and Sitz baths). Many also reported abstaining from eating certain foods, such as green papaya, as a way of preventing or decreasing discharge symptoms. If these measures do not work, they go to clinic where they may obtain a solution for hygienic washing of the vagina or a variety of antibiotics. The widespread use of traditional remedies was reported to be quite common in both rural and urban areas. Very few respondents reported going to a health care facility as a first line response. For unmarried girls with vaginal discharge, treatment with traditional medicine seemed to be the only alternative as they were reported to never go to the hospital when experiencing symptoms potentially related to RTI.

A foul smell, itching, and a yellow discoloration were widely reported to be worrisome aspects of vaginal discharge. Many said that if a ‘yellow’ discharge were accompanied by an itch then women would seek treatment either at the health centre, district hospital, MCH clinic, or from private providers. When women are seen at the hospitals, it is usually for more severe symptoms, such as those indicative of pelvic inflammatory disease. Health staff reported that most women seen in the hospital with discharge are from the village, as women from the town will more commonly treat themselves with antibiotics obtained from drug shops.

At present, very little treatment of common RTI syndromes is provided by MCH staff. Rather, most MCH staff will refer women with discharge to the ob-gyn wards at provincial hospitals. This may be one reason why women present to MCH facilities only with fairly serious or persistent symptoms. After traditional remedies fail, the most common treatment is buying medicine in the drug store. While some women seek services at the district hospital, the caseload is generally only about two to four clients per month with RTI symptoms. Treatment at public health facilities most often includes suppositories and ampicillin. Staff often treat “cervicitis” with flagyl.

Discharge among men is common according to some private health service providers. Some men will resort to traditional remedies, such as boiling banana leaves, however, most men with discharge will self-medicate with drugs obtained from pharmacies or private practitioners. They generally do not go to public health facilities for treatment, fearing that a record will be kept of their illness. Some men also perceive that the health facility is unlikely to have the medicines needed to treat them. It was suggested that recent inflationary trends have undermined the revolving drug funds that are used to maintain the supply of antibiotics in peripheral hospitals, resulting in significant shortages of commonly used pharmaceuticals. Staff generally believed that compliance with prescribed therapy was generally poor, with most individuals discontinuing therapy once the symptoms have resolved.

Often patients in the areas closer to the border who can afford it will go to Thailand for treatment of RTI-related symptoms. Reasons for making this journey were anonymity and the possibility of being tested for specific infections.
2.3.4 Public Sector Service Delivery

Therapeutic practices for the management of RTI symptoms by staff within public sector services was found to be highly variable and non-standardised. As mentioned previously, many front-line care providers in MCH and outpatient settings did not offer treatment for RTI symptoms, but instead referred clients to more centralised ob-gyn or dermatovenerology clinics. When specific management practices were described, they frequently included drugs that might not work against common RTI pathogens. These drugs were often prescribed in non-standard doses or lengths of time. Sometimes clients received more than one effective antibiotic at the same time. Generally, the management of symptomatic infection focused primarily on antimicrobial therapy, with little attention to prevention counselling, condom promotion, or partner referral. The assessment team did not see any significant attempt to integrate RTI services for women into MCH activities. Even health education concerning STDs and HIV was not a routine part of MCH services.

Over the past year CARE International has trained a variety of public and private sector health care providers, including drug shop dispensers, in Louang Prabang and Oudomxay provinces in the syndromic approach to STD case management as part of their STEM project. In evaluating this project, CARE found that there was a high level of acceptance of the syndromic approach among all categories of trained providers. In Oudomxay this training also resulted in better coordination between hospital staff and the MCH programme. This was primarily because the MCH programme had access to some of the drugs recommended in the syndromic treatment protocols that the other hospital staff did not.

At a community level, some village volunteers reported having some men and women come to them with RTI symptoms, although it is relatively rare for women to approach them for these problems. Some village volunteers will give them Bactrim and advise them to take two tablets/day for five days (costs: 1.800 kip). No advice is given about going to the hospital or asking the partner to come for check up or treatment. Very few men come to village volunteers with discharge symptoms.

Generally there are no diagnostic facilities for testing for STIs or other RTI pathogens in provincial and district hospitals, nor are they routinely available in centralised facilities, such as the ob-gyn ward of Mahasot hospital in Vientiane. Partly due to this absence of laboratory facilities, one finding of CARE’s STEM evaluation was that their training in syndromic case management was appropriate for provincial level hospitals, as well as district level hospitals and more peripheral facilities.

The shortage of laboratory facilities, combined with a low rate of attendance for prenatal care, results in an exceptional low rate of antenatal syphilis screening. The assessment team saw very little evidence of any routine antenatal syphilis screening outside of provincial level facilities. While there are no comprehensive epidemiological data on the prevalence of syphilis in the Lao PDR, the cost-effectiveness of prenatal syphilis screening has been demonstrated in many settings worldwide.
One MCH staff mentioned that many women have discharge but are too shy to come to the hospital. She knows there is some degree of infection because at some community meetings in the village women ask her what to do. She thinks there are both endogenous and sexually transmitted RTIs. The only women who come to hospital, however, come for abdominal pain, not knowing they might have STD. These women often have yellow discharge and cervicitis upon examination. She saw three cases like this in the last month, out of approximately 200 clients seen at the hospital. She treats women with these symptoms with ampicillin and flagyl (six times/day seven days 250 mg). Frequently she does not have ampicillin. Her case management is limited to antibiotic treatment. She does no partner referral or condom promotion (she has no supply of condoms). She also has no silver nitrate for neonatal ophthalmia prophylaxis and has no access to antenatal syphilis screening facilities. The hospital does have a microscope, but it belongs to the malaria programme and it can not be used for gram stains for RTI pathogens. Even if it could be used, there are no gram stain reagents and laboratory staff have not been trained in RTI diagnosis.

The use of prophylactic eye drops to prevent ophthalmia neonatorum was also reported to be routine practice only in provincial hospitals. The team witnessed several instances where there were serious gaps in routine infection control practices at health care facilities, raising a concern about the potential for significant rates of iatrogenic infection. Lack of adequate hospital infection control was attributed to a chronic lack of supplies and poor staff motivation.

2.3.5 Role of Pharmacies and Other Private Providers

Traditional healers report seeing many women with vaginal discharge and genital itching. They often treat the women with ampicillin or penicillin in addition to traditional remedies and think that “Western drugs work faster”. Some reported giving clients the choice of which medicine (traditional, Western, or both) to use.

In addition to traditional healers, many symptomatic individuals seek treatment in the community from “Phet Gao” (“old doctors”). The phet gao have typically received some kind of medical or nursing training in the past (often in the course of military service). Providing health services is not their primary occupation, but because they are trusted community members and have some degree of expertise, they are often consulted for common ailments, including diarrhoeal and respiratory complaints, as well as genital tract symptoms. Their therapeutic practices rely primarily on allopathic medicines. For example, one phet gao in Saravane province treated the symptoms of vaginal discharge in women with a complex regimen, including Sitz baths with sodium permanganate, nystatin vaginal suppositories, an injection of Penicillin G or Streptomycin, and oral bicarbonate. He sometimes added tetracycline to this complex prescription. He apparently does not routinely treat the women’s male partners, but if a man comes with the woman, he will examine him to see if he has any genital lesions. Some phet gao reported giving the woman medicine to take home for her husband.

Phet gao report that “jeb mot luuk” or “jeb thong noi” (postpartum uterus pain) is a very common problem, along with gastritis. These are treated with antibiotics which the phet gao buy and keep in their house. Common antibiotics used for this purpose include ampicillin, penicillin, and gentamycin. Of interest, metronidazole, a readily available medication effective against some of the most common causes of vaginal infection, appeared to be used solely for the treatment of intestinal disorders. If there is no improvement in the patient’s condition, the phet gao refer them...
to the district hospital. Apparently, it is common for symptoms to recur and many women develop chronic complaints related to the reproductive tract.

While the traditional healers and phe gao are important private sector providers for RTI treatment in rural areas, in the urban areas pharmacies are by far the major providers of curative services for men and women with RTI symptoms. In addition, as mentioned previously, due to the stigma attached to these symptoms, individuals will often travel outside their local area to seek care. In most cases, this means going to a pharmacy in an urban or peri-urban area. For example, the assessment team visited four drug shops in Xieng Khouang and found that an average of 20 men and 30 women per month presented to the pharmacy with RTI symptoms. In addition to treating symptomatic individuals, many pharmacists reported selling condoms to men (mostly married men) and one pharmacist mentioned selling condoms to bar girls in the provincial town. In the past, under the STI control programme, condoms were provided to pharmacists and they could sell them for 100 kip ($0.02). This service has now stopped. Pharmacists had the impression that many people were too “shy” to ask for or buy condoms.

In one district a drug store owner, who used to be the former director of the district hospital, mentioned that he sees many men with gonorrhea (more so than women), but when women do come for medicine they often come at a later stage with more severe complications. He thought this might be partly explained by the fact that women are shy, and often prefer self-treatment with traditional medicine before seeking treatment with drugs. He provides a one-two week course of antibiotics as treatment for women with vaginal discharge. He advises the patient to come back with their partner for treatment. This does not commonly happen. Most of his clients are unmarried men. He advises his patients to use condoms during treatment. Most of them are unaware that they have contracted an STI. He thought that AIDS is brought in from Thailand, and personally knew about two or three people who had died from AIDS last year in a neighbouring district. In his opinion, since the AIDS control programme reached his district, people are more careful and there seems to be more awareness about HIV/AIDS. Despite this, however, condom use remains low. In fact, his drugstore stopped ordering or selling condoms seven months ago because there was no demand.

Drug sellers in the district town mention that they mostly see men with symptoms. Women generally come at a later stage of infection and have more serious complications. The pharmacists think this is because women first try to treat at home by themselves or seek traditional treatment and they are shy to admit their symptoms to drug sellers. At present, most pharmacies treat with antibiotics for a few weeks at relatively low costs. The content of treatment provided by drug stores varies widely, however, and the person’s ability to pay was often cited as a determinant of therapy prescribed. First-line treatments often include tetracycline or penicillin.

It is of interest to note that the STEM evaluation found that one of the main obstacles to using the new treatment protocols recommended by the syndromic management training was the cost and availability of some of the newer drugs. Despite this limitation, the evaluation of CARE’s STEM project in Louang Prabang and Oudamxay provinces found that training in the syndromic approach was greatly welcomed by pharmacy staff, as evidenced by the willingness of many to forgo five days income in order to attend the training. The training also served to bring pharmacies more into the national health system, an important achievement given that they are a primary source of outpatient treatment for so many people.
2.3.6 Strategic Assessment Recommendations

IEC and community outreach
- Government health personnel should train village health volunteers (VHVs) on prevention and treatment of RTIs, including STIs. In places where there are no VHVs, staff of the Lao Women’s Union, Lao Youth Union, and Village Committee members should be trained.
- All health education efforts regarding RTIs should address both sexually transmitted and non-sexually transmitted infections. These efforts will require adequate support for the development of appropriate health information materials and training programmes to improve interpersonal counselling skills of health providers.
- Special efforts should be made to reach out to men with accurate information regarding STIs and HIV/AIDS, emphasising the often asymptomatic nature of sexually transmitted infection, the benefits of condom use, and the need for partner referral when infections are treated. This may best be accomplished by reaching men in places where they congregate, such as barber shops, coffee shops, etc.
- There is an urgent need for targeted interventions (awareness raising and prevention) to reach men and women in especially vulnerable groups, such as bar girls, their clients, and the transportation sector (i.e. long distance bus and truck drivers), as well as people who go to work in neighbouring countries, and men involved in road construction; many of these men are migrant labourers from neighbouring countries.

Training and care provision
- There is a need to standardise the case management of symptomatic men and women, ideally using flowcharts that are based on data concerning the types of infection and antibiotic sensitivity patterns common in the Lao PDR.
- There is a companion need to train health care providers of all types, including dispensary staff in drug shops, in the use of such standardised case management guidelines. Such training should focus on the need for enhanced primary prevention counselling, condom promotion, and – where appropriate – partner referral advice, in addition to prescription of appropriate therapeutic agents. Complementary efforts to ensure a sufficient and affordable supply of recommended drugs are also required.

Health system capacity and programme implementation
- There is a need to strengthen the capacity of primary health care facilities to provide first line treatment for common RTI symptoms. Ideally, women coming to MCH facilities and men coming to Out Patient Department (OPD) services would receive appropriate RTI treatment at their first point of contact with the health care system. Referral to specialist gynaecology or dermatovenerology clinics could be reserved for more complicated cases or symptoms unresponsive to initial therapy.
- Antenatal syphilis screening programmes need considerable strengthening to ensure that pregnant women (primi and segunda gravidae) are screened, results promptly reported, and that Veneral Disease Reference Laboratory (VDRL)-positive women and their partners receive correct therapy. To ensure that syphilis screening receives the full participation of pregnant women, the confidentiality of test results must be assured and the cost should be subsidised. As a first step, epidemiological data should be collected concerning the incidence and prevalence of syphilis among pregnant women in the Lao PDR.
Guidelines

- National guidelines regarding the importance of administering prophylaxis for ophthalmia neonatorum to all newborn infants should be developed and disseminated widely to all health staff who provide care for new-borns. Given the high social costs associated with preventable blindness, consideration should be given to public subsidy of such prophylaxis. This effort should be complemented by efforts to increase the proportion of births attended by trained staff.

Research

- Epidemiologic, behavioural and operations research are required for the development of appropriate RTI/STD/HIV/AIDS prevention and case management guidelines and activities.

2.4 Adolescent Health

In 1995, the Lao PDR had an estimated 1.5 million adolescents (10-19 years of age), who made up nearly 23% of the total population (National Population Census, 1995). The vast majority of adolescents are out of school, and one of the main problems facing young people in the Lao PDR is the lack of post-schooling and vocational training opportunities that match with labour market needs. This has resulted in an increasing population of unskilled and unemployed youth. The lack of employment opportunities has also resulted in large numbers of young people migrating internally or travelling to Thailand to look for work. These young people are at considerable risk of sexual and/or commercial exploitation and they have limited access to health services and in particular, counselling or support.

Information about adolescent sexual and reproductive health is scarce, and little comprehensive or in-depth research has been done in the Lao PDR to look specifically at the reproductive health behaviour or needs of adolescents. The Lao Youth Union is beginning a survey focusing on reproductive health of single male and female youth in 150 villages across the country, with support from UNFPA. Large-scale surveys show that early marriage and teenage pregnancy is common and hence poses a high risk of maternal morbidity/mortality (/UNFPA, 19967, NSC and Lao Women’s Training Centre, 1995)15. Additionally, one small survey indicates that many young people, especially those living in urban areas, had their first sexual experience when they were in their teens (Australian Red Cross/Lao Red Cross, 1994)16.

Some work has started on a pilot study to raise awareness about adolescent reproductive health issues among youth. This is being conducted by the Lao Youth Union in two districts in Champasak province, with support from UNFPA. The Lao Youth Union is pilot testing similar approaches in Oudomxay and Luang Namtha. Other work of a similar nature includes a plan by JOICFP to develop IEC focusing on youth, in partnership with various government departments, plans by Ecole sans Frontiere to develop IEC to support some of the strategies in the EC/UNFPA Reproductive Health Initiative and a plan by Health Unlimited to conduct a study of the feasibility of adolescent reproductive health focused IEC through the media.

2.4.1 Adolescent Pregnancy

Early marriage and pregnancy in adolescence are the norm in Laos, and marriage usually happens quickly – i.e. weeks to months after a first “conversation” between a boy and a girl (this
conversation may be arranged). As a result, in both highland villages and lowland communities, many adolescent girls are married by age 16-17 and start childbearing shortly thereafter. In the peri-urban areas visited by the assessment teams, the average age of marriage was found to be slightly higher (around 17-18 years). While the age of marriage is low in most rural Lao Loum communities (the team visited villages where 15-17 years seemed the norm), it is even lower in Lao Theung populations. In one remote district, for example, many girls marry before age 14 and nearly all are married by age 16. Typically, the age range for marriage among boys was wider, from approximately 15-18 years.

Generally both the young woman and the community expect that she will become pregnant soon after marriage. The FBBS (1995) estimated that median age at first birth for all married women was 20.5 years and according to a 1994 survey, 14% of adolescent girls have already started childbearing (NSC/LWTC, 1995)\textsuperscript{15} Early marriage and early pregnancy are important contributors to the country’s high maternal and infant mortality rates. Data for 1996 indicate that 15% and 30% of all maternal deaths are among women less than 20 and 25 years of age respectively (UNFPA, 1996)\textsuperscript{7}. The strategic assessment teams encountered several examples of maternal death during adolescence. Two of these cases involved girls that were 13 and 14 years old.

2.4.2 Pregnancy in Unmarried Adolescents

Interviews with community members revealed that sex and pregnancy before marriage are common, and are more or less accepted to the extent that pregnancy leads to marriage. When an unmarried girl becomes pregnant, and the boy refuses to marry her, his family is required to pay a fine to the village. In some instances, the girl’s family is required to pay the village a fine to ask for forgiveness. If marriage is not the ultimate outcome or if the boy can not be found, the girl may have the child and look for another husband (either before birth or after), or if financial resources permit, have an abortion. Other alternatives include adoption or raising the child with support from family members. In some instances, the teams found that pregnancy outside of marriage can lead to negative social consequences, such as extreme pressure and social stigmatisation, in case the father of the child is not identified. Although this type of information is difficult to verify and many factors may contribute, in one highland village visited, village leaders reported three cases of suicide among pregnant adolescent girls in 1998.

2.4.3 Community Perceptions Related to Adolescent Pregnancy

Although teenage pregnancy is common, the team interviewed very few people who had an appreciation or understanding of the health and social risks associated with adolescent pregnancy. Some community leaders mentioned that childbirth might be more difficult for a girl who is not physically mature. There was some awareness that complications due to obstructed or prolonged labour are more common among younger women. A few village leaders acknowledged that many of the babies born to young girls are born prematurely. In general, they believed that very few neonates born to young girls survive. The team encountered only few women (Lao Theung) who seemed to think that adolescent pregnancy poses a health risk (higher likelihood of fever, body ache or pain, stillbirths, and retained placenta).

When probed, most people talked about the socio-economic problems facing young couples with children and the increased likelihood that girls will drop out of school. People also said that young girls are not concerned with their sexual or reproductive health, and are largely unaware of
the health risks associated with early childbirth. Overall, community members said that adolescent pregnancy was “not good” without giving any specific reasons.

One single adolescent girl described her friend’s experience: “She is now 17 years old, and her first baby died after seven days. She has another child who is now nine months old. They are very poor and she is very unhappy. She has to work all day to provide food for the family and has no time to enjoy her baby.” The girl attributed her friend’s difficult socio-economic situation to the early onset of childbearing. Another young girl who was pregnant was feeling very depressed and concerned about coping with having a child under conditions of poverty. Other single adolescents reiterated the difficulties associated with early childbirth, but only talked about socio-economic pressures.

The following observations describe some of the practices related to early marriage and childbirth among highland communities:

The team visited one district where premarital sex occurs even before a girl has started menstruating. Here pregnancy usually leads to marriage. Polygamy is widely practiced in this district, and many older men purchase young girls as second or third wives. Men may purchase girls as young as three to five years of age and the girls live with the man’s family until they are “ready” for sex and marriage. Premarital sex occurs outside the house, in secret in the forest, and if the couple is caught, a large fine has to be paid to the village. The norm in these communities is for a woman to have a child every year during her reproductive years. Many young adolescents had already experienced several pregnancies. There was little awareness about contraception and virtually no use of contraceptive methods, as the national birth spacing program had not yet reached this district.

2.4.4 High Risk Sexual Behaviour

Adolescents in many Lao communities seem to engage in risky sexual behaviour. Both boys and girls appeared shy to discuss sexual activity but acknowledged that it often happens before marriage. Community leaders were more reluctant to acknowledge sexual activity among unmarried youth. Adolescent boys reported frequent sexual activity outside of their villages, and boys may have multiple sex partners before marriage. Some youth visit bar girls in district and provincial towns or go to Thailand. It is common for adolescents in lowland villages to work outside of the village and to have resources that enable them to pay for commercial sex. In highland villages, lack of financial resources largely prohibits young people’s access to commercial sex, although sex before marriage with multiple partners from the village is common.

Most young people appeared generally not aware or concerned about the health risks associated with commercial sex or multiple sex partners. While the majority of adolescent boys in peri-urban areas seemed to know that condoms help prevent STDs, many boys in rural areas had never seen or used a condom. In one remote district, adolescents had never heard of condoms.

2.4.5 Other Reproductive Health Problem

Abortion

Incidence of induced abortion appears low in the highland villages visited by the assessment teams because of the high infant and child mortality, the lack of information about abortion
services and the difficulties of accessing health services and abortion in particular. In lowland villages abortion among unmarried young women is much more common; while people are reluctant to discuss the issue, some village leaders mentioned that young women go to Thailand for abortion. Adolescents were uncomfortable discussing abortion or said they did not know about it.

**Other health risk behaviours**

The team also found evidence of other high-risk health behaviours that seem to be common among adolescents in peri-urban areas, such as glue sniffing and occasional amphetamine use. Alcohol consumption was generally reported to be low, but the team encountered a few cases where young people’s alcohol consumption was excessive. Most adolescents consume alcohol during festivals or on other special occasions. Generally, alcohol consumption was not reported by community members to be associated with aggressive behaviour or sexual risk-taking.

In some Lao Theung communities, children start smoking at a very young age. The team observed many small children under ten who were smoking cigarettes and pipes. Smoking among girls appeared less common in general, although not in these isolated rural communities. Several adolescent boys talked about strong pressures from peers and older men that encouraged early onset of smoking. Many boys in Lao Loum villages start smoking between ages 10-15. If a boy is not interested in smoking or tries to quit, he is thought of as unmanly.

### 2.4.6 Access to and Use of Reproductive Health Information and Services

**Awareness and information on contraception**

The majority of adolescents expressed interest in having smaller families to enable them to achieve better living standards. The team noted that most adolescents from Lao Loum groups talked about the lack of land and rice to feed a large family. Among the few Lao Theung adolescents interviewed, young girls said that having too many children would make them tired, thin and ugly. They also thought it would also make them age prematurely. Nearly all adolescents discussed the socio-economic pressures resulting from a large family size.

Many girls in peri-urban areas and in areas where the national birth spacing programme has been introduced had heard about the different family planning methods, mostly from women in the village who are using contraception (oral contraceptives, injectables, and to a lesser extent sterilisation). Some also knew about their side-effects from relatives or from rumours that circulated in the community. Nearly all adolescents interviewed lacked comprehensive information, and among both married and unmarried adolescents, knowledge about contraception was found to be limited or inaccurate. Some adolescents in rural areas reported that they were afraid of using birth spacing methods.

Most of the young peri-urban women interviewed indicated that they would like to space their births, two to three years apart. The team also talked to a number of young women, mostly in rural areas, who wanted to first have three to four children and then start the use of contraception.

**Contraceptive use**

Contraceptive use among adolescents varied highly between and within districts. Some girls were using OCs and/or condoms, and/or in the Northern part of the Lao PDR the monthly pill from China. This contraceptive pill is readily available from drug stores or drug peddlers and thus is easier to obtain for unmarried youth. In one group discussion, young people mentioned
that 11 of the adolescent girls in the village were using contraception. In other villages, adolescents had never heard about contraception.

Many young people seemed to prefer condoms to OCs, but could or did not articulate a reason for this preference. This may be because of the dual protection of condoms, the fact that condoms can be used without anybody in the family/village/MCH clinic knowing, and that condoms are easy/convenient in case of unexpected sexual activity.

**Access to contraception**

Adolescents’ access to contraceptive methods, including condoms, remains very limited. Although the national policy on birth spacing stipulates the provision of modern contraceptive methods, including OCs and condoms, to people irrespective of their marital status, health providers at MCH clinics either have no specific policy for young people, or think they are not allowed to provide contraceptives to unmarried youth. In Khammouane province, for example, staff at the provincial hospital’s pharmacy reported that on average one adolescent per month will come to buy condoms. Young people’s utilisation of contraceptive services at the MCH clinics is very low; both staff attitudes and a lack of information and awareness contribute to this. Shyness and embarrassment are other important reasons for low attendance at public clinics.

While condoms are sold through the private sector, few drug stores that have condoms for sale will sell them to adolescents. None of the drug sellers interviewed reported having sold many condoms to adolescents. Young people themselves perceived buying condoms as an obvious sign of sexual activity before marriage, and were uncomfortable with having people know about it. The common perception among adolescents, adults and some health providers is that condoms provided through the government’s birth spacing programme are intended to be used for that purpose only. This artificial distinction is likely to further inhibit young people’s already limited ability to protect themselves from STIs.

**Awareness of STIs and HIV/AIDS**

Adolescents’ awareness and information about STIs was generally inadequate. Adolescents seemed to have limited understanding and knowledge about HIV/AIDS prevention or ways of transmission. Some knew that the HIV virus is transmitted by sex and sharing of needles, but most were uncertain or had inaccurate information. Comprehensive knowledge about different RTIs/STIs (type, symptoms, treatment) was virtually non-existent. According to health providers, HIV/AIDS is a problem among adolescents, and especially for those who work in, or travel frequently to Thailand. The team noted that adolescents lacked comprehensive information on RTIs/STIs, including HIV/AIDS. Lack of awareness was most obvious in rural and highland areas visited by the team. Most youth were shy to discuss STIs. Some girls knew about vaginal discharge, having heard about it from other women in the village. The team did not encounter adolescent girls who reported having discharge.

**Prenatal care**

The strategic assessment found that adolescents, even those living relatively close to health facilities, were not likely to attend prenatal care services, mostly due to a lack of awareness about its importance and the health risks associated with early pregnancy and childbirth. They were also shy, intimidated and, according to some, disinterested in maternal health.

**Information, education and communication on reproductive and sexual health**

In the majority of highland communities, adult-adolescent communication about sexuality and reproductive health is virtually non-existent. In lowland villages and towns, young people heard about contraception and other sexual and reproductive health issues from older married women.
Unmarried adolescents have very little access to health education from health staff. In addition, printed information on sexual and reproductive health is rare. The team did not encounter any health-related information or messages that were specifically targeted to adolescents, other than information about HIV/AIDS that the LYU is providing in schools in Xieng Khouang province. In areas close to the border with Thailand, Thai television and radio provide some information about HIV/AIDS, but when asked, young people seemed to remember few details of these messages. Most prefer to listen to music. At present, neither Thai nor Lao radio or television broadcast information on other reproductive health topics.

In some districts of Xieng Khouang province, secondary school students receive two hours per week of HIV/AIDS education from LYU and health staff. The LYU also provides some community education, but this does not include information on contraception or STIs. One provincial radio station broadcasts daily health promotion spots. In the near future they plan to develop television and radio spots on Acute Respiratory Infection (ARI), diarrhoea, birth spacing and EPI.

In collaboration with the Ministry of Education, UNFPA is working to strengthen reproductive and sexual health education efforts in schools and for young people not enrolled in formal education. Several curricula are being field-tested among seven-nine year olds, and these materials will be eventually introduced in more than 100 schools in six provinces.

When asked how best to reach youth with essential reproductive health information, there was general agreement that modern mass media was the best way, but programmes had to be more attractive to young people. Additionally, ethnic minority groups thought that young people in their communities would benefit from having health staff come to explain about different sexual and reproductive health issues, especially family planning. This should ideally be someone young, and someone who speaks the local language to help facilitate communication and understanding.

In addition to a regional UNFPA project, there are two other projects that began in 1999 and specifically target adolescents. These are the EC/UNFPA Adolescent Reproductive Health Initiative, which will be supporting various NGO projects, and the Australian Macfarlane Burnett Centre Project, which will be working in partnership with the Lao Youth Union. The latter project focuses on HIV/AIDS and STI prevention and awareness raising in three Central and Northern provinces of the Lao PDR.

### 2.4.7 Community Perceptions about Adolescent Health

There was virtually no awareness or understanding of the different reproductive health needs of adolescents among community leaders, traditional healers, men and women interviewed in either lowland or highland villages. Traditional healers, for example, said that, “adolescents didn’t have any health problems.” Many older women were surprised when the team discussed adolescent pregnancy and related reproductive health problems. In one group discussion in Xieng Khouang province, 8 out of 12 women had their first pregnancy during adolescence. None of them thought this was unusual. The team further noted that the great majority of community leaders, traditional healers and village birth attendants had never considered the reproductive health needs of adolescents or their special risks, including those related to early marriage and pregnancy. One team member said: ‘Adolescent health needs were never mentioned in our discussions with
villagers. It appeared as if adolescent health problems were not important to the community. Even adolescents themselves never talked about their needs.”

Adolescents themselves appeared largely unaware and uninformed about reproductive health and most did not recognise the health and social risks associated with early marriage, early pregnancy and childbirth, unprotected sex and STIs.
2.4.8 Strategic Assessment Recommendations

IEC and outreach/community-based activities
- Sexuality and reproductive health education should be expanded beyond the provincial town schools, and efforts should be made to develop greater activities with out-of-school youth (e.g. through the LYU, LWU, or village committees). Family life education (including sexuality education) should be provided as part of the school curriculum. The feasibility and utility of LYU representatives becoming peer educators and other participatory approaches should be tested on a pilot basis.
- There is an urgent need to develop appropriate IEC formats that are of interest to adolescent audiences and to utilise such materials to reach youth with key reproductive health information.

Training and counselling
- Health providers should be sensitised to provide appropriate reproductive and sexual health education and counselling to adolescents, including adolescent pregnancy, information about birth spacing methods, and sexually transmitted infections.

Policy implementation
- The current policy to provide condoms and other contraceptive services to all who need them, regardless of marital status, should be more broadly implemented to improve young people’s access to the different contraceptive methods.

Research
- The need for emergency contraception should be investigated. If such research demonstrates a strong need, best international practices on emergency contraception should be introduced on a pilot basis to test their usefulness and appropriateness in the Lao PDR.
- More in-depth data are needed using both quantitative and qualitative methodologies on adolescent reproductive health problems, perceptions, and sexual behaviour, given the lack of data on adolescent health.
- Evaluative research to develop best models to reach adolescents through peer education, promotion of role models and other participatory approaches for improving adolescent reproductive health.
3 PROPOSED STRATEGIC ACTION

A framework for integrated reproductive health programming

A set of recommended interventions has been presented at the end of each of the previous sub-chapters (2.1-2.4), to address specific reproductive health problems. After developing this set of recommendations, the assessment team conducted an informal prioritisation exercise. The team was divided into five subgroups which rated each recommendation as being of high, medium or low priority based on three criteria:

- potential for impact on improving reproductive health;
- policy compatibility; and
- operational viability. After rating each proposed intervention with a numerical value (3 for high, 2 for medium, and 1 for low), the scores assigned by each subgroup were pooled, and subsequently, each group's score was pooled. This produced an overall rating score for each recommendation. The results of the prioritisation exercise were then reviewed by the assessment team.

Generally, recommendations related to IEC activities and adolescent reproductive health received high priority scores, as did the recommendation to strengthen linkages between MCH and birth spacing activities. The team identified several policy barriers to improving reproductive health, namely:

- allowing safe abortions where there are health and/or social reasons; and
- simplifying access or procedural requirements and reviewing the criteria for sterilisation to enhance its availability where it is the preferred method of choice;
- The formulation and implementation of a comprehensive HIV/AIDS policy.

Once the team had reviewed the priorities and reached agreement about recommendations for policy and programme action on the key reproductive health issues included in the strategic assessment, each recommendation was subsequently classified in terms of its:

- type - whether the recommendation pertains to either policy, programme strategy and/or programme implementation;
- level - whether the recommendation refers to action to be taken at national, provincial, district, health centre and/or community level; and
- time-frame - whether the recommendation is expected to have the possibility of impact in the short- (1-3 years), medium- (2-5) or long-term (5-10 years). Based on the results from the classification exercise, the assessment team concluded that the recommendations could be grouped in three categories based on their impact:

**Priority Interventions (Short term):** Those recommended interventions that have a potential short-term or life saving impact;
Programme strategy: Those recommended interventions, policy or programme modifications or additions that would strengthen health programmes currently being implemented; and

Policy and programme development: Those recommendations that would contribute to policy and programme development toward an integrated reproductive health programme.

Recommendations grouped under each of these three categories are discussed below.

3.1 Priority Interventions

The assessment findings point to several timely and excellent opportunities for interventions with an immediate impact. These include:

Management of postpartum or postabortion haemorrhage: Common delivery complications due to retained placenta, postpartum or postabortion haemorrhage contribute to high levels of maternal morbidity/mortality. In the Lao PDR, village health volunteers, LWU representatives and other community-based health workers in villages with relatively good access to higher levels of care should be trained and equipped to refer a woman with complications from retained placenta or postpartum haemorrhage to a first-level referral facility where oxytocin or IV fluids can be administered. In addition, the skills of health centre staff should be upgraded and necessary supplies and equipment made available for administration of oxytocin and IV fluids in the immediate postpartum period.

Routine prophylaxis treatment or intermittent treatment of pregnant women (primi- and secunda gravidae) for malaria in areas where it is endemic is an essential life-saving intervention. Since malaria is a significant cause of maternal morbidity/mortality, malaria prophylaxis and intermittent treatment should be included as an integral component of standard prenatal care in endemic areas.

The district health level should be strengthened to perform its functions as a first-level referral facility for women with complications from pregnancy, delivery or in the postpartum period. This includes the capacity to manage complications related to unsafe/incomplete abortion. District hospital staff’s skills should be upgraded to include key life saving-skills. It is recommended that such training include all categories of health providers at the district hospital who are likely to attend women with obstetric complications (nurse, nurse-midwives, medical doctors, medical assistants). All relevant training curricula need to include a midwifery component. Standards and protocols for normal and complicated delivery care need to be developed and their implementation monitored.

Village health volunteers and LWU representatives should be trained to enable them to motivate women (and men) to space births for an optimum birth interval of between 24 and 36 months. Currently, many births take place in shorter intervals. To facilitate the task of promoting the use of contraceptive methods in the community, each LWU member should have a checklist of activities for easy memorisation and standardisation of tasks across participating communities. As part of this effort, contraceptives, including oral contraceptives and condoms, should be made readily available at the village level.

Case management of STIs, including syndromic diagnosis, should be standardised according to national guidelines and protocols, and all providers should be trained in their use. Current treatment practices, in particular in the private sector, are not only wasteful but also are likely to be ineffective as they rely on costly and sometimes inappropriate drugs. Early and appropriate treatment of STIs, including partner referral and condom promotion, would not only reduce morbidity due to STIs but is also known to reduce the rate of HIV transmission.
3.2 Programme Strategy Development

As ongoing programmes and activities are being expanded toward greater geographic coverage, and opportunities for integration of different reproductive health services explored, the strategic assessment found that a need remains to strengthen existing reproductive health programmes. Recommendations for each current programme area are as follows.

Safe motherhood programme. The safe motherhood programme could make a greater contribution to reducing maternal morbidity and mortality by: (a) strengthening the early recognition in the community of danger signs or symptoms in pregnancy, delivery and the postpartum period, and ensuring timely referral through training of VHV/LWU and the community; (b) helping communities plan for emergency transport if needed; (c) increasing awareness of village committees, LWU, LYU of the health risks of unsafe abortion and improving the access at village level to family planning methods for women at risk of unwanted pregnancy; (d) upgrading skills of health centre staff in the initial management of pregnancy and childbirth complications; (e) equipping and preparing district hospitals to provide quality prenatal and delivery care and basic essential obstetric care (EOC).

Birth spacing programme. There is high community demand for birth spacing and the programme should be expanded to cover the whole country as soon as possible while maintaining standards of care. The team observed that the effectiveness of the programme could be enhanced by: (a) stronger IEC efforts through the production and distribution of user-friendly IEC materials, and the training of service providers in their use; (b) reaching men, particularly in ethnic minority populations, through making more and better use of the LYU and Village Committees and networks; (c) strengthening training of service providers in addressing side-effects and misconceptions about different contraceptive methods; and (d) placing increased emphasis on community-based distribution of contraception, especially in more remote parts of the country.

In addition, it is highly recommended that the arbitrary distinction between condoms supplied by the birth spacing programme and the National Programme on the Control of AIDS be discontinued. To make contraceptives more accessible to young people, oral contraceptives and condoms should be made widely available to all those in need as stipulated in the national policy on birth spacing.

STI programme. Enhanced IEC is required to strengthen the national RTI/STI programme, as follows: (a) the VHV/LWU/LYU/Village Committees need to be trained on reproductive tract infections, including those that are sexually transmitted, to enable them to provide accurate IEC to the community; (b) men should be reached with essential information in places where they generally congregate; and (c) targeted interventions should be undertaken to reach men and women in especially vulnerable groups, such as bar workers, their clients, and the transportation sector (i.e. long distance bus and truck drivers), as well as people who go to work in neighbouring countries and men involved in road construction.

To reduce stigmatisation of STI clients, all health staff at the first point of contact (OPD for men and MCH for women) should be trained in standardised case management of RTIs, including syndromic diagnosis, partner referral and condom promotion.

In the Lao PDR, the private and informal health sector is an important provider of health services, and generally people go to a pharmacy or self-treat for common illnesses. The assessment team found that the treatment provided, particularly for treating STIs, was often inappropriate or substandard. Not only were the drugs used generally more expensive than those used in the public sector but the quantity of treatment provided was also inappropriate. Thus, both efficiency and effectiveness are reduced. It is recommended that private providers be trained in
standardised RTI case management, as well as in the provision of oral contraceptives and condoms.

The assessment team indicated that the impact of training alone on drug dispensing behaviour is likely to be limited. What is needed is not only periodic training of private providers but also that such training be accompanied by IEC for the community on appropriate drug use. Closer linkages between public and private health service providers will also facilitate efforts to monitor certain elements of the private sector. The Government will need to consider introducing a regulatory framework for the private health sector once the public health system is made fully functional.

Adolescent reproductive health. The HIV/AIDS programme of the LYU should be broadened to cover both family life education in schools and recruitment/training of peer educators to reach out-of-school youth. Given the limited activities directed at youth and their considerable sexual and reproductive health needs, LYU activities in reproductive health should be expanded nationwide.

Establishing stronger linkages among these programmes. The effectiveness of each of these four national programmes will be greatly enhanced if coordination among each of them is reinforced and re-emphasized at the national level, while their services are linked at the field level. Many opportunities are missed for providing integrated care and many services, which are linked, are also not being provided in a comprehensive manner. Examples of how this coordination/linkage could be operationalised in the field include: birth spacing information should be provided at prenatal care visits and immunisation sessions; comprehensive reproductive health education and counselling, including for the prevention of RTIs, should be given at the time of family planning consultations especially IUD insertion; the provision of condoms (or other contraceptives) for birth spacing should be accompanied by education and counselling on RTIs. In essence, any opportunity for the public health system to come in contact with clients should be optimised for reproductive health education.

3.3 Policy and Programme Development

The assessment team believes that the above measures, when fully implemented, would considerably improve reproductive health status. For sustained improvement, however, further policy and programme development is needed. The issues to be addressed here relate to strengthening the health system, improving health systems outreach, enhancing professional competence, undertaking research to guide policy and programme development, and formulating an integrated reproductive health policy.

Strengthening the health system

While in principle well planned, the public health system suffers from several constraints, including:

- The infrastructure is very limited despite several projects currently strengthening the primary health care network. The Asian Development Bank, however, has estimated that even after the current projects have been completed, approximately a third of the country will still not be covered by primary health care activities,

- In the whole system, while there is no lack of staff and human resources, in many instances, their technical capacity is not regularly upgraded, and practical training is limited. Staff competency decreases because of low utilisation of services. Even when staff have been trained, often staff turnover is fast, or staff responsibilities are changed, creating a service
vacuum. Recruiting qualified staff to work at health centres in rural areas remains a challenge and consequently, many areas lack functioning health posts due to an absence of staff.

- The necessary medicines and other supplies to provide reproductive health care are often not present in health facilities. The revolving drug fund is expected to solve this problem but even so, some of the facilities visited by the assessment teams have many drugs that are not procured according to demand (e.g., there is an excess of certain drugs, and insufficient supplies of others).

As a result of systematic weaknesses in the health system, health services at all levels are considerably under-utilised, which in turn compromises their ability to provide quality health care, including for reproductive health. It is widely acknowledged that overall programme management capacity needs to be strengthened. For this process to be initiated, it is necessary that: (a) data collected are used for planning and management; and (b) the health system at all levels takes more of a public health focus and responds more efficiently, and with an emphasis on quality of care for those who seek services.

**Strengthening the use of data for programme management**

The assessment team found that programme managers were not conscious of the health needs of the community and the current levels of health service utilisation or coverage. This seems related to the overall system-wide lack of management capability and public health training and orientation. For example, there is no concrete understanding of health planning, using data for decision making and prioritising, mapping communities to track progress on achieving desired coverage levels, etc. Such sporadic use of data hampers system-wide efforts to reach special or vulnerable groups with information and services, ensure adequate coverage for the different health activities, procure adequate amounts of drugs and supplies, etc.

There is a need to introduce simple tools and instruments to facilitate data collection and use for health-related activities. An effort should be made to strengthen community ability to monitor reproductive health needs and status. Examples include: identification and mapping of villages within catchment areas; mapping of key features for each community or district (e.g., health centres, households with pregnant women, etc); and management of relevant data at the district level that will be useful for planning, decision-making and priority setting at the district level and below.

Additionally, throughout the system, monitoring, feedback and supervision systems need to be revised and implemented by the respective health authorities. Given the seriousness of maternal mortality in the Lao PDR, this may also include maternal death review committees that conduct verbal autopsies, as a demonstrated tool to strengthen quality of facility-based maternal care, raise community awareness on maternal health and increase political commitment.

**Focus on client-centred quality of care**

All levels of the health system would benefit from a re-orientation away from distribution-based service provision toward one focused on client-centred quality of care. In addition, there is a well-defined need to improve clinical practices, counselling and interpersonal relations between clients and providers. Several actions are necessary for this process to be initiated, including:

- developing and implementing standards and norms;
- periodic retraining of staff;
- technical supervision for on-the-job training;
- enhancement of professional competence through medium- to long-term training;
- provision of necessary equipment and supplies;

**Provision of manuals and other IEC materials**
To assist health staff in performing their tasks and the introduction of simple tools to facilitate periodic monitoring and assessing quality of care.

**Expanding health system outreach**
It is widely acknowledged that the health system outreach is very limited, which, combined with difficult access, severely limits health service coverage even when facilities are adequately staffed, equipped and supplied. As such, the following issues require attention:

- the EPI team can only spend a very limited time in the village as the cold chain for vaccines needs to be maintained;
- additional activities would impose a considerable workload on EPI or malaria staff; and administrative guidance and job descriptions would need to be revised. It is not clear how serious these constraints are.
- Making the EPI or malaria team a more comprehensive health team for community outreach would expand the reach of services and contribute to utilization of health facilities.

Developing and testing a comprehensive outreach system
Currently the EPI and malaria teams have schedules to visit villages in zones 0, 1, 2 and 3, approximately four times a year. There is no outreach in zone 0, as it is expected that people will access the services offered by the health facility. The assessment team understands that encouraging the EPI team to provide additional services in a pilot project by UNICEF (termed internationally as “EPI-plus”) has had mixed success. There are several technical and organisational issues which need to be addressed in order to expand or compliment ongoing activities of the EPI or malaria programme. These include:

- addition of a health staff to the EPI or malaria team;
- forming a health outreach team for limited facility-based outreach from the health centre; or
- creating a mobile district-level team that can integrate all the outreach functions for reproductive health.

Such an effort will need to have the support and cooperation of the different organizations working to improve reproductive health in the Lao PDR, and calls for a joint effort from donors and government. In order to accomplish more integrated community-based health activities

---
6 zones are defined as concentric rings of increasing distance from the district centre.
through health outreach teams, specific functions, tasks and responsibilities should be defined for these teams, and agreed upon at the central level. One way such a team could manage its workload in the community is to work with simple checklists and to have up-to-date information on target groups (e.g. the number of women of reproductive age; the number of children under age one; pregnant women and women who recently delivered, etc.). One of the teams’ tasks will be to provide information concerning various contraceptive methods, enhance community-based distribution of contraceptives, and supply drugs and contraceptives to the VHV or LWU, as appropriate. The team could also provide other health outreach activities, including: sales of bed-nets for the prevention of malaria, family planning and prenatal care services, provision of iron folic acid, tetanus toxoid immunization, malaria prophylaxis or treatment as appropriate, regular support and supervision to the VHV and LWU in their community education work, postpartum and postabortion counselling on contraception.

**Community mobilization**

In view of the difficult access to health services and the limited availability of services at the periphery, community linkages with the health system are essential to improving reproductive health. It is clear that important entry points for first contact and promotion of preventive health activities are the LYU and LWU, but there is a noticeable under-utilization of the potential of this informal and expansive health network.

The assessment teams noted that many community-based health workers lack the motivation or incentives, training and IEC materials to focus on preventive care activities, such as promoting the use of bed-nets, motivating families to practice birth spacing, conducting growth monitoring sessions for infants, encouraging feeding of colostrum, and to provide information about nutrition, sanitation and clean water, etc.

Health outreach activities as described earlier will have a higher success and impact if they are supplemented by community mobilization and IEC activities targeting men, women and adolescents. Communities need to be mobilized to use existing health services appropriately. Activities should include intensive IEC, education and orientation of village leaders (including village committees, LWU and LYU representatives) and the network of other relevant mass-organizations active in the village.

Specific recommendations include:

- specifying a few tasks that are integral to the work of each LWU representative in the community, such as for example: providing prenatal care; promoting and distributing contraceptive methods, promoting skilled attendance at birth, and raising awareness on complications related to pregnancy and delivery. These tasks and educational activities should be independent of other project or programme activities (i.e., designing a core programme for LWU and LYU representatives across the nation); and

- using community demand for contraceptives as an entry point for expanded activities in reproductive health. Both the LWU and the VHV could serve multiple functions as providers of information and education on contraception, maternal health and RTIs/STIs, among other topics.

Community education seems particularly important to contribute to better care-seeking behaviour for prenatal and postpartum care, in the event of delivery complications and for the treatment of RTIs.

**Development of health services for very remote areas.**

Even with a strengthened health system, several areas in the country will remain very remote or cut off for many months during the rainy season, and thus are not reached regularly through routine outreach. A long-term effort will be required to develop a special pattern of health
service delivery that takes into consideration these challenges of geographic terrain and the extremely limited physical infrastructure. In general terms, local capacity needs to be upgraded and health centres in remote areas prepared to handle normal and complicated deliveries that do not require a surgical theatre. Determining areas where this type of special outreach may be pilot-tested can be achieved through mapping exercises, determination of community priorities in reproductive health in close collaboration with the community, and expert guidance. Considering the long-term framework required for this intervention, in the immediate term, the need remains to upgrade district hospitals to handle all complications of pregnancy (including those requiring a surgical theatre) and unsafe abortion.

**Enhancing professional competence**

The assessment team has made several recommendations for in-service staff training in reproductive health issues included in this strategic assessment. One-time training is not sufficient to maintain staff competence. It is recommended that the MOPH develop a training plan to use existing resources more effectively and evaluate the need to establish a national training centre for continuous skills development in obstetric care and reproductive health in general. This will help institutionalize national standards of care and maintain levels of excellence. Additional recommendations for long-term training include:

- Considering the importance of midwifery skills and practice at all levels of the health system, and in particular at the district and health centre level, it is recommended that the nursing curriculum include a strong component on midwifery (knowledge and skills) to ensure adequate provision of care in this area. Standards, norms and protocols for normal and complicated delivery care should be developed and all relevant staff trained in their use.

- The Safe Motherhood Policy outlines services to be provided at the provincial hospitals. Providing such services with high levels of quality calls for professional leadership and excellence. This type of leadership will help promote and support safe motherhood activities by and at the provincial hospital. Over the long-term, it is important for the health system that professional competence in obstetrics and gynecology is strengthened. It is recommended that one doctor from each provincial hospital (beginning with the regional centre) receive specialized ob-gyn training so as to provide clinical leadership. It is envisioned that these specialists will continually upgrade the clinical skills of all staff within the province through periodic in-service training and supervision.

- It is recommended that national guidelines for the provision of integrated reproductive health care should be developed and implemented. Staff should be trained in the concepts of integrated service provision, quality of care, and the importance of client counselling, among other topics (see also the last section of this chapter).

**3.4 Research for Policy and Programme Development**

It is important for the design of policy and programmes that the current research base for comprehensive reproductive health policy and programme development be expanded. In particular, it is suggested that research be conducted in the following areas:

- *Pilot testing of alternative models of expanding health outreach* (as discussed earlier in this chapter).

- Formative research on innovative community approaches to emergency transport for obstetric emergencies.
- Explore increased involvement of the private sector in improving reproductive health e.g., social marketing.

- Epidemiologic and behavioural research concerning RTIs and STIs including HIV/AIDS necessary for the development of effective prevention and case management activities.

- Formative research on the possibility of introducing emergency contraception, and if found useful and relevant to the country’s needs and priorities, to pilot test its introduction in selected areas.

- Target group research for the development of IEC materials on different Reproductive Health issues that are of interest and attractive to adolescents.

- More in-depth data are needed using both quantitative and qualitative methodologies on adolescent reproductive health problems, perceptions, and sexual behaviour, given the lack of data on adolescent health.

- Evaluative research to develop best models to reach adolescents through peer education, promotion of role models and other participatory approaches for improving adolescent reproductive health.

### 3.5 Developing a Comprehensive Reproductive Health Policy

It is encouraging to see that the Lao PDR Government has recently developed forward-looking safe motherhood and birth spacing policies, and is planning for their wide implementation. An STD policy is also being formulated. To guide the development of interventions for the provision of quality reproductive health services that will lead to sustained improvement in the reproductive health status of women, men and young people, it is highly recommended that the government consider developing a comprehensive reproductive health policy. The formulation of such a policy will facilitate linkages between and among related reproductive health services, while also considering more sensitive issues, such as establishing optimal criteria for approval of induced abortion and female sterilization.

Such a comprehensive reproductive health policy would need to include:

- an affirmation of national consensus and commitment to improve the country’s reproductive health status;

- strategies for improving reproductive health;

- an enumeration of services to be provided at each level of service delivery;

- organizational mechanisms for implementation of such strategies;

- required human and financial resources;

- monitoring and evaluation procedures on implementation of the policy;

- establishment of indicators for monitoring changes in reproductive health over time; and

- an outline of the role of private sector and NGOs, and a commitment to intersectoral collaboration.
3.6 Providing Integrated Reproductive Health Care

Providing integrated reproductive health services will not only require efforts to develop a comprehensive policy and strengthen the health system, but also the design of an essential service delivery package based on programme and policy activities for all reproductive health care. This strategic assessment has addressed four major reproductive health issues: maternal health, birth spacing, RTI/STI/HIV/AIDS and adolescent health. Acquiring an in-depth understanding of the incidence and prevalence of violence against women and the role of gender among the country’s different populations will require special studies. Similarly, other important reproductive health components such as infertility, reproductive cancers, and reproductive health of the elderly need to be included in a common framework in order to cover the whole life-span. This approach has been advocated by the International Conference on Population and Development (ICPD), and the Lao PDR MOH should be applauded for the initial steps it is taking to conceptualize and test the operational and policy implications of this approach.

The table in Annex 3 shows the various Reproductive Health services that should ideally be provided at different levels of the public health delivery system, for the reproductive health issues included in the strategic assessment. Required services are presented for the community, health centre, district hospital and provincial hospital level. Services not currently being provided within the public health service have been marked in bold. The table indicates that many new service components need to be introduced in the Lao PDR. As has been highlighted throughout this report, the community level needs strong reinforcement.

In addition to adding new services to better address the country’s reproductive health needs, it will be necessary to strengthen existing linkages among services. The need for improved linkages arises both because of the need to utilize ‘missed opportunities’ in the provision of reproductive health care, and to provide services that are closely related. At present, many opportunities are missed that would allow for more integrated care. For example, it has been observed that in many instances even maternal health and birth spacing services are not fully integrated. Moreover, some services that are linked are not provided in a comprehensive manner. For example: birth spacing information should be provided at prenatal visits and immunization sessions; comprehensive reproductive health education, including for the prevention of RTIs, should be given at the time of a family planning consultation; and the provision of condoms (and other contraceptives) should be accompanied by education about RTIs/STIs. Given the low levels of health system utilization, every client contact should be utilized for reproductive health education and service provision.

Moving toward integrated reproductive health services

At the moment, the concept of ‘reproductive health’ and its implications for the various levels of health services in the Lao PDR are not well understood by health professionals and programme staff. The move toward integration will take time and needs to proceed in an incremental manner, building on already existing programme activities and policy commitments. The following steps are suggested:

- **Develop a comprehensive Reproductive Health policy building on existing policy documents.** Elaborating an integrated Reproductive Health policy would be a key initial step in moving toward a system of integrated reproductive health care.

- **Orientation of staff on reproductive health.** While high-level health authorities have considerable appreciation of the reproductive health approach, most service providers do not yet fully understand the new concept or the rationale for providing integrated services. This lack of orientation is partly a result of vertical programmes inherited from the past. Since
staff orientation on reproductive health as set forth in the Programme of Action of the ICPD will need to be dynamic and participatory, rather than merely informational, a series of workshops and seminars is the most appropriate forum for this kind of activity. Further, it is suggested that staff receive training on a range of reproductive health issues, presented through an integrated curriculum.

- **Link services to the extent possible.** It is important to establish formal service linkages between related reproductive health service components, as indicated earlier in this chapter. Starting with basic linkages will facilitate a gradual move toward a fully integrated reproductive health programme.

- **Ensure functioning of the MCH clinics at the district and provincial hospitals as the first level for integrated reproductive health care.** When services are provided through a linked approach, it will be possible for MCH clinics at the provincial hospitals to function as integrated reproductive health centres. In subsequent stages, provincial level MCH clinics could provide guidance and support to health centres.

- **Create appropriate organizational structures.** Perhaps the most difficult step in the process to integrating reproductive health care is to create an appropriate organizational structure within the MOPH that can coordinate various programmes, and to establish a council or committee with representation of public sector agencies involved in reproductive health. Several countries have begun to transform the organization of their MCH/FP programmes to embrace a broader reproductive health perspective.
4 CONCLUSION

This report of a strategic reproductive health assessment in three provinces of the Lao PDR has identified a comprehensive set of measures that can help the country achieve important strides in its effort to improve the reproductive health of women, men and youth. The recommendations contained in this report may guide both development of priority interventions with an immediate impact as well as strengthen current programmes and activities in reproductive health. It also provides a road map for long-term policy and programme development toward the provision of integrated reproductive health care.

As many international agencies are collaborating with the government in implementing various programmes for specific components of reproductive health, it would be beneficial to all stakeholders to build consensus for a coordinated and integrated approach through a process of dialogue and consultation. The current report may serve as a basis for such a dialogue.
Annex I: People interviewed, districts and villages visited during the Strategic Assessment

Central Level

Health professionals
- Dr. Ponmek Dalaloy, Minister of Health
- Dr. Nao Boutta, Deputy Chief of Cabinet, Ministry of Public Health
- Dr. Vannareth Thammavong
- Dr. Phonethep Pholsena, Director, Institute of Maternal and Child Health
- Chief and Deputy Chief, OB-GYN, Mahosot Hospital
- Director and Deputy Director, Setthathirath Hospital
- Chief, OB-GYN, Setthathirath Hospital
- Director, Dermatology Centre
- OPD Chief, Dermatology Centre
- Chief, Thoulakhom District Hospital

International Agencies
- Dr. BounNhou Hanvichid, Programme Officer, UNFPA
- Dr. Jacqui Badcock, UNICEF Representative
- Dr. K.S. Muang, UNICEF Project Officer, Health and Nutrition
- Ms. Karin Nordheim Larsen, Resident Representative
- Dr. Danglam Mahayo, World Bank Project
- Tada Yusuki, Project Formulation Advisor, JICA
- Dr. Hiroyuki Amano, Health and Medical Cooperation Planning Advisor, JICA
- Dr. Anne Marie van den Bosch, EU
- Mr. Christophe Andre, MSF
- Ms. Anne Harmer, UNFPA/EU Coordinator, RH Initiative
- Ms. Cecily Dignam and Ms. Carol Perks, SCF (A)
- Dr. Hio Hohmann, Programme Coordinator
- Mr. Tony Bott, Health and Social Development Project
- Mr. Peter Miller, UNFPA

Provincial Level

Public Health Sector
- Director, Provincial Health Office
- Chief, MCH Provincial
- Director, Provincial Hospital
- Chief, OB-GYN, Provincial Hospital
- Chief, MCH, Provincial Hospital
- Chief, OPD, Provincial Hospital
- Chief, Dermatology, Provincial Hospital
- Laboratory
- Provincial Hospital Pharmacy

Informal Health Sector
- Traditional healers

Private Health Sector
- Private clinics/Private GPs
- Private drug stores
- Pharmacies

Other
- LWU and LYU members

C. District Level
The teams visited the following districts:

**Two districts in Saravane Province**
1. Khongsedone District
2. Samouay District

**Two districts in Khammouane Province**
1. Mahaxay District
2. Nongbok District

**Two districts in Xieng Khouang Province**
1. Kham District
2. Khoune District

The team had meetings with:

**Public Health Sector**
- Chief, District Health Office
- Chief, District MCH
- Chief, District Hospital
- Chief, OB-GYN, District Hospital
- Chief, MCH, District Hospital
- Chief, OPD, District Hospital
- Laboratory, District Hospital
- District Hospital Pharmacy

**Informal Health Sector**
- Traditional healers

**Private Health Sector**
- Private clinics
- Private drug stores
- Pharmacies

**Other**
- Lao Women's Union
- Lao Youth Union

**D. Dispensary and Community Level**

The team visited four dispensaries and 35 villages during the assessment

<table>
<thead>
<tr>
<th>Saravane Province</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Samouay District</strong></td>
</tr>
<tr>
<td>PinAr Village</td>
</tr>
<tr>
<td>Acheung Nhai Village</td>
</tr>
<tr>
<td>Acheung Delae Village</td>
</tr>
<tr>
<td>Lalay Akong Village</td>
</tr>
<tr>
<td>Lalay Asoy Village</td>
</tr>
<tr>
<td>Lahang Village</td>
</tr>
</tbody>
</table>
### Khammouane Province

<table>
<thead>
<tr>
<th>Mahaxay District</th>
<th>Nongbok District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nakham Village</td>
<td>SongMeuang Neua Village</td>
</tr>
<tr>
<td>Taen Neua Village</td>
<td>Nong Done Village</td>
</tr>
<tr>
<td>Nakok Noi Village</td>
<td>Santisouk Village</td>
</tr>
<tr>
<td>Mahaxay Neua Village</td>
<td>Dongboun Nhai Village</td>
</tr>
<tr>
<td>Phova Tai Village</td>
<td>Phone Pheng Village</td>
</tr>
</tbody>
</table>

### Xieng Khouang Province

<table>
<thead>
<tr>
<th>Kham District</th>
<th>Koune District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phiawat Village</td>
<td>Nameuang Village</td>
</tr>
<tr>
<td>PhoneNheng Village</td>
<td>Mouang Village</td>
</tr>
<tr>
<td>Siphom Village</td>
<td>Chomthong Village</td>
</tr>
<tr>
<td>Thoum Village</td>
<td>Phiangkhob Village</td>
</tr>
<tr>
<td>Thak Village</td>
<td>Nafai Village</td>
</tr>
<tr>
<td>Homsy Village</td>
<td>Phathang Village</td>
</tr>
<tr>
<td>Nasy Village</td>
<td>Laeng Village</td>
</tr>
</tbody>
</table>

The assessment teams interviewed the following groups:

**Providers**
- Dispensary staff
- Village Health Volunteers (involved in: birth spacing, revolving drug funds, malaria)
- Traditional birth attendants (trained and untrained)
- Traditional healers
- Mass organizations/Community groups
  - Lao Women's Union
  - Lao Youth Union
  - Elderly Group/Trade Union

**Community leaders (Village and Party Leaders)**

**Village Committee Members**

**Villagers**
- **Adolescents (12-20 years old)**
  - Boys and girls
  - Married/Unmarried
- **Women**
  - Married/Unmarried
  - Range of ages (reproductive age as well as over 45 years old)
  - Different contraceptive experiences (former and current users)
  - Different birth histories (prenatal care, delivery, postpartum care, abortion)
- **Men**
  - Married/Unmarried
  - Range of ages (reproductive age as well as over 45 years old)
Annex II: List of Strategic Assessment team members

A. Central Level

MINISTRY OF PUBLIC HEALTH

INSTITUTE OF MATERNAL AND CHILD HEALTH

- Khonesavanh Pholsyna
- Khamseong Philavong
- Manisone Oudom
- Saysouda Sayasene
- Pany Sananikhom
- Oudone Southalack
- Somphathai Bouathong
- Nirabonh Chanlivong
- Chanthavone Louangkhot

NATIONAL CENTRE FOR CONTROL OF AIDS

- Phouthaly Keomoukda

CENTRE FOR EDUCATION AND INFORMATION FOR HEALTH

- Vanmaly Svanmaly

COLLEGE OF HEALTH TECHNOLOGY

- Sengmany Nochaleun

LAO YOUTH UNION

- Sompheng Phamixay

WORLD HEALTH ORGANIZATION

- Agostino Borra
- Giovanni Deodato
- Peter Fajans

FAMILY CARE INTERNATIONAL

- Ietje Reerink

POPULATION COUNCIL

- Christopher Elias

INTERNATIONAL COUNCIL ON MANAGEMENT OF POPULATION PROGRAMMES

- Jay Satia

B. Saravane Province

Provincial level

- Dr. Somkhid Boualavong
  - Chief, MCH Provincial Hospital
- MA. BounNhong Chanthakoumane
  - Deputy Chief, Provincial MCH

District level

- MA. Vilayvanh Homsombath
  - MCH staff, Khongsedone District
- MA. AmYang Seunsarae
  - Chief, Samouay District Health

C. Khammouane Province

Provincial level

- MA. Keodala Phimmachack
  - Provincial MCH staff
- MA. Phetsomphone Souvannasao
  - Provincial MCH staff

District level

- MA. Panya
  - MCH staff, Mahaxay District
- MA. Kobkeo
  - MCH staff, Nongbok District

D. Xieng Khouang Province
<table>
<thead>
<tr>
<th>Level</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial level</td>
<td>Dr. Khamphet</td>
<td>Chief, Provincial MCH</td>
</tr>
<tr>
<td></td>
<td>MA. Bouaphone</td>
<td>Provincial MCH staff</td>
</tr>
<tr>
<td>District level</td>
<td>MA. Chanhom</td>
<td>MCH Chief, Kham District</td>
</tr>
<tr>
<td></td>
<td>Ms. Chantasone</td>
<td>MCH staff, Khoune District MCH</td>
</tr>
</tbody>
</table>
Annex III: Overview of selected reproductive health services to be provided at different levels of the health system

## Services at the community level

<table>
<thead>
<tr>
<th>Prenatal care</th>
<th>Delivery care</th>
<th>Postpartum care</th>
<th>Birth spacing</th>
<th>Prevention/treatment of RTIs and STIs</th>
<th>Adolescent reproductive health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselling and education on breastfeeding, nutrition, birth spacing, rest,</td>
<td>Recognition of danger signals (rupture of membranes of more than 12 hours</td>
<td>Provision of breastfeeding support.</td>
<td>Sexuality and gender information, education and counselling.</td>
<td>Sexuality and gender information, education and counselling for adolescents, youth, men and women.</td>
<td>Provision of information and services in a non-judgmental and youth-friendly manner.</td>
</tr>
<tr>
<td>Referral for danger signs/symptoms of pregnancy</td>
<td>Arrangement of transport for emergency referral</td>
<td>Provision of nutrition education.</td>
<td>Community-based distribution of contraceptives (oral contraceptives, POPs and</td>
<td>Referral of women with vaginal discharge, lower abdominal pain and genital ulcers, and men with urethral</td>
<td>Health talks on adolescent reproductive health to young people, community leaders,</td>
</tr>
<tr>
<td>Referral of women with RTI and STI symptoms.</td>
<td>Clean home deliveries with delivery kits.</td>
<td>Detection and referral of postpartum complications</td>
<td>condoms).</td>
<td>discharge, genital ulcers, and swelling in the scrotum or groin.</td>
<td>parents and other adults.</td>
</tr>
<tr>
<td>Provision of iron follic acid Immunization for tetanus prevention.</td>
<td></td>
<td>Education and care of low birth weight (2000-2500 grams) infants.</td>
<td>Counselling, management and referral for side-effects, method-related</td>
<td>Routine prophylaxis of ophthalmia neonatorium of the newborn (feasibility at community level to be tested).</td>
<td></td>
</tr>
<tr>
<td>Routine prophylaxis and treatment for malaria in endemic areas</td>
<td></td>
<td></td>
<td>problems, and change of method</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Referral for tubal ligation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Provide birth spacing counselling for women with abortion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Complications.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Services at the health centre level

<table>
<thead>
<tr>
<th>Prenatal care</th>
<th>Delivery care</th>
<th>Postpartum care</th>
<th>Birth spacing</th>
<th>Prevention/treatment of RTIs and STIs</th>
<th>Adolescent reproductive health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselling and education for breastfeeding, nutrition, birth spacing, rest, exercise.</td>
<td>Detection of delivery complications and arrangement of emergency transport for referral for hospital delivery.</td>
<td>Provision of postnatal care through five postpartum visits (including: less than 24 hours, 7-10 days and 5-6 weeks) in zone 0</td>
<td>Sexuality and gender information, education and counselling</td>
<td>Sexuality and gender information, education and counselling for adolescents, youth, men and women.</td>
<td>Provision of information and services in a non-judgmental and youth-friendly manner</td>
</tr>
<tr>
<td>Detection and referral for major pregnancy complications (hypertension, pre-eclampsia, eclampsia, severe anemia, malaria, tuberculosis, antepartum haemorrhage, and cephalopelvic disproportion).</td>
<td>Initial emergency management of complications (e.g., postpartum haemorrhage, sepsis, eclampsia) and referral.</td>
<td>Provision of birth spacing counselling and services</td>
<td>Community mobilization and education for adolescents, youth, men and women.</td>
<td>Condom provision</td>
<td>Evaluation of models for peer interventions</td>
</tr>
<tr>
<td>Detection and referral of women with RTIs and STIs.</td>
<td>Routine ophthalmia neonatorum.</td>
<td>Provision of nutrition education and supplements (iodized salt, iron folic acid) Initial treatment of puerperal sepsis.</td>
<td>Provision of oral contraceptives, POPs, injectables and condoms.</td>
<td>Provision of oral contraceptives, POPs, injectables and condoms.</td>
<td>Health talks on adolescent reproductive health to young people, community leaders, parents and other adults</td>
</tr>
<tr>
<td>Routine prophylaxis for malaria in endemic areas.</td>
<td>Referral for antenatal syphilis testing according to health system capacity.</td>
<td>Treatment and referral for postpartum complications</td>
<td>Referral for tubal ligation</td>
<td>Referral for tubal ligation</td>
<td></td>
</tr>
<tr>
<td>Provision of iron folic acid.</td>
<td></td>
<td></td>
<td>Counselling for women abortion complications</td>
<td>Counselling for women abortion complications</td>
<td></td>
</tr>
</tbody>
</table>
### Services at the district hospital level

<table>
<thead>
<tr>
<th>Prenatal care</th>
<th>Delivery care</th>
<th>Postpartum care</th>
<th>Birth spacing</th>
<th>Prevention/treatment of RTIs and STI</th>
<th>Adolescent reproductive health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral for hospital delivery in cases with complications. Routine testing for syphilis according to health system capacity. Diagnosis and treatment of selected RTIs and STIs and referral for others. Management of referred cases and feedback to referral source Provision of iron folic acid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services at the provincial hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prenatal care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselling and education for breast-feeding, nutrition, birth spacing, rest, exercise, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunization for tetanus prevention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of prenatal service at clinics (at least 3 visits)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of cases with complications.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine prophylaxis for malaria in endemic areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment of malaria and tuberculosis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine testing for syphilis Diagnosis and treatment of RTIs and STIs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of referred cases and feedback to referral system Provision of iron folic acid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Delivery care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of institutional delivery services.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment of pregnancy complications.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of obstetrical emergencies Routine ophthalmia neonatorum prophylaxis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrangement of transport for obstetrical emergencies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of referred cases and feedback to referral source</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Postpartum care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of postnatal care through five postpartum visits (including: less than 24 hours, 7-10 days and 5-6 weeks) in zone 0.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of breastfeeding support.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of birth spacing counselling and services Provision of nutrition education and iron folic acid supplements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment of puerperal sepsis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual removal of retained placenta.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resuscitation for asphyxia of the newborn Management of neonatal hypothermia.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of referred cases and feedback to referral source Management of low birth weight (2000-2500 grams) infants by feeding, temperature control and infection prevention methods.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Birth spacing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexuality and gender information, education and counselling.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of oral contraceptives, POPs, injectables and condoms.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insertion of IUD after screening for contraindications.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting tubal ligation procedures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselling and management of cases referred for side-effects, method-related problems, and change of method.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide treatment birth spacing counselling for women with abortion complications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prevention/treatment of RTIs and STIs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexuality and gender information, education and counselling for adolescents, youth, men and women.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner notification and treatment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine syphilis testing in pregnant women.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine prophylaxis of ophthalmia neonatorum of the newborn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of referred cases and feedback to referral source.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adolescent reproductive health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of information and services in a non-judgmental and youth-friendly manner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES...


4 UNFPA (1997) Component Project One, Lao/97/P01. Strengthening of Reproductive Health Services through Primary Health Network.


17 Save the Children (UK)/EC/UNFPA (1998). Initiative for Reproductive Health in Asia, Strategic Framework, Lao PDR.