Strategic Assessment of Reproductive Health in the Lao People's Democratic Republic

There remains a need to strengthen existing reproductive health progmmmes in the areas of safe motherhood, birth spacing, STIs and adolescent reproductive health

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The status of women's reproductive health remains a serious problem in the Lao People's Democratic Republic. Although data on reproductive

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health are generally scarce, the maternal mortality ratio has been estimated to be 656 per 100,000 live births (Ministry of Public Health and United Nations Children's Fund (MOPH and UNICEF), 1998). Estimates of total fertility rates vary from 4.7 children per woman for urban women to 7.8 for rural women (National Statistical Centre (NSC) and the Lao Women's Training Centre (LWTC), 1995). Only limited data exist on the incidence 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. The data from the sentinel surveillance system show generally low prevalence rates for HIV, but only limited testing has been carried out and a more comprehensive sentinel surveillance system has only recently been put into place. Abortion and adolescent reproductive health remain politically sensitive issues. A report from a small-scale survey conducted by the Japanese Organization for International Cooperation in Family Planning (JOICFP) in three districts showed that the abortion rate was 101.1 per thousand pregnancies (Podhisita and others, 1997). Early marriage and pregnancy in adolescence are the norm in the Lao People's Democratic Republic, The Fertility and Birth Spacing Survey (NSC and LWTC, 1995) estimated that the median age at first birth for all married women was 20.5 years.

The Lao People's Democratic Republic is one of the world's least developed economies, with an average per capita income of US$ 350 and it is estimated that 46 per cent of the country's total population of 4.8 million live below the poverty line (UNFPA, 1997). A broad division of the population into three main categories can be made based on language and location: the majority (68 per cent) are Lao Loum, or lowlanders who live mainly in the Mekong River basin and speak the official national language (Lao); the Lao Theung (22 per cent), or midlanders who speak Mon-Khmer languages and live on low mountain slopes; and the Lao Soung, or highlanders, who engage in slash-and-burn agriculture on mountain summits and speak Tibeto-Burman languages (Stuart-Fox, 1986:45). Smaller ethnic minorities include the Chinese, Indians and Vietnamese, residing chiefly in urban areas (Frisen, 1991).

Health service delivery

Over the past several years, the Government of the Lao People's Democratic Republic has articulated its commitment to expanding and improving its primary health care system, and to exploring ways to better meet the health needs of the population, including its reproductive health needs. Approximately 55-60 per cent of the Ministry of Public Health budget goes to the provinces, but operating funds at the district level and below are, however, typically insufficient to provide basic services needed.

Public health services 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. At the provincial level, services are coordinated by the provincial health office, and include service provision through provincial hospitals (45-249 beds), and supervising/supporting activities of the district health system. District hospitals have between 15 and 25 beds each but provide care for a population of about 300,000 people (UNFPA, 1996). There are more than 700 dispensaries in villages throughout the Lao People's Democratic Republic but very few are fully operational. The dispensary level health staff seem not to be linked in any formal way to other health workers in the villages, such as community-based health volunteers or the Lao Women's Union. In addition to public health facilities, there are more than 900 private clinics, the majority of which are located in the capital, Vientiane, and other cities, and almost 2,000 registered pharmacies, located mostly in urban areas. Most services in rural areas are provided through an informal network that includes private drug sellers, village health volunteers, traditional healers and traditional birth attendants.

Access to public health services is limited. It is estimated that only 26 per cent of the population live within a three-kilometre radius of a health facility and 54 per cent of villages are located in remote areas where more than a day's travel is necessary to reach the nearest health facility (MOPH and UNICEF, 1998). Utilization of health facilities is very low, and most facilities with in-patient services report occupancy rates of less than 10 per cent (MOPH and UNICEF, 1998).

Reproductive health strategic assessment

Acknowledging the importance of improved reproductive health for human resources development, the Government of the Lao People's Democratic Republic decided to carry out a strategic assessment of reproductive health in selected parts of the country in early 1999. Funds for the assessment were provided by the UNDP/UNFPA/WHO/World Bank Programme of Research, Development and Research Training in Human Reproduction (HRP). The strategic assessment was designed to identity reproductive health needs within the existing service delivery models and to set priorities for intervention.

This article is based on the findings of the reproductive health strategic assessment conducted during the period February-June 1999 (MOPH and WHO, 2000). The assessment broadly followed the process described in the adjunct article in this *Journal* by Satia and others (pp. 5-

20). A planning workshop for the assessment defined the following areas of reproductive health requiring emphasis: maternal health, birth spacing, reproductive tract infections and adolescent health. A multidisciplinary team of 13 members drawn from different Ministry of Public Health institutions, mass organizations, including women's and youth unions, and the College of Health Technology conducted the mostly qualitative fieldwork. A team of consultants from WHO, the Population Council, Family Care International (FCI) and the International Council on Management of Population Programmes (ICOMP) facilitated data collection in the field and assisted the team in synthesizing their observations. At the national level, interviews were held with the health professionals and international agencies. Fieldwork was carried out in Salavan, Khammouane and Xieng Khouang provinces, representing different geographical regions of the country. During fieldwork, interviews were held with provincial-, district- and dispensary-level service providers, including those from the informal and private health sectors. A total of 35 villages were visited during the assessment where the team interviewed community leaders, representatives of mass organizations, adolescents, women and men.

Maternal health

Maternal health services

Recent data from the Lao People's Democratic Republic clearly reflect the precarious maternal health situation in the country. For example, for the five years preceding the 1995 Fertility and Birth Spacing Survey, less than 7 per cent of births were delivered in a health facility and less than 14 per cent of births were attended by trained medical personnel; 15 per cent were attended by birth attendants in the community (trained and untrained); and 70 per cent were attended by relatives or friends. The United Nations Population Fund (UNFPA, 1997) estimates that more than 73 per cent of all pregnant women do not receive any prenatal care. As a result, many of the estimated 15 per cent of pregnant women who develop serious obstetric complications had no one with them who could recognize these complications and refer them for appropriate care at a health facility (FCI and the Inter-Agency Group for Safe Motherhood, 1998; MOPH and UNICEF, 1998).

A 1998 comprehensive maternal health needs assessment found that the consistency and quality of routine maternal and child health (MCH) services vary considerably (MOPH and UNICEF, 1998). For example, of the 22 health facilities visited in that assessment, few had adequate supplies

and equipment to provide quality pregnancy-related care, including care for women with obstetric emergencies. The referral system linking the community or periphery with higher levels of health care was found to be virtually non-existent or largely non-functional. Health personnel also generally lacked clinical and management skills and most had not received comprehensive in-service training in recent years, except in specific programme components. In the Lao People's Democratic Republic, no trained staff exist for specialized obstetric and gynaecology care.

Community awareness, beliefs and health-care-seeking behaviour

The assessment found that in most communities, pregnancy is not expected to interfere with a woman's daily chores. In many communities, it is expected that women will resume their work in the fields only a few days after delivery. The role of women in decision-making about their own health is minimal. Husbands and other family members determine whether or not a woman will be able to seek care at a health facility, even in case of life-threatening complications. It was alarming to note that many women, men and village leaders were not aware of the danger signs and symptoms during pregnancy and childbirth. There was also little awareness among villagers about the elevated risks of malaria for pregnant women. Members of mass organizations such as the Lao Women's Union and Village Health Volunteers provide basic information about maternal health and encourage utilization of prenatal care services, but generally give little or no detailed information on warning signs of pregnancy-related complications, postpartum care or the importance of clean delivery.

The assessment found little difference in preference to giving birth at home versus in a health institution. Nearly all women, both from peri-urban areas and rural areas, preferred to give birth at home, even when institutional care is available nearby. The women mentioned that the main reasons for home delivery included the following: their belief that delivery is not anything "unusual" and thus does not warrant any special attention, the high cost of supplies and drugs associated with delivery care, the additional associated costs (time, travel, childcare arrangements, food), the perceived low quality of care, and the absence of drugs at health facilities.

Thus, the utilization of health services was greatly influenced by women's expectations of services; for example, in one village, one kilometre down the road from a district hospital, people reported that they rarely use existing health services. People go to the hospital only when there are drugs available. Malaria and obstetric complications are the main causes of maternal deaths both at hospital and home. In 1998 in this 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. Miscommunication and poor interaction between clients and health providers presented another barrier to utilization of public health services, particularly among minority groups. For instance, one woman interviewed said: "I would like to receive prenatal care services at the hospital, but I am illiterate and I do not speak Lao Loum".

Most women and some village leaders perceived spontaneous abortion as a common occurrence and attributed it to women's hard physical labour. Since induced abortion is illegal in the Lao People's Democratic Republic, except for a set of very specific medical circumstances, in general people did not want to talk about it and were somewhat hesitant to provide information. Therefore, accurate or reliable data on the incidence of abortion are difficult to collect, particularly for unmarried women and adolescents, and perceptions of the frequency of induced abortions vary considerably.

Some induced abortions occur in provincial hospitals following medical indications to protect a woman's health. 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. Anecdotal evidence suggests that the majority of induced abortions are performed in private clinics in the Lao People's Democratic Republic, or across the border in Thailand where it is also illegal. Staff at various provincial hospitals reported attending 7-20 women per month with complications from abortions. Many were cases of severe haemorrhage; some were treated for infection. Most were diagnosed as complications from induced abortion, and seemed to be adolescents.

Reducing maternal deaths

Despite the country's high maternal mortality rate, maternal deaths in health facilities and recorded deaths in the community are relatively uncommon events. Therefore, considerable IEC (information, education and communication) efforts are needed concerning the risks of pregnancy and various associated danger signs, and for referral in case of pregnancy complications as well as for malaria prophylaxis and treatment for pregnant women. Simultaneously, the health service delivery system needs to be upgraded to refer safely and efficiently women with obstetric emergencies from the community and lower levels of care to a health facility where comprehensive obstetric care can be provided. Finally, professional leadership is needed to improve the quality of care and promote safe motherhood activities.

Birth spacing

National birth-spacing policy and programme

The 1995 Fertility and Birth Spacing Survey (FBSS) estimated that 20 per cent of women of reproductive age were using some form of contraception and 15 per cent were using modern supply-based methods. Respective percentages for modern methods used were oral contraceptives, 32 per cent; female sterilization, 18 per cent; injectables, 11 per cent; and intrauterine devices (IUDs), 11 per cent. Condom use represented less than 1 per cent of modern methods, and male sterilization is virtually unknown.

Since 1996, the Ministry of Public Health, under the leadership of the Institute of Maternal and Child Health, has been implementing a national birth-spacing programme. The programme is expanding geographic coverage of information and services related to birth spacing phase-wise, covering nearly two thirds of all districts and 70 per cent of the population by 1999. Birth spacing is also an essential component of primary health care services that are supported by a variety of donors and NGOs.

According to the national birth-spacing policy, contraception, including IUD insertion, sterilization (provincial hospital only), the progestin-only injectable DMPA (depot medroxyprogesterone acetate, which is sold commercially as Depo-Provera), condoms and oral contraceptives, are available from MCH clinics at the provincial and district levels. With UNFPA support, more than 3,800 Lao Women's Union members have been trained to provide information about birth spacing, and distribute oral contraceptives and condoms. In addition, 1,500 village health volunteers have been trained in basic contraceptive knowledge and skills.

Knowledge of and demand for contraception

The assessment found generally high levels of knowledge and awareness about contraception, except in remote districts that had not been reached by the national birth-spacing programme. However, users as well as non-users seemed to lack detailed information about the different contraceptives available. Most community members mentioned the Lao Women's Union representatives as their main source of information about contraception.

The 1995 FBSS reported that 55 per cent of women interviewed wanted to stop childbearing and another 27 per cent wanted to have another child after a gap of more than two years. However, only 20 per cent of ever-married women were using contraception. Therefore, there is considerable unmet need for contraception in the Lao People's Democratic Republic. The strategic assessment confirmed that that there is high

demand for contraception among both men and women in the towns and villages visited. Community acceptance of birth-spacing methods appeared high nearly everywhere. Many women with four or live living children said that ‘birth spacing came too late”. In one group discussion, a woman commented: “Since 1996, more and more women in the village are practising contraception. We are very happy because we have time to earn money and work in the field”. Health workers told many stories of women who travel from very remote areas in order to receive information and services.

Access, affordability and quality of care

Physical access to contraceptives is an important factor in determining method selection. IUD insertion and injectables are provided only at MCH centres in hospitals. As these methods require fewer visits to health facilities than oral contraceptives and condoms, their use is higher among women from villages where no community-based distribution system exists. The assessment team observed that, while many pharmacies and private drug shops in small towns sell contraceptives, there is an urgent need to expand community-based distribution of contraceptives at the village level. Women from ethnic minority groups faced additional barriers to contraceptive use, including limited awareness and the absence of IEC materials in languages other than Lao. One Lao Theung woman, speaking on behalf of the women in her community, 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”.

Although in theory, contraception is provided free of charge at the MCH clinics, many women chose to obtain contraceptives from the private sector and pay a small amount of money. Most people recognize that contraceptive methods are cheap and generally costs are not perceived as a significant barrier to contraceptive use.

The assessment team found that knowledge of providers about different contraceptive methods, their side-effects and the appropriate management of side-effects was generally adequate. However, the providers were rather passive about promoting contraception among potential users; there were many missed opportunities for providing women with information about contraception. For each of the widely available methods – oral contraceptives, condoms and particularly IUDs – many misconceptions exist, and fear of unwanted side-effects seems to account for unnecessary method drop-out and method switching. Female sterilization is available at provincial hospitals, but there are official restrictions on who can receive sterilization. Eligibility criteria vary according to province, and

include age, parity and the presence of serious health problems. As mentioned previously, vasectomy is virtually unheard of in the Lao People's Democratic Republic owing to strong cultural resistance.

There is some indication that users' choice of contraceptive method is highly influenced by the service provider. When asked why they were using a particular method, many women said that "the health staff made the decision for me". Provision of counselling is limited, particularly for different ethnic groups. In one Lao Theung village, a woman said: "We are illiterate and cannot understand all the things health workers tell us. We forget their explanations. Five of us who used injectables became pregnant because of this".

Improving access and quality of care

In view of the considerable umnet need for contraception, some method failure and misconceptions, it is necessary that information and education on birth-spacing methods be strengthened through training of village health volunteers and Lao Women's Union representatives, provision of flip charts and IEC materials, and the supply of technical manuals for health staff. Health staff need to be trained in counselling skills and the use of IEC materials. As contraceptive use is lowest among ethnic minorities and consists ahnost exclusively of female methods, a special effort needs to be made to reach men in rural and ethnic minority communities through village committees and the Lao Youth Union, for example. It is also necessary that access and procedural requirements for sterilization be simplified and the criteria for sterilization reviewed. Finally, providers need to be better informed about the national birth-spacing policy, which calls for the provision of oral contraceptives and condoms to people irrespective of their marital status.

Reproductive tract infections

The team was unable to find any studies documenting the prevalence of any specific infections other than HIV. Although the sentinel surveillance system reports a low prevalence of HIV, ahnost everywhere the assessment team went, people were aware of persons in their communities living with or dying from AIDS. Ahnost invariably, these were reported to be individuals who had returned from working in neiglbouring countries with well-documented HIV epidemics. Discussions with respondents about other reproductive tract infections revealed considerable variability in the perceived occurrence of such infections. It is interesting to note that, while public sector providers generally thought that such infections were

uncommon, private providers (both general practitioners and *phaet gao,* literally "old doctors"), in rural areas reported that symptoms of vaginal or urethral discharge were common reasons for out-patient consultation, A small study by CARE (1998) in Luang Prabang Province found that 19 providers trained in STIs collectively saw a total of 331 patients with RTI symptoms over a four-month period. This comprised 7.5 per cent of their reported caseload.

Community knowledge and perceptions

Awareness of RTIs and the risks associated with acquiring both sexually transmitted and endogenous infections was generally low in the community. Most people believed that genital discharge symptoms among both women and men are due primarily to sexually transmitted diseases (STDs). The widespread perception that most vaginal discharge symptoms were caused by STDs resulted in a fair degree of stigmatization of these conditions.

There was general denial of any risky sexual behaviour in the community. At the same time, men were reported to have multiple partners "in town". There are apparently many "bar girls" (prostitutes) in town whose clients are primarily married men. It was reported to be less common for youths to visit bar girls, as young men typically have less money than older men.

Women appeared more aware of the broader dangers of STIs. The team found that, while many respondents had heard about STIs, few could remember any details about specific infections other than HIV. Most people had heard of HIV/AIDS, but there were several village leaders (generally older men) who had no idea about HIV/AIDS. There appeared to exist a considerable degree of stigmatization towards people with HIV/AIDS. The assessment team felt that health education efforts undertaken to date have succeeded in raising a general fear of AIDS but have left significant gaps in knowledge at the community level.

Many recognized condom use as an important strategy for preventing STIs including HIV. Nevertheless, condom use was uniformly reported to be rather uncommon. For example, according to a group of 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 and they do not know how to use them. 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 of having visited bar girls.

The Lao Youth Union and other organizations such as the Lao Red Cross have been active in IEC/awareness-raising about HIV/AIDS. In some districts, they have carried out educational activities in schools and the community (Australian Red Cross/Lao Red Cross, 1994; World Bank, 1994). Generally, the information given was limited to simple messages indicating that AIDS is a dangerous disease and condoms can be used to protect oneself. It seems that very little attention is paid to other curable STDs and no information was provided concerning endogenous RTIs.

Care-seeking behaviour

For women, the first recourse for treating symptoms potentially related to RTIs was a traditional healer. Many women reported treating vaginal discharge with traditional medicine and mentioned some sort of topical treatment. Currently, MCH staff provide very little treatment of common RTI syndromes; rather, they refer women with discharge to the obstetric-gynaecology wards at provincial hospitals. This may be one reason why women present to MCH facilities only with fairly serious or persistent symptoms.

According to some private health service providers, discharge among men is common. Some men resort to traditional remedies, such as boiled banana leaves, yet, most men with discharge will self-medicate with drugs obtained from pharmacies or private practitioners. They generally do not go to public heath facilities for treatment, fearing that a record will be kept of their illness, and knowing that medicines are often not available. Staff generally believed that compliance with prescribed therapy is poor, with most patients discontinuing therapy once the symptom has been resolved.

Public sector service delivery

Therapeutic practices for the management of RTI symptoms by staff within public sector services were found to be highly variable and non-standardized. Generally, there are no diagnostic facilities for testing for the presence of STIs or other RTI pathogens in provincial and district hospitals. The shortage of laboratory facilities, combined with a low rate of attendance for prenatal care, results in an exceptionally low rate of antenatal syphilis screening. While there are no comprehensive epidemiological data on the prevalence of syphilis in the Lao People's Democratic Republic, the cost-effectiveness of prenatal syphilis screening has been demonstrated in many settings worldwide.

Role of pharmacists and other providers

Traditional healers reported seeing many women with vaginal discharge and genital itching. They often treat women with ampicillin or

penicillin in addition to traditional remedies and think that "Western drugs work faster." In addition to traditional healers, many symptomatic individuals seek treatment in the community from the aforementioned *phaet guo*, who typically have received some kind of medical or nursing training in the past, often in the course of military service. Although providing health services is not their primary occupation, because they are trusted community members and have some degree of expertise, they are often consulted for the treatment of common ailments, including diarrhoea and respiratory complaints as well as genital tract symptoms. Their therapeutic practice relies primarily on allopathic medicines.

While the traditional healers and *phaet 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. For example, the assessment team visited four drug shops in a district and found that an average of 20 men and 30 women per month presented to the pharmacy with RTI symptoms.

Addressing RTIs

Considerable IEC is required at the village level on prevention and treatment of RTIs, including STIs, and all health education efforts should address both sexually transmitted and non-sexually transmitted infections. Special efforts need to be made to reach men and vulnerable groups with accurate information regarding STIs. There is an additional need to standardize case management of symptomatic men and women, and all health care providers need to be trained in the use of such standardized case management guidelines. Further, the capacity of primary health care facilities needs strengthening to provide first line treatment for common RTI symptoms. Antenatal screening programmes also need considerable strengthening. Finally, as information about RTI prevalence and care-seeking behaviour is so scarce, considerable epidemiological, behavioural and operations research efforts are required for the development of appropriate activities for RTI/STD/HIV/AIDS prevention and case management.

Adolescent health

Adolescent reproductive health problems

In 1995, adolescents (l0-19 years of age) made up nearly 23 per cent of the total population. The vast majority of adolescents are out of school, and one of the main problems facing young people is the lack of post-schooling and vocational training opportunities that match labour market needs. The lack of employment opportunities has also resulted in a large

number of young people migrating within the country or travelling to Thailand to look for work. These young people are at considerable risk of sexual and/or commercial exploitation.

Information about adolescent sexual and reproductive health is scarce, and little comprehensive or in-depth research has been done in the Lao People's Democratic Republic so far, although recently some studies have been initiated. The Lao Youth Union has started a pilot study to raise awareness about adolescent reproductive health issues among youth with support from UNFPA. JOICFP is developing IEC activities focusing on youth. The European Commission/UNFPA Reproductive Health Initiative is also undertaking several activities in this area (Save the Children/UK/EC/UNFPA, 1998).

Early marriage and pregnancy are the norm in the Lao People's Democratic Republic and contribute to its high maternal and infant mortality rates. Data for 1996 indicate that 15 per cent and 30 per cent of all maternal deaths are among women younger than 20 and 25 years of age respectively (UNFPA, 1996). 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. In some instances, the team found that pregnancy outside marriage could lead to negative social consequences, such as extreme pressure and social stigmatization if the father of the child is not identified. Some incidents of suicide among young women were mentioned. 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.

Both boys and girls appeared shy to discuss sexual activity, but acknowledged that it often happens before marriage. Adolescent boys reported frequent sexual activity outside their villages, and boys may have multiple sex partners before marriage. Most young people appeared generally unaware of the health risks associated with commercial sex or multiple partners. The team found further evidence of other high-risk behaviour that seems to be common among adolescents in peri-urban areas, such as glue sniffing and occasional amphetamine use.

Access to and use of reproductive health information and services

The majority of adolescents expressed interest in having smaller families than had previously been the norm to enable them to achieve better living standards. Contraceptive use among adolescents varied highly between and within districts. Adolescents' access to contraceptive methods, including condoms, remains very limited, however. Young people's

utilization of contraceptive services at the MCH clinics is very low; both staff attitude and a lack of information contribute to this situation. Shyness and embarrassment are other important reasons for low attendance at public clinics. While condoms are sold through the private sector, few drug shops that have condoms for sale will sell them to adolescents.

Adolescents' awareness and information about STIs was generally inadequate. They seemed to have limited understanding and knowledge about HIV/AIDS prevention or ways of transmission. Comprehensive knowledge about different RTIs/STIs was virtually non-existent. Unmarried adolescents have very little access to health education from health staff. In addition, printed information on sexual and reproductive health is rare. In some districts, secondary students receive two hours per week of HIV/AIDS education from Lao Youth Union and health staff. The Union also provides some community education, but this does not include contraception or STIs. The Ministry of Education, in collaboration with UNFPA, is currently testing pilot curricula for schools. However, the team noted that a great majority of community leaders and health care providers had never considered the reproductive health needs of adolescents or their special risks, including those related to early marriage and pregnancy.

There is an urgent need for IEC and outreach/community-based activities on adolescent reproductive health. Health providers need to be sensitized to provide appropriate reproductive and sexual health education and counselling to adolescents. More in-depth data are needed, using both quantitative and qualitative methodologies, on adolescent reproductive health problems. Evaluative research can help in developing appropriate strategies to reach adolescents through peer education, promotion of role models and other participatory approaches for improving adolescent reproductive health.

A framework for integrated reproductive health programming

The reproductive health strategic assessment led to many recommendations to address specific reproductive health problems. Based on their potential for having an impact on improving reproductive health, compatibility with national policies and operational viability, the team attempted informally to prioritize the recommendations. Generally, recommendations related to IEC and adolescent reproductive health received high priority scores, as did the recommendations to strengthen linkages between MCH and birth-spacing activities. The team identified several policy barriers that they suggested be changed to improve reproductive health, namely (a) simplifying access to and/or procedural

requirements for sterilization where it is the preferred method of choice, (b) allowing safe abortions where there are health and/or social reasons, and (c) the formulation and implementation of a comprehensive HIV/AIDS policy.

The team classified all recommendations in terms of their type (policy, programme strategy and/or programme implementation), level (national, provincial, district, health centre and/or community), and time frame (short, 1-3 years; medium, 2-5 years; and long, beyond 5 years). This classification provided a framework for developing integrated reproductive health programming, as discussed below.

The assessment findings point to several timely interventions that would have an immediate impact on morbidity and mortality. These include (a) training and equipping health workers at the lowest possible level for management of postpartum and post-abortion haemorrhage, (b) routine prophylaxis or intermittent treatment of pregnant women (having first and second births) for malaria, (c) strengthening district-level hospitals to serve as a first-level referral facility for women with complications of pregnancy, (d) training Village Health Volunteers and Lao Women's Union representatives better to motivate and enable women (and men) to space births for an optimum interval, and (e) standardizing syndromic case management of STIs, including syndromic diagnosis, and training all providers in the use of national guidelines.

As ongoing programmes and activities are being expanded towards greater geographic coverage, and opportunities for integration of different reproductive health services are explored, the assessment found that there remains a need to strengthen existing reproductive health programmes in the areas of safe motherhood, birth spacing, STIs and adolescent reproductive health. The current strategies of each of these programmes need to be further developed to address the issues arising out of the strategic assessment.

When fully developed and implemented, these programmes would considerably improve reproductive health in the Lao People's Democratic Republic. For sustained improvement, however, further policy and programme development is needed. First, the health system needs to be further strengthened, because, even after completion of the current ongoing projects, nearly one third of the country will still not be covered by the primary health care system. In addition, action is needed for continuing skill development of staff and the provision of necessary medicine and supplies. Second, because of the country's difficult geographic terrain, cost-effective methods of outreach need to be devised and pilot tested. Third, midwifery

skills need to be upgraded and obstetrical and gynaecological specialists need to be trained and posted, at least one for each provincial hospital. Fourth, as programmes are at a relatively early stage of development, further research is required for policy and programme development.

The Govermnent of the Lao People's Democratic Republic has developed forward-looking safe motherhood and birth-spacing policies (MOPH, 1997). An STD policy is also being formulated (MOPH, 1998; World Bank, 1994). To move towards integrated reproductive health services, the government needs to consider developing a comprehensive reproductive health policy. Beyond formulating a policy and strengthening the health system, providing integrated health services will require the design of an essential service package. This assessment addressed four major reproductive health issues, namely maternal health, birth spacing, RTIs/STIs/HIV/AIDS and adolescent health. This leaves many important sexual and reproductive health issues little explored. For example, acquiring an 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. The same is true for infertility and abortion. While new services may be gradually introduced to the existing service delivery package so as to better address reproductive health needs, it will be necessary to strengthen existing linkages among services. Finally, all staff need to be oriented on comprehensive reproductive health issues.

A dissemination workshop of the assessment findings and recommendations was held in June 1999, where key stakeholders working in the field of reproductive health attended in order to discuss findings and agree upon a series of recommendations. Recommendations were categorized in the areas of priority interventions, programme strategies, and policy and programme development. The Institute of Maternal and Child Health and UNFPA are addressing many of these recommendations through their ongoing and planned programme activities. Both are partners in a national reproductive health programme that over the next two years will cover all 133 districts in the 18 provinces of the Lao People's Democratic Republic.

In addition, a pilot project for a district model of integrated reproductive health services will be tested. This proposed pilot project will complement the country-wide interventions mentioned above in birth spacing and reproductive health, by exploring which additional service delivery and support mechanisms are feasible at the district level, without greatly increasing recurrent health costs. Specific project interventions aim

to, among others, enhance the skills of service providers in managing emergency obstetric complications at the provincial, district and health dispensary levels; strengthen district-level capacity to organize and provide support to the health dispensary and community-level activities in reproductive health; and strengthen the logistic supply from the district to the village level of birth-spacing commodities and essential medications for maternal health (for example, iron tablets and antimalarials in areas where malaria is endemic). The impact of the proposed interventions will be studied in three intervention districts in Oudomxai Province and compared with three control districts in the same province.

In sum, the strategic assessment in reproductive health provided a road map for long-term policy and programme development towards the provision of integrated reproductive health care. As many international agencies are collaborating with the Government of the Lao People's Democratic Republic in implementing various programmes for specific components of reproductive health, such a road map can form the basis for a dialogue to build consensus for a coordinated and integrated approach to reproductive health programme development.

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