

A Strategic Approach to Reproductive Health Programme Development

The strategic approach is highly effective, flexible and adaptable, creates a high degree of country ownership and is an important tool for policy change

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Many countries are transforming their efforts to meet their population's reproductive health needs by refocusing maternal and child health and family planning activities into more comprehensive reproductive

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health programmes. Clearly, the specific directions and magnitude of the changes involved should depend on the socio-economic context and local epidemiology of reproductive health problems, as well as on the current programmatic situation. In seeking to innovate and expand reproductive health services, programme managers and policy makers are generally advised to follow an approach that is (a) public health based — addressing key reproductive health problems, (b) pragmatic — adding interventions and services in an incremental manner and building on what already exists, and (c) participatory — recognizing what different actors can feasibly do (Fathalla, 1996). The need to identify appropriate service delivery models and subsequently scale-up successful efforts is acute.

Over the past decade, the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP), Department of Reproductive Health and Research (RHR), WHO, in collaboration with a variety of other institutions, has developed a strategic approach to contraceptive introduction that focuses on improving the quality of care in a reproductive health context.

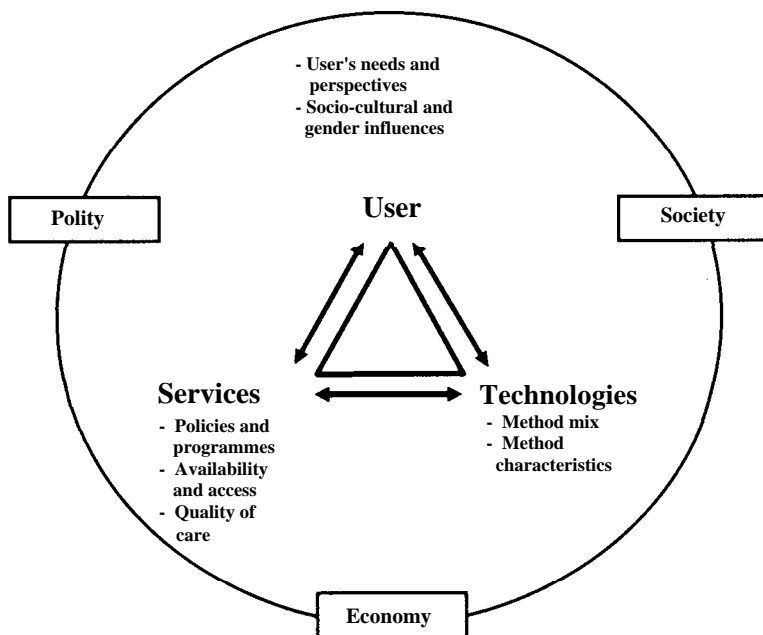
As the strategic approach was being implemented to address contraceptive introduction in several countries, its utility for addressing other specific reproductive health problems was recognized. Since then, the approach has been used for safe motherhood, abortion, reproductive tract infections/sexually transmitted infections (RTI/STIs) including human immunodeficiency virus/acquired immunodeficiency syndrome HIV/AIDS and adolescent reproductive health programmes. More recently, it has been applied as a framework for developing comprehensive reproductive health programmes.

This article describes the strategic approach to contraceptive introduction and experience with its implementation. It then reviews the application of the approach to reproductive health programme development and raises some issues concerning the methodology that needs to be addressed in considering its application to reproductive health programme development.

The strategic approach to contraceptive introduction

The introduction of new contraceptive technologies has great potential for expanding contraceptive choice, but in practice, benefits have not always materialized as new methods have been added to public sector family planning programmes. Approaches to contraceptive introduction have evolved over the past three decades. However, the experience with the

Figure 1. Systems framework guiding the strategic approach



introduction of the Norplant implant and the Cyclofem monthly injectable in the 1980s demonstrated that these efforts still fell short in assuring adequate attention to quality of care, to user perspectives and needs, and to the sociocultural and institutional context of method choice (Spicehandler and Simmons, 1994).

In response to lessons from the past, in 1991 HRP in collaboration with other institutions developed a strategic approach to contraceptive introduction. Several innovations characterize this approach, which WHO has been testing since 1993 (Simmons and others, 1997; HRP, 1996 and 1999a). The approach shifts attention from promotion of a particular technology to an emphasis on the role of technology in enhancing quality of care and reproductive choice. In doing so, it recognizes the implications of technology introduction for changes in programme management. The

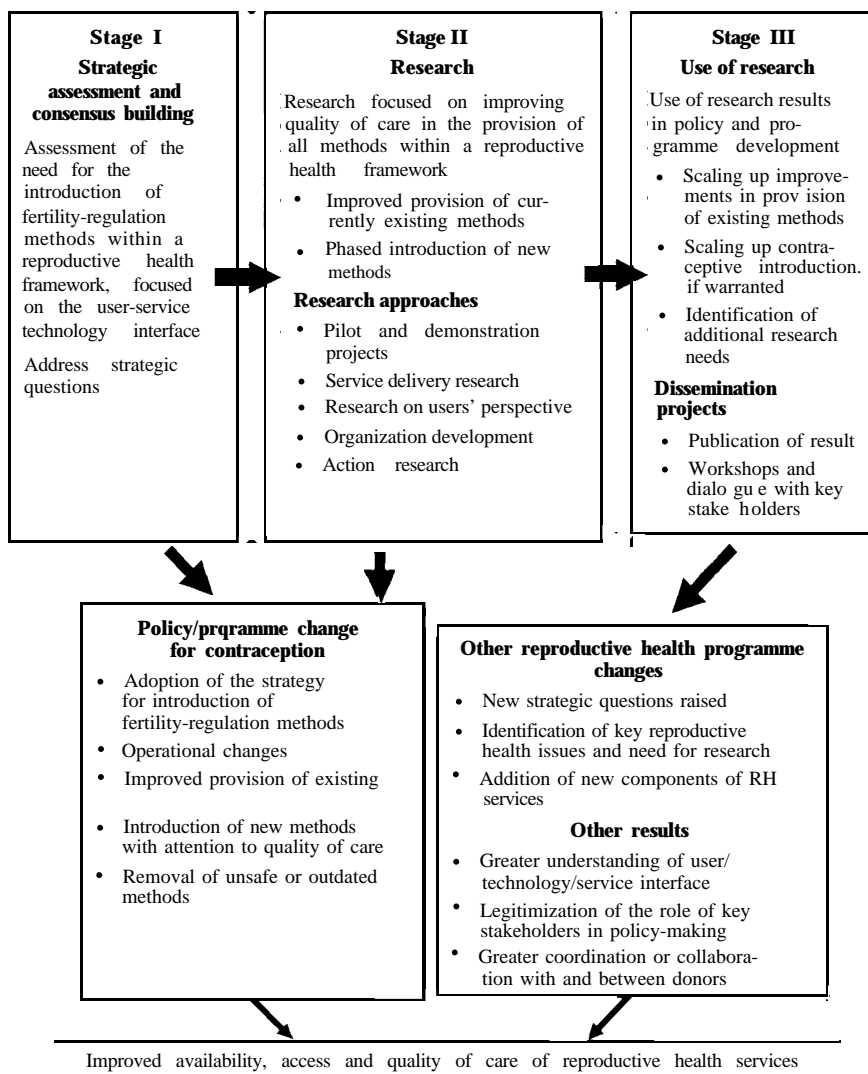
strategy is based on a conceptual framework that considers users' needs and perspectives, available technologies and the capabilities of the service delivery system as well as their interactions, all in the broader context of the health, socio-cultural, political and resource settings. This framework is illustrated in [figure 1](#). The strategic approach to contraceptive introduction also involves a change in the process of decision-making, emphasizing country ownership, broad-based participation and transparency. The strategic approach has three stages ([figure 2](#)).

When addressing contraceptive introduction, Stage I is an assessment of national family planning services. It is focused on the method mix, the extent of coverage and the capability of the servicedelivery system to provide high quality services and to respond to the needs and perspectives of actual or potential users. The central purpose of these assessments is to answer the following three strategic questions: (a) Does a need exist for the improved provision of existing methods? (b) Is there a need to remove methods from a service delivery setting on the grounds of their lack of safety or efficacy? (c) Does a need exist for the introduction of new contraceptive methods, and if so, at what level of service delivery? As the assessments focus on quality of care (Bruce, 1990) in a systems framework, they also address related reproductive health issues such as RTI/STIs, adolescent reproductive health and abortion.

A typical assessment involves preparatory activities including definition of the scope of the assessment and appropriate strategic questions, the formation of the assessment team and the preparation of a background paper that synthesizes the existing knowledge. This is followed by a planning workshop that brings together relevant stakeholders; two to three weeks of field visits with qualitative data collection from community members, service providers and managers, and observations of service delivery; and informing the decision-making process through strategic analysis and report preparation, the holding of a dissemination workshop, and action planning.

Assessments are government-led, but involve a broad range of relevant stakeholders. These may include women's health advocates, representatives of youth organizations, local researchers and representatives from national non-governmental organizations (NGOs). They are involved throughout the assessment process. Assessments may lead to a variety of policy changes, to direct changes in programming and to Stage II research initiatives related to technology introduction and to improved quality of care.

Figure 2. Outcomes of the strategic approach



Source: Adapted from Ruth Simmons, Peter Hall, Juan Diaz, Margarita Diaz, Peter Fajans and Jay Satia (1997). "The strategic approach to contraceptive introduction" *Studies in Family Planning* 28(2):79-94.

Stage II activities have typically consisted of pilot projects which test interventions recommended in the assessment through user-perspective and service delivery research. Pilot projects have often involved introducing one or more new or underutilized methods of contraception while improving quality of care for all methods. While focusing on contraception, Stage II has been adapted to address broader reproductive health concerns. Wherever possible, the research continues to apply participatory approaches.

The primary objective of Stage III is the use of research findings for policy and programme development. Based on the research results of Stage II, policy makers and programme managers must determine how to scale up and expand implementation of the tested interventions and programme adaptations to improve the quality of services elsewhere and decide which service delivery points are appropriate. Specific activities undertaken at this stage vary and arise out of country and programme needs. In addition to replication or expansion of new programme activities, the activities may entail additional research during scaling-up, further simplification of the interventions, dissemination of results, and continued evaluation. Stage III activities should continue to address questions related to costs and sustainability. The participatory and community-oriented approaches that guide the earlier phases of the strategic approach continue to be important in this phase of activities.

Experience with implementation of the approach

The strategic approach to contraceptive introduction has been implemented in 10 countries: Burkina Faso, Ethiopia, South Africa and Zambia in Africa; Lao People's Democratic Republic, Myanmar and Viet Nam in Asia; and Bolivia, Brazil and Chile in Latin America. The process has been participatory, involving multiple stakeholders, country-owned and generally led by senior programme managers. The systems framework of the approach and its flexibility have led to a broader application that addresses a range of reproductive health programme issues. These features of the approach have been demonstrated to be major advantages of the strategic approach.

Participatory process involving multiple stakeholders

The assessment team is involved in all aspects of the Stage I strategic assessment (HRP, 2000). While the assessment team continues to be involved, a sub-team has the responsibility for implementation of Stage II.

The composition of this sub-team, however, reflects the perspectives of programme managers, researchers and women's advocates. The team is also involved in reviewing the strategy for Stage III.

The participatory processes have been expanded to include other stakeholders, which typically did not have a strong role in decision-making. In all assessments, teams have included other government agencies, NGOs and researchers. However, the NGOs involved have varied depending on the socio-political context. In Viet Nam and Myanmar, the NGOs involved were closely related to the government, but reflected different perspectives.

The participatory nature of the process has engendered closer working relationships among agencies. For example, in Viet Nam, it brought together representatives of the Ministry of Health, the National Committee on Population and Family Planning (NCPFP) and the Vietnam Women's Union, all key stakeholders in quality of care for contraceptive services (Do Trong Hieu, 1995). In Myanmar, it provided an opportunity to further strengthen the relationship between the Department of Medical Research, the MCH/FP Programme and the Myanmar Maternal and Child Welfare Association, an NGO (Union of Myanmar and WHO, 1997).

Addressing women's reproductive rights issues has often depended on the strength as well as the tradition of women's health advocacy. The participation of the Vietnam Women's Union in the strategic process in Viet Nam not only enhanced the Union's sensitivity to women's concerns to encourage a client-oriented approach to services but also strengthened its ability to enter into a dialogue with government managers at various levels.

The participatory nature of the process has also made the decision-making process more transparent. The involvement of a large group of stakeholders, including the field-level managers and staff of the programme, donors and other organizations in various workshops, provides an opportunity to discuss and debate not only the design of assessments and research but also the findings and recommendations of the assessments and subsequent action research.

Country ownership

The process is country-owned, although WHO and other collaborating agencies have provided extensive technical support. The assessment teams were usually led by senior programme managers or, in some cases, by national reproductive health researchers. The participatory nature of the process, involving a large national team, has assured that national priorities

and needs are reflected in the decision-making process. In Viet Nam, the Stage I assessment concluded that the highest priority should be accorded to improving the quality of care for existing contraceptive methods in the programme. The Vietnamese Government thereafter changed its plans for widespread introduction of Norplant. However, given the serious policy concern with expanding method choices, the Stage II research linked the introduction of DMPA (depot medroxyprogesterone acetate, which is sold commercially as Depo-Provera) to improving the quality of care for all methods.

Role of senior programme managers

Senior programme managers have almost always led the implementation of the strategic approach, which has several advantages but also poses some difficulties. It guides the approach to address the programme's strategic concerns and, therefore, the possibility is high that the results would be used. In Viet Nam, the use of the approach was guided by the policy thrust to diversify the contraceptive method-mix. In Myanmar, there was a need to expand the birth-spacing programme and in the Lao People's Democratic Republic, the government was concerned as to how it could develop the reproductive health programme when the health service delivery infrastructure is very weak. However, because the process of assessment followed by research and up-scaling may take several years, there is a good possibility that managers may change. For example, in Viet Nam, the programme manager retired before Stage II was completed. Therefore, the team has an important role to play in assuring continuity.

The involvement of senior managers in the assessment fieldwork and subsequent Stage II research is also important. Rarely, the senior managers have an opportunity to meet community members directly and get feedback in informal settings where the information is not filtered by service providers or lower level managers. On the other hand, in view of the many demands on their time, senior managers are often not able to participate fully in the two weeks of field work. Programme managers have guided and participated in the Stage II operations research, which increases the chances that the research results would be used for programme development.

Flexibility and adaptability

Although the strategic approach was developed to address the introduction of contraceptives, its implementation offers considerable flexibility. In each country, the approach has been adapted to address various reproductive health concerns. In view of its strategic nature, even

when focused on contraceptive introduction, a broader set of recommendations have emerged covering policy, programming programme implementation and further research as well as linkages to other aspects of reproductive health. For example, in the contraceptive method-mix assessment in Myanmar, the programming recommendations not only encompassed recommendations on birth spacing — enhancing community capability, improving access and availability, and ensuring quality of services — but also included suggestions on abortion and management of its complications as well as for the establishment of closer linkages between MCH and birth-spacing services.

Follow-up of such a comprehensive set of recommendations has, however, proved difficult. Stage II research has typically addressed a narrower set of concerns whereas others require policy or programme changes. Programmes need to devise or strengthen existing mechanisms to follow up on such needed key actions.

Use of approach for reproductive health programme development

Because a systems perspective guides it, the approach addresses the linkages between the introduction of contraceptives and a range of reproductive health issues. During implementation, countries found it useful not only for contraceptive introduction, but wanted to employ the same process to address other specific reproductive health issues. Finally, in view of the flexibility of the process, it has been used for the development of comprehensive reproductive health programmes.

Improving quality of care

The strategic approach has always focused on improving quality of care in a reproductive health context. Most assessments identified inadequate quality of care as a major concern. Consequently, in addition to specific recommendations for the addition of new methods or removal of methods from distribution, recommendations were made to address policy, structural and managerial barriers to improving the quality of care in family planning.

Most Stage II projects have demonstrated that the introduction of one or more new contraceptive methods in the programme provides an opportunity to address a range of issues related to quality of care. In Viet Nam, DMPA was introduced while improving the quality of care for all

methods (Nguyen Thi Thorn and others, 2000). In Myanmar, the Stage II project seeks to develop a township model for improving the quality of care in reproductive health services that includes not only the complete range of contraceptive methods, but the management of reproductive tract infections in both the public and private sectors. The major programme interventions include improving IEC (information, education and communication) materials, training, community advocacy and strengthening management capabilities of township and health centre staff (HRP, 1999b).

Addressing other specific reproductive health problems

The strategic approach has been adapted to address other components of reproductive health. Subsequent to its application, the strategic approach for contraceptive introduction in Viet Nam was recognized as a useful method for addressing client-, service-delivery- and technology-related issues in reproductive health. In 1997, the Ministry of Health and the United Nations Population Fund (UNFPA) requested assistance for a second strategic assessment to be conducted in Viet Nam focusing on issues relating to abortion, which is legal and widely used in Viet Nam (Bélanger and Khuat Thu Hong, 1998). The assessment examined ways of both decreasing the recourse to abortion, as well as improving the safety and quality of current abortion services. The recommendations covered a wide range of policy and programme adaptations as well as research issues, which included the need for strengthening of post-abortion family planning, improved counselling as well as various related aspects associated with technical quality of care (Do Trong Hieu and others, 1999).

More recently, WHO, together with the Population Council's HORIZONS project, has adapted the strategic approach to address the development of comprehensive national programmes for the management of RTIs. The RTI programme guidance tool, based on the guidelines developed for use of approaches for contraceptive introduction, has been utilized in four countries for the strategic assessment of RTI programme interventions. For example, in Cambodia, the Ministry of Health conducted a strategic assessment on the management of established reproductive tract infections in four provinces in February-March 2000 (WHO, 2000). Considering the limited availability of information on reproductive and sexual health, and on the management of RTIs in particular, the assessment sought to (a) fill existing information gaps about RTIs, (b) help to identify priority areas for research or subsequent programme interventions, and (c) identify areas where existing programme interventions need strengthening.

A series of interventions based on the assessment recommendations is currently being developed.

In order to address the sexual and reproductive health needs of young people in Kyrgyzstan, a national assessment was conducted to explore the issues around the sexual and reproductive health needs of young people and identify programmes, research and policy to improve the situation (Reproductive Health Alliance, 1999). The Stage I assessment adapted the guidelines for conducting assessments of the need for contraception. The assessment was guided by the following three strategic questions, which were developed at the planning workshop: (a) How can information and health and education services that respond to the needs of young people be best provided? (b) How can access to, and quality of, information and services be improved? and (c) How can intersectoral linkages be strengthened to support the sexual and reproductive health of young people? Currently, work is in progress at WHO to adapt the guidelines for the strategic approach to address concerns of “making pregnancies safer”.

Myanmar reproductive health strategic assessment

Following the successful experience with the contraceptive method mix assessment, the Government of Myanmar undertook a reproductive health strategic assessment, with support from UNFPA, as a basis for developing its next round of UNFPA country programme assistance for Myanmar (Union of Myanmar and UNFPA, 1999). Through a variety of previous exercises, policy makers and programme managers in Myanmar had already prioritized the country's reproductive health problems: maternal health, birth spacing, RTI/STI/HIV prevention and management, and adolescent reproductive health. A broader concern for gender issues underlined each of these problems. The strategic assessment followed the approach previously described for the contraceptive method-mix assessments. After developing an exhaustive set of recommendations that comprehensively addressed the key reproductive health issues, the assessment team conducted an informal prioritization exercise on how to move forward (Thein Thein Htay and others, 2000).

Based on the priority and feasibility of interventions derived from the exercise, as well as in view of varying epidemiology, the team concluded that a uniform programme would not be an efficient way to address reproductive health problems throughout Myanmar. Rather, they recommended that an incremental and cost-effective approach to programme development would comprise implementing a core package of high-priority interventions

everywhere, and additional interventions to address specific reproductive health problems in the geographic areas where the problem was determined by key indicators to be critical. In the assessment team's collective judgement, the high priority interventions which should form a minimum core package of interventions to be implemented in all the townships consisted of (a) efforts to promote community awareness and education, (b) training of all (public and private) service providers and (c) establishing national standards and guidelines.

The reproductive health strategic assessment in the Lao People's Democratic Republic

The reproductive health strategic assessment in the Lao People's Democratic Republic was conducted with support from WHO in response to a country request to determine how to proceed in developing an integrated reproductive health programme. The assessment (Ministry of Public Health and WHO, 2000) followed the approach of the Myanmar assessment and previous contraceptive method-mix assessments. In view of the absence of a formal prioritization of reproductive health problems that preceded the assessment, these priorities were established at a planning meeting of key stakeholders in Vientiane. Subsequently, the assessment team developed guidelines for field-level data collection and carried out the assessment over a period of four weeks.

Once the team had 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 (a) its type (i.e. whether the recommendation pertained to policy, programme design and/or programme implementation), (b) its level (i.e. whether the recommendation referred to action to be taken at a specific level of the health system — national, provincial, district, health centre and/or community) and (c) its *time frame* (whether the recommendation promises the possibility of impact in the short (1-3 years), medium (2-5) or long (5-10 years) term).

Based on the results from this classification, the assessment team then concluded that the recommendations could be grouped into three categories: (a) timely interventions that have a potential for immediate impact in the short term, (b) programme strategy in the medium term and (c) policy and programme development over the long term (Sananikhom and others, 2000).

Further development of the strategic approach for reproductive health programme development

Despite the utility of the strategic approach for reproductive health policy and programme development, several issues remain to be addressed. First, the approach, as developed for contraceptive introduction, is guided by strategic questions related to the introduction of new methods, improved provision of existing methods and removal of some of those methods. As the approach has been adapted to address other reproductive health concerns, there has been a need to define strategic questions differently. Although more experience is needed in this regard, to date, the following two questions have guided the application of the approach:

- What is needed to enhance access to and improve the quality of care of services to address reproductive health problems?
- How can appropriate health-care-seeking reproductive health behaviour be promoted?

A second concern relates to the considerable amount of time required to implement the strategic approach. Some of the time involved is inherent in the process if a participatory, systematic, evidence-based approach to policy and programme development is to be followed. However, various delays are also encountered during implementation. Senior government officials and other participants are limited in the amount of time they can devote to such a process. The various approvals required, both from government and donor agencies, also often take a considerable amount of time. Nevertheless, the experience shows that hastily introduced technologies or programme interventions may not assure the requisite quality of care to bring about desired improvements in reproductive health.

A third concern relates to the availability of adequate information. Some managers have felt that available quantitative information on reproductive health epidemiology and behaviour may be too scant to build further knowledge based on the largely qualitative methodologies used in the strategic approach. The approach is flexible in this regard, however. In Myanmar, a need was felt for more information on reproductive morbidity after a contraceptive method-mix assessment and a research study were carried out to address this need. Therefore, it may be necessary to seek more information through complementary research to aid in implementing the strategic approach.

Conclusion

An external evaluation of the strategic approach to contraceptive introduction conducted in 1998 concluded that the strategy has contributed to a more integrated holistic and client-centred approach to the introduction of fertility regulation technologies (HRP, 1999b). It found the approach to be highly effective, to create a high degree of country ownership, to be an important tool for policy change as well as flexible and adaptable. The evaluation noted, however, that the application of the strategy was labour intensive, and required time and substantial local and international technical assistance to be implemented successfully.

The companion articles in this issue of the *Asia-Pacific Population Journal* discuss how the Lao People's Democratic Republic, Myanmar and Viet Nam have used the strategic approach for reproductive health programme development. The strategic approach represents a shift in approach to policy and programme development, not only because of its emphasis on quality of care but also for the process of country ownership and broad participation by multiple stakeholders, some of whom have often not been previously involved. Through the course of implementation, the value of the approach as an effective decision-making tool has been realized. It is not easy to implement the approach, however, as it requires sustained commitment to participatory and evidence-based decision-making as well as a strategic orientation. While there are resource constraints, both financial and physical, and cultural sensitivities abound, the strategic approach is of relevance to countries in reproductive health policy and programme development.

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

There remains a need to strengthen existing reproductive health programmes 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 identify 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 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 unmet 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 almost 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, almost everywhere the assessment team went, people were aware of persons in their communities living with or dying from AIDS. Almost invariably, these were reported to be individuals who had returned from working in neighbouring 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 health 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 (10-19 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 Government 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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A Strategy for Advancing Reproductive Health in Myanmar

The implementation of the strategic approach to contraceptive introduction has convinced decision makers of the need for resources and effort to be put into the reproductive health programme

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The implementation of a strategic approach to the introduction of contraceptive services has had a significant impact on the development of the reproductive health programme in Myanmar. At the time of the initial

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Stage I activity, entitled “An assessment of the contraceptive method mix in Myanmar” (Ministry of Health (MOH) and WHO, 1997), public sector contraceptive service provision was very limited in geographic coverage, and there was no framework for the integration of contraceptive services with other areas of reproductive health. That assessment provided vital information for informing the development of many components of the reproductive health programme in a context where such a programme was in its infancy. Subsequent follow-up activities comprising behavioural and operations research have provided useful tools for improving the quality of care and for moving towards a more comprehensive reproductive health programme.

Background to the assessment

Initial discussions about the possibility of Myanmar implementing the strategic approach to contraceptive introduction promoted by WHO began in mid-1995. At the time, a rapid expansion of the provision of contraceptive services in the public sector was being discussed. In that year, the Government of Myanmar provided birth-spacing services in 33 of the country's 320 townships (the township is the primary administrative division in Myanmar) covering approximately 15 per cent of the population of Myanmar.

In 1995, there were ongoing discussions between the Government of Myanmar and UNPPA to support birth-spacing services in an additional 46 townships by the end of 1997, representing a rapid expansion of the public sector provision of contraception. Owing to the relatively recent availability of such services in the public sector, and the sensitivity with which the Government viewed the provision of such services, very little data were available to inform the development of such an expanded programme. It was in this context that WHO initially approached the Government of Myanmar to discuss the possibility of undertaking a contraceptive method mix assessment to inform programme expansion.

Reproductive health situation

In the mid-1990s, little reliable data were available concerning reproductive health conditions in Myanmar. Despite the lack of research, available information indicated that reproductive health problems were both widespread and serious. One large-scale survey undertaken in 1991, before the introduction of any public sector birth-spacing services, found a low level of contraceptive use, at around 16.8 per cent of all married couples

(Ministry of Immigration and Population (MOIP), 1995). The unmet need for contraception was large, leading to unregulated and unwanted fertility, which was placing a significant burden on the reproductive health of women, particularly in terms of maternal morbidity and mortality.

Estimates of maternal mortality varied significantly, from 100 to over 500 per 100,000 live births (MOH, 1993; Myammar Maternal and Child Welfare Association (MMCWA) and others, 1994; Adamson, 1996). No matter what was the actual rate, maternal mortality had generally been recognized as a serious health problem in Myammar. Although induced abortion is illegal in Myanmar, considerable anecdotal evidence suggests that it is a large contributor to maternal mortality. One hospital-based study found that complications of abortion accounted for 38.3 per cent of maternal deaths (Krasu, 1992), and estimates have been made that one third of all pregnancies end in abortion (Ba Thihe, 1997). By the mid-1990s, awareness of the importance of sexually transmitted infections (STIs) and HIV/AIDS was growing, although the available data were still limited. By September 1996, only 13,773 cases of HIV and 612 cases of AIDS had been officially reported to the National AIDS Programme; however, WHO estimated that the number of people with HIV could actually be up to 30 times higher (Goodwin, 1997). Sentinel surveillance data from the same year found an HIV prevalence of 1.3 per cent in pregnant women (Department of Health, 1997). Islam (1995) estimated that the incidence of new cases of curable STIs was 665 per 100,000 population.

Contraceptive method mix assessment

The methodology for the contraceptive method mix assessment was based on the strategy developed and promoted by WHO for examining the introduction of contraceptive technologies. As described elsewhere (Spicehandler and Simmons, 1994; Simmons and others, 1997; and Satia and others, 2000 [in present issue of this Journal]), this strategy places policy choices and identification of research needs in the context of the service environment and user demand. Although contraception and quality of care remained the entry points, the importance of including a consideration of the links between contraception and other areas of reproductive health was considered particularly relevant in Myanmar in view of the infancy of the public sector birth-spacing programme. During discussions on a background paper and the development of an agenda for a planning workshop, strong emphasis was placed on links with adolescent reproductive health, reproductive tract infections (RTIs), abortion, and, to a lesser extent, other reproductive health issues such as maternal health.

After the preparation of the background paper and discussions at a central level workshop, primary data collection for the assessment was undertaken in seven townships in five states/divisions. The townships were selected to represent a range of socioeconomic, geographic, ethnic and health situations. Four of the townships reflected reproductive health programmes supported by different international agencies, and three had no such public sector programme. Selection of the groups for interview and the development of the interview guidelines was undertaken by the assessment team which comprised representatives of the Maternal and Child Health (MCH)/Birth Spacing, Health Education, Health Systems Research and HIV/AIDS/STD Sections of the Department of Health, the Department of Medical Research, the Central Women's Hospital, the Department of Medical Sciences and MMCWA, a national NGO. WHO, the International Council on Management of Population Programmes and the Population Council provided technical assistance throughout the process. Interviews were conducted with over 90 service providers in the public and private sectors, more than 170 women, men and adolescents, and 17 community leaders. In addition, 60 midwives, more than 40 MMCWA members, around 20 community leaders and eight general practitioners participated in group discussions.

Availability of and access to birth-spacing services

As noted previously, at the time of the assessment, public sector birth-spacing services covered 33 townships, accounting for approximately 15 per cent of the total population of Myanmar. Programme townships generally received birth-spacing training for public sector staff, information, education and communication (IEC) materials and some contraceptive commodities. In other townships, a birth-spacing training manual had been distributed to township medical officers, although it was unclear how much additional training had taken place. Neither IEC materials nor contraceptives were provided by the public sector in these non-programme townships.

Even within the programme townships, the assessment team found that there were a number of public sector staff who had not been trained in birth spacing. This resulted from the single round of training provided by most of the programmes and the often high turnover of staff. Although IEC materials were technically provided in the programme townships, the assessment team found very little in the way of available information materials in the townships visited.

Supplies of contraceptives at public sector service delivery sites were often limited, and the logistics systems appeared to have not yet stabilized. This was being complicated by the different requirements for procurement and supply of contraceptives between the different programmes. At the time of the assessment, some townships were found to be receiving more contraceptives than they could use, whereas others were experiencing shortages.

In all townships, contraceptive services were being provided by the private sector. Pharmacies and drug shops were well stocked, and many private providers, mainly in urban areas, would provide contraceptive services. Public sector providers were also providing contraceptive services in their private practice in their off-duty hours.

During the fieldwork, the team saw two brands of monthly injectables from China, the two-monthly progestin-only injectable NET-EN (norethisterone enanthate), and several brands of the three-monthly progestin-only injectable DMPA (depot medroxyprogesterone acetate). National surveys indicate that 18.5 per cent of contraceptive users were using injectable contraceptives in 1991, and 35.7 per cent in 1997 (MOIP, 1995; MOIP and UNFPA, 1999). Women visited a range of service providers for injectable contraceptives, including basic health staff, private general practitioners and "quacks". While private providers often did not have stocks of injectable contraceptives, most of those interviewed would regularly give an injection to women who had purchased the product from a drug shop. Injectables were found to be widely available in drug shops in all the townships visited, and through the basic health staff in programme townships, although it was reported that, in the public sector, stocks were commonly exhausted.

Oral contraceptives were the most widely used method in 1991 (23.8 per cent of current users), and the second most used method in 1997 (22.5 per cent) (MOIP, 1995; MOIP and UNFPA, 1999). Most users of oral contraceptives indicated that they purchased their supplies from either independent drug shops or those adjoining private clinics. Such drug shops were generally well stocked with both the once-a-month pill from China and several brands of daily oral contraceptives. In those townships where public sector birth-spacing programmes were in effect, daily oral contraceptives were available from basic health staff, but it was unclear who was being reached by this service. Some providers reported that they did not prescribe oral contraceptives for certain women because they did not think that the women would be able to take them daily.

Condoms were not as widely available as the hormonal methods, although many drug shops did have a supply, as did the public sector in the programme townships visited. Many providers perceived an association between the use of condoms and people having multiple sex partners; the team interviewed many providers who had never seen a condom out of the wrapper.

Services related to the provision of the intra-uterine device (IUD) were particularly limited, even when there was a public sector birth-spacing programme, because few providers, particularly midwives, had received the relevant training. Even for those who had received training, the ability to provide the method was constrained by a shortage of equipment and limited privacy. A number of potential providers were reluctant to provide IUDs because of the perceived health risks.

Female sterilization was the one contraceptive method available in all townships, regardless of the implementation of the birth-spacing programme. However, it was available only to women who had previously received permission from a division/state-level board. Although criteria varied, in general, the woman to be sterilized should be at least 30 years of age, have at least three living children and have a health condition that would endanger further childbearing. Although few applications were rejected, the lengthy application procedure and associated costs made it a method not easily accessible to many women. Vasectomy is legal only if the man's wife has received permission for a sterilization but she is unable to go through the procedure for health reasons. However, many people knew of vasectomies taking place in the private sector.

Most clients actively had to seek contraceptive services from providers. Although midwives were expected to visit every three months all households with married women of reproductive age, they were not expected to provide birth-spacing services. Proximity to a birth-spacing service provider was therefore a key determinant of the availability of services. In programme townships, many public sector providers had been trained, and therefore access tended to be better. In urban areas of non-programme townships, access to private sector contraceptive services was good. In rural areas, it depended on whether the midwife provided such services as part of a private practice.

In addition to availability of services and geographical access, cost was an important barrier to access in all of the townships visited. The

government has a policy of cost sharing for most medicines, including contraceptives, but since contraceptives were provided in a limited number of townships, many couples could not benefit from this provision. Generally the providers and community members interviewed felt that many potential users could not afford injectable contraceptives from the private sector, which ranged between 100 and 150 kyats (US\$ 1 = 160 kyats in 1996) per ampule.

Community knowledge and perceptions related to birth spacing

Most community members were aware of both birth spacing and contraception, although misperceptions were common. For example, many people expressed concern about the use of contraception for more than three years continuously. Hormonal methods were often incorrectly linked with difficult deliveries in future pregnancies, and with an increased risk of cancer. Knowledge of injectable and oral contraceptive methods was greatest, although this knowledge was usually superficial.

Some women preferred the once-a-month injectable because a single dose is cheaper than one dose of a three-monthly injectable and menstruation is more regular. Many women, however, were aware of the higher failure rate, and therefore would prefer the three-monthly injection. It was also perceived to be more convenient because it only required contact with a service provider once every three months. Concern with amenorrhoea was common, with a fear that the unexpelled blood would accumulate and cause health problems. Many women, however, said that they were willing to tolerate the lack of bleeding for the convenience and security offered by injectables. One common misperception among women was that there was no need to return for a re-injection until menstruation had returned, possibly resulting in the relatively high number of contraceptive failures reported to the assessment team.

Women who chose the monthly oral contraceptive pill generally did so because of its low cost. Most women recognized the high risk of contraceptive failure associated with the monthly pill, and many associated it with nausea and vomiting. Daily oral contraceptives were the preferred choice of some women because they were cheaper than injectables and menstruation was perceived to be more regular. Reports of side-effects, however, were high, particularly dizziness, headache and nausea. Users of oral contraceptives often did not know when in the menstrual cycle contraceptive pills should be started. There were also a number of reports of intermittent use resulting from balancing the perceptions of risk of

pregnancy with the cost of the method. The team also met a number of women who started using the oral contraceptive pill on the day of unprotected sex or postcoitally, believing that pills prevent pregnancy as soon as they are taken.

Far less was known about the IUD, particularly in those townships without a birth-spacing programme. Although several satisfied IUD users were interviewed during the assessment, most women considered IUDs to have many disadvantages and to be dangerous for health. There was fear that IUDs could lead to erosion of the uterus, cause a tumour in the uterus or adversely affect sexual function. Anecdotes related to dislocation of the IUD were also common. Even current users thought that they should stop using IUDs after a few years to avoid serious health problems. A significant number of people had not heard of condoms, and of those who had, few associated them with birth spacing; considering them to be only a means of STI prevention. Concern was expressed over the health effects of both female and male sterilization, fearing that this method would adversely affect strength and sexual function in men and cause neck stiffness and back pain in women.

Perceptions of the potential health risks associated with contraceptive use, particularly hormonal methods, were of great concern, and one of the main reasons for the non-use of contraception. Side-effects were also one of the main factors in the choice of a specific method, with this aspect being balanced with an assessment of the perceived efficacy, convenience and cost. Method switching, particularly between oral and injectable contraceptives and between brands of hormonal methods was common, and again the experience of side-effects, particularly menstrual disturbances, was a key reason for such switching. Choice between brands of three-monthly injectable contraceptives was usually made on the basis of price and availability rather than factors associated with side-effects and efficacy, however. Choice of brand of daily oral contraceptives was often based on availability, price and reputation, with the more expensive "gold-card" brands being associated with the most regular menstruation, and therefore the preferred choice of those who could afford it.

Provision of birth-spacing information and counselling

When services were provided and accessed, there were a number of constraints to the provision of high quality information and counselling. At the time of the assessment, neither the basic training for midwives, nor the

additional training for female health visitors included birth spacing. Staff in programme areas had received in-service training, but staff turnover meant that even in programme areas there were untrained staff. Midwives appeared to have acquired some information about hormonal methods based on the experience of their clients, but that knowledge was superficial and many did not know the details of good technical practice. For example, few providers considered the whole interval up to seven days after the start of menstruation as appropriate for a woman to begin injectables and, although most knew of the re-injection window, few were able to appropriately explain what they would do if a woman returned after this time. Most providers could not distinguish between high- and low-dose oral pills, and did not know that combined oral contraceptives should not be given to breastfeeding mothers for the first six months after delivery.

During the assessment, the team did not have the opportunity to observe directly service provision. It was found that in the rural areas, in the public sector, most service provision took place outside of the formal setting of a clinic, therefore making observations difficult within the context of a rapid assessment. Despite this, both providers and clients indicated that counselling of clients was limited. Counselling was generally conducted in a passive manner, with providers responding only when a client enquired directly about birth spacing. Other opportunities for counselling, such as antenatal care, were generally missed. The limited knowledge of providers also meant that, other than common side-effects, such as irregular bleeding and amenorrhea for DMPA and nausea for oral contraceptives, potential side-effects were generally not mentioned to women and follow-up and contraindications were not sufficiently discussed. Providers appeared to have a bias towards injectable contraceptives, so even when some form of counselling did take place it was often not in the context of contraceptive choice. Private general practitioners additionally mentioned that they were too busy to provide adequate counselling. Women who attended private clinics had usually already made the decision regarding contraceptive method choice, and if not then they would normally rely on the provider's choice of method. Counselling and provision of information at drug shops was even more limited.

Levels of supervision within the public sector were highly varied. Where supervision was relatively intense, providers were generally able to put their training into practice, and provide higher quality counselling to clients. Because of limited human resources at the central level, and the

difficulty of accessing many rural areas, such supervision was not universal, however.

Quality of contraceptive products

The assessment team identified a number of problems related to the quality of contraceptive products, particularly hormonal methods. One of the methods on the market, the once-a-month oral contraceptive from China, has not been adequately tested for safety and efficacy (Yibin and Pengdi, 1997), and the monthly injectable is known to have a relatively high pregnancy rate (Newton and others, 1994). A number of the more popular oral contraceptive brands contain high doses of oestrogen, which is likely to be contributing to the experience of side-effects. Many of the three-monthly injectables also have not been tested for content and purity, and the team saw many vials that did not have labels with the country of origin or the expiry date.

Other related reproductive health issues

Although issues related to areas of reproductive health other than birth spacing were not a primary focus of the assessment, the team addressed them as part of the broader reproductive health framework within which the assessment was undertaken.

Antenatal care coverage was generally high, and the provision of ferrous sulfate tablets and tetanus toxoid immunization was found to be routine, as was referral for syphilis screening in townships where an STD laboratory was available. Essential equipment such as blood pressure cuffs was not always in working order, however. Midwives could usually identify women at high risk of complications during childbirth whom they believed should deliver in a health facility. Both women themselves and providers, however, reported that women were often reluctant to do so, preferring to deliver at home. For postpartum care, if a midwife had delivered a baby, she would regularly visit the mother for five consecutive days after the birth. This was an opportunity to counsel the woman on various issues related to child care, breastfeeding and nutrition. Birth-spacing information, however, was found either to be not given or superficial. If a midwife did not attend the birth, it was unclear if the woman received postpartum care from other providers, and if so what was the scope of such care.

Concern about the regularity of menstruation was high. Women reported using a variety of menses inducers, including the injection of

Menstrogen (estradiol and progesterone), a variety of local herbal preparations, and a mixture of ginger and jaggery (palm sugar). Used to induce menstruation, these methods were not generally considered to be abortifacients, although some were said to be so if used in higher doses. In fact, these methods were often used as a proxy for pregnancy testing, as they were assumed not to work if the woman was pregnant.

Abortion is illegal in Myanmar, but most providers knew of them taking place in their community and recognized that significant numbers of women experienced complications of unsafe abortion procedures. Community members were very aware of the risks associated with induced abortion, and it was described as a desperate action by women who did not want any more children. A range of methods were reportedly used to induce abortion, including uterine massage, followed by the passing of a variety of instruments through the cervix if this did not work. Treatment guidelines for women with incomplete abortion were available to service providers, and evacuation and curettage, or dilation and curettage were generally used. Manual vacuum aspiration equipment was not available.

The assessment team was repeatedly told by community leaders that young people did not face any problems during adolescence, and that premarital sex was uncommon despite the high average age at first marriage (20.0 years for women and 23.3 years for men in 1997) (MOIP and UNFPA, 1999). Many also felt that it was the responsibility of parents to provide adolescents with the necessary information on sexuality and reproduction. From discussions with young people, however, it appeared that these subjects were rarely discussed openly at home, and that adolescents acquired much inaccurate information from a range of informal sources. Many of the young people interviewed during the assessment recognized that the information they had was superficial and expressed interest in receiving more accurate information regarding reproductive health issues.

Many of the men and women interviewed during the assessment were much more aware of HIV/AIDS than other STIs and RTIs, possibly reflecting the prominence of HIV/AIDS issues in the media. It was difficult for the assessment team to determine the depth of information the community had regarding HIV/AIDS, beyond the primary modes of transmission and the association with commercial sex and drug use. Providers, too, seemed to have more knowledge of HIV/AIDS than other RTIs.

Self treatment with antibiotics from drug shops prior to consultation with a private general practitioner appeared to be the normal practice for

men with genital symptoms. Most men would not go to the public sector for treatment, primarily for reasons of privacy and to avoid stigmatization. Women would also prefer to go to the private sector, but only if the provider was a woman.

When there was consultation with a formal health care provider, many limitations to case management were identified. At the rural health centre level, female health visitors and midwives generally lacked the appropriate skills to treat a woman presenting with symptoms; for those with the skills, appropriate antibiotics often were not available. Private general practitioners tended to use a variety of syndromic approaches to the treatment of RTI symptoms, with little scientific rationale. In some cases, providers described prescribing the wrong antibiotics, and more commonly there were reported inaccuracies in the dosage or duration of prescribed therapies. Primarily because of the lack of equipment and privacy, neither laboratory testing nor vaginal examinations were common, particularly at private general practitioners and in the rural health centres, making accurate diagnosis difficult. Clients were also often reluctant to return for follow-up if it was perceived that symptoms had been relieved with the initial treatment.

Assessment recommendations

Based on the findings from the contraceptive method mix assessment, a number of key programme, policy and research recommendations were made.

Enhancing community capacity for birth spacing

The majority of birth-spacing services were provided in the private sector. Given the limited availability of financial and human resources in the public sector, the assessment concluded that strengthening of community involvement in the support and provision of birth-spacing services was important. Many community members had limited or inaccurate information about birth spacing and contraception. Accurate information on contraceptive methods should be made widely available to ensure that community members have the necessary information to make an informed choice regarding birth spacing. Since there were very few IEC materials available in Myanmar, the development of an effective IEC strategy will involve further research to determine the most effective communication formats. The needs and potential role of men in birth spacing had not been adequately addressed. The only widely available method for men, the

condom, was unknown by many men interviewed, and not considered a method of contraception. If community capability was to be enhanced, men would need greater access to accurate information and condoms, which could be instigated through the network of male basic health staff. The assessment also concluded that the role of national NGOs in the provision of birth spacing could be strengthened, particularly that of the Myanmar Maternal and Child Welfare Association and the Myanmar Medical Association. MMCWA has branch associations in all townships, and its role in birth spacing would be strengthened by more frequent refresher training and the strengthening of links with health care providers and local authorities. The Myanmar Medical Association has the potential to reach private general practitioners for training on service provision and IEC-related activities in birth spacing.

Improving access to and availability of birth-spacing services

The limited geographic coverage of public sector birth-spacing services constrained the impact that the programme was having on reproductive and abortion-related morbidity, and the assessment recommended the expansion of organized programme efforts to enable all townships to provide high quality contraceptive services. The finalization of the National Population Policy and strengthening of the capacity of the MCH/Birth Spacing Section of the Department of Health would be instrumental in facilitating such an expansion. Although a range of contraceptive methods was theoretically available in Myanmar, in reality most women had access only to oral and injectable contraceptives. In this context, the assessment suggested a controlled reintroduction of the IUD to improve access while ensuring adequate quality of care. A review of the administrative procedures related to sterilization would also significantly improve access. An improvement in the access to condoms was needed, possibly through an expansion of social marketing activities. The team also concluded that people should be made aware of the contraceptive properties of condoms.

Ensuring the quality of contraceptive services and commodities

During the field work, the assessment team noted that within the national programme a variety of brands of low-dose oral contraceptives and three-monthly injectables were being provided. There was concern that this could lead to confusion, and it was recommended that a limited number of brands of each different method be included in the public sector programme. Within the private sector, the range of methods was even wider, including a number of methods of uncertain or decreased safety and

efficacy, primarily utilized because of their low cost. By strengthening the drug regulatory process and placing safe and effective contraceptives on the national essential drugs list to allow duty-free importation, the use of these doubtful methods could be discouraged.

The team encountered weaknesses in several areas of quality of care in birth-spacing service delivery, including limited counselling and insufficient technical knowledge. Updating of the training curricula and expanded training activities was therefore one of the key recommendations resulting from the assessment. Given the importance of the private sector, it was recommended that training be provided not only for public sector providers at all levels, but also for drug shop staff and private general practitioners.

Abortion and management of its complications

The assessment identified great concern regarding the risks associated with unsafe abortion procedures. Recognizing that much of this demand for abortion is the direct result of the unmet need for contraceptive services, the assessment further recommended expanding the availability of birth-spacing services. Improving access to long-term methods such as the IUD and voluntary sterilization would be of particular importance in reducing the recourse to abortion. It was also suggested that the introduction of emergency contraceptive pills may decrease the number of abortions. Women who presented with incomplete and septic abortions were being treated with evacuation and curettage or dilation and curettage. The introduction of vacuum aspiration would significantly improve the management of incomplete abortion. Since little was known about the phenomenon of abortion in Myanmar, further research to document practices of menstrual induction and abortion-seeking behaviour would be important to future programmatic activities in this area. Data describing the profile of women having abortions and experiencing complications, their knowledge of birth spacing, and their access to contraception would also be useful.

Broadening the scope of reproductive health services

The integration of other reproductive health services with those for birth spacing was limited. Very little birth-spacing counselling was conducted in maternal health services, and the team concluded that efforts should be made to avoid missing opportunities to provide information and counselling in antenatal and postpartum case settings. Services and information related to RTIs were generally provided independently of birth

spacing. It was therefore thought to be important to incorporate accurate information on RTIs into IEC, health education and training materials for providers, community members and specific subgroups at risk. Improving the skills of providers at all levels in the syndromic identification and management of RTI symptoms and in appropriate counselling would be an important intervention, as would upgrading laboratory equipment and technical skills at the maternal and child health clinics for the identification and treatment of RTIs.

Implications for the method mix and contraceptive introduction

The strategic approach to contraceptive introduction addresses three basic questions: Should any method be removed from the contraceptive method mix? Do any methods need reintroduction? Should any methods be added to the mix? The contraceptive method mix assessment in Myanmar concluded that the use of injectables of unproven safety and efficacy should be discouraged, which would be facilitated by a lowering of the cost of effective and safe methods, and the introduction of a safer and more effective once-a-month injectable. The monthly oral contraceptive pill and high dose oestrogen pills should also be discouraged in favour of lower dose combined oral contraceptives. IUDs, sterilization and condoms are available in Myanmar, but the use of these methods was limited by a number of service- and user-related factors. Efforts to expand access to these methods with high quality of care would significantly improve contraceptive choice. As well as considering the introduction of a once-a-month injectable contraceptive, adding a progestin-only pill to the contraceptive method mix for breastfeeding women would be a significant enhancement of postpartum services. There may also be a role for emergency contraception in the birth-spacing programme, but further research to investigate this potential would be a first step.

Follow-up to programme activities

The contraceptive method mix assessment has proved to be an effective tool for advocating additional input to be made in the Myanmar reproductive health programme. The Department of Health, other participants in the assessment process, international organizations and donors have recognized that the assessment provided critical, programme-oriented information for the development of programmes and future interventions. Since the 1996 assessment, a number of agencies and organizations have undertaken activities specifically responding to the findings and recommendations of the assessment.

Reproductive morbidity studies

Following the contraceptive method mix assessment there was recognition of the importance of RTIs in the reproductive health of the Myanmar population. Reproductive tract infections, including STIs, were addressed in the context of birth spacing in the assessment, but the team did not manage to acquire as much information as had been hoped, primarily because of the differences in language and definitions of RTIs used by community members, providers and indeed the assessment team members themselves. Further clarification of these issues was seen as essential in order to develop appropriate interventions in the context of a reproductive health framework. Therefore, WHO supported the Department of Health in undertaking a qualitative study of reproductive morbidity in two townships as a preparatory activity for a broader focused interventions research project (see below). This study, entitled "Perceptions of reproductive morbidity among women, men and service providers in Myanmar" (Department of Health and the Population Council, 2000), undertaken in late 1997, focused on RTIs, but the opportunity was also taken to address by qualitative methodologies other areas of reproductive morbidity. It was conducted in two townships, Pyay in Bago Division and Kalaw in Shan State, which had already been identified as the sites for the interventions research project described below. A variety of qualitative data collection techniques were used, free-listing, focus group discussions, in-depth interviews and pile sorting. This reproductive morbidity study corroborated the findings of the initial assessment, using more structured research techniques, and provided more detailed information on many areas of reproductive morbidity.

Improving quality of care in reproductive health

As the second stage of the strategic approach to contraceptive introduction, WHO is currently supporting the Department of Health to undertake an interventions research activity which puts into action many of the recommendations from the contraceptive method mix assessment. The project, entitled "A township model for improving quality of care in reproductive health services in Myanmar", aims primarily at improving the quality of currently available contraceptive services and increasing the attention given to related reproductive health services, particularly regarding the prevention and treatment of RTIs.

Major activities of the project include reviewing and improving existing IEC materials and developing new materials; training for public sector basic health staff, private general practitioners, drug shop staff, and members of

the Myanmar Maternal and Child Welfare Association; a community advocacy component; and efforts to strengthen township-level and health centre staffs management capabilities related to planning, supervision and logistics.

Research and evaluation activities employ methodologies such as rapid qualitative assessments, a modified situation analysis including facility inventories and observations of service delivery and quantitative surveys of women. The surveys collect data concerning women's perspectives on and patterns of use of contraceptive methods, men's involvement in reproductive health issues, women's health-care-seeking behaviour focusing on both contraception and RTIs, and other related issues including abortion in the community. Qualitative user perspective research addresses similar reproductive health issues, as well as including additional emphasis on client and community perspectives on the quality of reproductive health services, counselling and the new IEC materials developed by the project.

Although the interventions have only recently been implemented in the two pilot townships, and research has not yet been undertaken to demonstrate the impact of the interventions, the Department of Health considers the revised training curriculum for public sector health staff to be a significant improvement over those previously used. Efforts are already under way to utilize the new curriculum for training and refresher training in all of the UNFPA-supported townships, and to distribute the curriculum to the township medical officers in non-programme townships.

Reproductive health needs assessment

In early 1998, a reproductive health needs assessment (MOH and UNFPA, 1999) was undertaken with UNFPA support, eliciting the technical assistance of the same groups that had participated in the initial assessment. This assessment utilized a similar process as the contraceptive method mix assessment, but interview guide development and data collection were conducted with a view to providing detailed information on maternal health, birth spacing, RTIs and adolescent reproductive health.

The assessment showed that considerable effort would be required to implement a comprehensive reproductive health programme in Myanmar. In view of the fact that a large proportion of services are delivered through the private sector and the public sector has severe resource limitations, the key role for the government in the provision of reproductive health services would be to improve the quality of care by strengthening community

awareness as well as the education and training of all service providers in all townships, and establish standards and guidelines. As there is considerable regional variation in reproductive health status, it would be useful to target specific interventions at different townships to address specific reproductive health problems. The report of the assessment included recommendations for policy change, programme development and research; it also laid out an approach for operationalizing an essential service package for the national reproductive health programme.

Following this broader assessment, a range of pilot activities has been implemented in a number of areas of reproductive health, and discussions continue between the government, international organizations and donor agencies regarding the implementation of additional follow-up initiatives. The identification of reproductive health as one of the priority areas of WHO's work in Myanmar over the period 2002 to 2005 is a significant stimulant for these discussions.

Maternal health

The reproductive health needs assessment team observed that the number of maternal deaths remains high. Preliminary data from a UNFPA-supported study of maternal mortality indicated that 57.4 per cent of maternal deaths took place at home, and 3.7 per cent on the way to the hospital. Even though a substantial proportion of women died before reaching the hospital, a noteworthy finding from this study was that over one third of the maternal deaths took place in government hospitals (cited in MOH and UNFPA, 1999). One of the reasons that women died even after arriving at the hospital was the extensive delay often experienced in reaching the hospital. Several factors were found to be deterrents to seeking timely care at the hospital, including women's preference to deliver at home, the cost of transportation to the hospital and the perceived high cost associated with hospitalization. It was also observed that the facilities for managing emergencies and complications were generally basic. For instance, in none of the township or district hospitals visited were there fully functional blood banks, although these did exist in state/division-level hospitals.

Since the assessments were made, the Ministry of Health has been in discussion with many donors and potential partners in the international community for the development and implementation of action plans for addressing the issues that were highlighted during the assessment. To date, post-abortion care has been the area of maternal health receiving the most

focused programme development. The Department of Health recognizes this as an important public health issue, and an important entry point for reaching women with reproductive health information and services. Given the sensitivities of activities related to abortion, the interventions currently being implemented are being done so in a limited number of townships as pilot projects. Both the Population Council and Family Planning International Assistance are supporting training for service providers in the provision of contraceptive services, counselling and follow-up for women who have undergone an abortion. Both of these organizations are also currently discussing the pilot introduction of modern equipment in a limited number of settings, as recommended by both of the needs assessments.

Birth spacing

By 1997, the coverage of the public sector birth-spacing programme had increased to 117 of Myanmar's 320 townships. The national Fertility and Reproductive Health Survey undertaken in 1997 found that the use of contraceptive methods had also increased to 32.7 per cent of married women of reproductive age, with injectable contraceptives becoming relatively more popular than oral contraceptives (MOIP and UNFPA, 1999). Since the expansion of public sector programme activities was still very new at the time of the data collection for this study, much of the increase is likely to be a result of increases in the private sector. Despite the increase in contraceptive use, the unmet need for birth spacing remains significant, with a total of 20.6 per cent of the currently married women found to be in need of contraception either to space their next birth or to limit their family size. Broadly speaking, the findings of the reproductive health needs assessment in relation to birth spacing corroborated the findings of the earlier contraceptive method mix assessment.

Reproductive tract infections

Data on reproductive tract infections continued to be limited in 1997. HIV sentinel surveillance data indicated a relatively high and increasing level of HIV among both high- and low-risk groups, however. Between 1994 and 1997, the prevalence of HIV infection in sex workers increased from 16.4 to 26.0 per cent, and in blood donors from 0.5 to 1.0 per cent. In contrast, data from injection drug users showed a decline in HIV infection from 71.4 to 56.2 per cent. The data also revealed considerable geographic variation in HIV prevalence (Department of Health, 1997). The assessment confirmed many of the findings of the contraceptive method mix assessment, but was able to address issues related to RTIs in considerably more detail.

Since the assessment, further research into the epidemiology and management of RTIs has been initiated. This research, being undertaken in Mandalay General Hospital and a number of private clinics in Mandalay, will provide cross-sectional descriptive data on the prevalence of RTIs among symptomatic female clients to document the prevalence of RTIs, using gold-standard laboratory tests. This study will also assess the predictive value of simple, clinic-based diagnostic tests and determine the behavioural and demographic characteristics of women with various RTIs. In addition, the study is aimed at addressing the important operations research questions related to the costs of implementing and maintaining various standardized diagnostic and treatment guidelines.

Adolescent reproductive health

In 1997, adolescent reproductive health was a new issue for Myanmar, and very little data were available. The lack of data was limiting providers' and policy makers' understanding of adolescent attitudes, knowledge, practices and needs. Providers interviewed by the assessment team did not generally associate adolescence with reproductive health concerns. Although most believe the traditional assumption that unmarried people are not sexually active, many people acknowledged that young men were currently engaging in sexual activity before marriage.

The involvement of a number of key programme officials in the two needs assessments was a valuable asset to advocacy for the need to expand activities in the field of adolescent reproductive health. The reproductive health needs assessment gained general consensus regarding the services that needed to be provided to young people as part of an essential package of reproductive health care, and noted that very few of these were currently included in the national programme. Since that time, a number of international agencies have been working with the Department of Health and national NGOs such as the Myanmar Red Cross Society to strengthen the programme response to the reproductive health needs of young people. To date, interventions have been on a limited scale, focusing on peer education and training of health staff in adolescent reproductive health. A number of research activities are also under way, highlighting the scarcity of information available for programme development in the area of adolescent reproductive health.

Structural impact of the assessment process

In addition to the specific programme areas and interventions discussed above, the assessment process has had a significant impact on the

environment within which reproductive health programmes are developed and implemented in Myanmar.

Increased awareness of assessment team members

One of the greatest impacts of the assessment has been on the assessment team members. By giving them an opportunity to talk to both providers and clients in the field, and to interact with other experts in reproductive health, their awareness and appreciation of many aspects of reproductive health have been greatly enhanced. For example, previously there had been little understanding of issues of quality of care in reproductive health. The team now recognizes the importance of considering both client and user perspectives in the design and implementation of reproductive health programmes.

Technical capacity-building of team members

In addition to increasing the awareness of team members, the assessment process improved the technical capacity of team members to utilize a qualitative, participatory research methodology. Through active participation in the assessment process under the guidance of an experienced technical assistance team, national team members became familiar with the principals and methods associated with qualitative data collection. Many of the team members have since used both rapid assessment and qualitative information gathering in the context of their institutional positions in Myanmar and abroad.

Links between organizations

The participatory approach used in the assessment gave individual team members an insight into the value of collaboration between institutions and stakeholders in reproductive health. This collaboration between individuals from the Department of Health, the Department of Medical Research, the Department of Medical Sciences and the Myanmar Maternal and Child Welfare Association has, to some extent, continued beyond the scope of activities related to the introduction strategy.

Empowerment of national team members

The country-led process through which the assessment was undertaken has been an important tool in the empowerment of technical staff involved in reproductive health programme implementation in Myanmar. Before the assessment, many policy and programme decisions had been made with

little constructive discussion with programme managers, and activities were often determined primarily by the donor and political environments. The assessment process gave team members a sense that they can influence the development of a reproductive health programme in Myanmar.

Credible source of information

Both the contraceptive method mix assessment and the reproductive health needs assessment are seen as credible sources of information to guide Ministry decision-making, because they are both nationally owned and have the credibility of an international organization. An example of this was the use of the findings and recommendations as background documentation in a presentation to the Deputy Minister of Health for his review of the decision to allow an acceptability trial of Cyclofem, a monthly injectable contraceptive containing progesterin, medroxyprogesterone acetate and oestrogen.

Conclusion

The implementation of the strategic approach to contraceptive introduction in Myanmar has catalysed a process of assessment, pilot testing and scaling-up of successful programme interventions as an evidence-based systematic process of moving towards reproductive health programmes in Myanmar. The assessments have proven to be a useful tool for providing critical information in the design of reproductive health programmes and interventions as well as being instrumental in identifying areas that require focused operations research type activities. In this regard, the reports from both the contraceptive method mix assessment and the reproductive health needs assessment have been particularly important for advocating internally to decision makers in Myanmar and to the international donor community the need for resources and for effort to be put into the reproductive health programme. In addition, the process has led to the increased empowerment of technical staff within the Department of Health and to greater collaboration between the various groups working in reproductive health in Myanmar.

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The Strategic Approach to the Introduction of DMPA as an Opportunity to Improve Quality of Care for All Contraceptive Methods in Viet Nam

*The strategic approach can be effectively utilized to
introduce new contraceptive technologies while improving the
quality of care for all methods of family planning*

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The Government of Viet Nam has an explicit policy to regulate population growth and, in 1993, established replacement level fertility as a

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target. It has implemented a strong family planning programme and contraceptive prevalence is high. The contraceptive method mix, however, remained very skewed. In 1996, the contraceptive prevalence of modern methods was 52 per cent, of which the IUD accounted for 72 per cent, female sterilization 10.4 per cent, condom 9 per cent and oral pills 6.9 per cent. The use of injectables was negligible. In addition, 16.3 per cent reported using natural methods (NCPFP, 1998). One of the concerns of the national population policy is to diversify the mix through adding more methods such as the DMPA (depot medroxyprogesterone acetate) injectable and the Norplant implant. There continues to be a concern about the high rate of induced abortion in the country and the need to address unmet need for family planning has been highlighted as a means to address this issue (Bélanger and Khuat Thu Hong, 1998; Do Trong Hieu and others, 1993).

Several national and international researchers have raised concerns about quality of care in the family planning programme of Viet Nam. Issues discussed include the limited range of methods available, inadequate technical competence and counselling skills of providers, limited ability of facilities to support services, and limitations on choice of contraceptive methods from a client's perspective. The need for access to a full range of information on family planning use and continuity of care has been emphasized to address some of these issues (Alam and others, 1995; Do Trong Hieu and others, 1995; Phan Thuc Anh and others, 1993 and 1996; Knodel and others, 1995; Truong Viet Dung and others, 1996; Jain and others, 1993; UNFPA, 1994; General Statistical Office, 1995).

In 1994, the Ministry of Health (MOH) had decided to introduce DMPA and Norplant on a wide scale, but an introduction strategy had not been worked out. Although the desire to add new methods was strong at the national, provincial and community levels, as well as among donors, previous experience in introducing new methods in Viet Nam raised concerns because of the following factors: (a) the prevalence rate of oral contraceptive pills had remained low, (b) small trials with DMPA had revealed extremely high discontinuation rates (Do Duy Che and others, 1995; Duong Thi Cuong and Nguyen Thi My, 1995; Tran Van Dong and Do Ngoc Tan, 1995; Huynh Thi Kim Chi, 1997b) and (c) difficulties in service delivery were experienced when Norplant was provided on a limited scale (Population Council/Vietnam, 1997). Therefore, the national programme managers were eager to test the strategic approach for introduction of fertility regulation technologies developed by the UNDP/UNFPA/WHO/World Bank Programme of Research, Development

and Research Training in Human Reproduction (HRP) (for a description of the approach, see Simmons and others, 1997; and Satia and others, 2000 in the present issue of this *Journal*, pp. 5-20).

Stage I: the strategic assessment

The Stage I strategic assessment of the need for contraceptive introduction was carried out in 1994 as a collaborative endeavour between the MOH, the National Committee for Population and Family Planning (NCPFP), and the Vietnam Women's Union (VWU) (Do Trong Hieu and others, 1995, HRP/WHO, 1999). An interdisciplinary team of national and international experts undertook the field work. In the assessment team, the government was represented by the key agencies mentioned above. A person from the Institute of Sociology provided social perspectives. As UNFPA had been the leading donor agency for a long period, a representative from the UNFPA country office also participated in the assessment team.

The assessment followed the process described in Simmons and others (1997). It showed that unbalanced information and strong provider biases contributed to the skewed method mix. The quality of care in family planning service delivery was found to be weak. The range of methods actually available for the client at the service delivery points was often limited, largely owing to the non-availability of, and provider bias for, some methods. Poor counselling practices as well as inadequate IEC (information, education and communication) materials at all levels of the family planning programme were observed during the assessment and review of the literature. The assessment found that provider bias leads to inadequate amounts of information being provided on methods. For example, side-effects were rarely mentioned and often only one method — the IUD — was mentioned.

The assessment reached the following conclusions: (a) priority should be given to improving the provision of the methods already available, primarily through improved quality of care, which would enhance real choice for women; (b) there is no need for removal of currently existing methods from the public sector family planning programme provided that high-dose oral contraceptives are not re-supplied; and (c) introduction of fertility regulation technology currently not available or not widely available within the public sector should be approached with great caution. In view of the government's interest in the introduction of DMPA, it was suggested that this be approached in a phased process that would include acceptability

studies, user perspective research and service delivery research. Such introductory research should focus on developing strategies for strengthening the quality of care for all methods rather than focusing only on the introduction of DMPA. The assessment team also recommended that Norplant not be introduced at that time. In addition, the assessment made a variety of recommendations on ways to improve the quality of care of in-service family planning delivery.

The assessment findings and recommendations were reviewed at a national workshop in 1994. After considerable deliberation, the government decided that DMPA should be strategically introduced into the programme, as an opportunity to improve the quality of care for all family planning methods, thereby addressing the issues discussed in the assessment. Two major questions needed to be answered: What was an appropriate strategy to introduce DMPA into the national programme while improving the quality of care for all family planning methods? What will be Vietnamese women's use-behaviour and perspectives of DMPA and the improved services? A Stage II project entitled "Introductory study of DMPA in Viet Nam: an opportunity to strengthen the quality of care in family planning service delivery" was developed by the MOH, NCPFP and VWU members of the assessment team. It was approved for funding by UNFPA, GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) and HRP, and activities commenced in January 1996.

Stage II: an introductory study of DMPA in Viet Nam

As several clinical trials of DMPA had already been undertaken in Viet Nam, the project focused on strengthening service delivery capabilities, and research into use-behaviour and provider/client interactions. The goal of the Stage II study was to develop a strategy for DMPA introduction in Viet Nam within the context of broad method choice and improved quality of care for all family planning methods. The introductory study involved programme interventions and research activities.

The study was conducted between November 1995 and August 1998. A five-person central team comprising members from the MOH, NCPFP and VWU managed it. In addition, provincial teams were formed in each of the three study provinces, namely Binh Phuoc, Binh Duong and Ninh Binh, with one member each from the MOH service delivery (provincial hospital or maternal and child health/family planning (MCH/FP) centre), the Provincial Committee for Population and Family Planning (PCPFP) and the VWU.

In the first year, DMPA was provided in the Binh Duong (previously gong Be) provincial MCH/FP Centre and Ninh Binh Provincial Hospital, the Yen Mo and Gia Vien district health centres in Ninh Binh Province and one district hospital each in Binh Duong and Binh Phuoc provinces. In the second year, service delivery was expanded to include commune health centres in the four districts. DMPA injections commenced between September and November 1997 in 32 commune-level health centres (eight in each district). These had been selected based on minimum criteria that had been listed as essential for provision of services with an adequate quality of care.

Programme interventions

The project undertook a range of managerial and service delivery modifications. A situational analysis at each site was the first activity undertaken in both years before provision of DMPA commenced. This identified management and provider needs for improved quality of care for all services, as well as specific needs to support the quality provision of DMPA.

The programme interventions in the Stage II were developed for the following purposes: (a) improve health worker knowledge and skills through training, (b) increase the supply of appropriate IEC materials, (c) improve the clinic organization as well as frequency and content of supervision, (d) provide management information tools for improved follow-up and continuity of care for all methods and (e) gain user and provider perspectives from the research and feed this information into the ongoing development and implementation of project activities.

The training process

The training materials that already existed in the Vietnamese programme were reviewed in order to develop a refresher training activity for the staff and managers within the project areas. Training was developed for five categories of people: provincial and district doctors, assistant doctors and midwives at the provincial and district levels, commune health station staff, provincial and district leaders and Women's Union family planning motivators. The materials were developed in a modular fashion, with a maximum of 19 modules included for provincial- and district-level doctors and a minimum of five modules for the mass organization leaders. Each of these groups was trained separately to enable sharing of

experiences and to determine the appropriateness of the information provided and skills practised. Training was also provided to community leaders and family motivators. The project found that well-informed community leaders and motivators assisted in supporting women's and couples' choices to use a method and to continue using a method. If the community leaders have biases or incorrect information, they can wrongly counsel women and limit women's and couple's real choices for family planning.

This training covered topics including quality of care and the reproductive health approach; findings from the assessment; counselling; informed consent; providing fully balanced information on all contraceptive methods including DMPA; specific skills in DMPA injection, management of side-effects and the recording system as well as training on infection control; knowledge of conducting thorough gynaecological examinations and some training in the diagnosis and management of reproductive tract infections (RTIs). The second round of training was modified to include areas that observational studies and client interviews identified as requiring further emphasis, particularly counselling, infection control and some knowledge on other reproductive health skills required during a family planning consultation such as breast examination.

The second year of the project consolidated the refresher training and, based upon both the qualitative research findings of the first year and supervisory reports, increased the focus upon the areas of concern. No DMPA service delivery was allowed to commence until the training was completed, supplies were available and IEC and management information system materials were in the clinics.

Another activity to improve providers' technical competence was the development of a technical update book on injectable contraceptives produced by the central team for distribution to doctors in the private sector. This was to address the concern that, if women sought assistance for side-effects from the private sector, then they might receive incorrect advice, treatment and even biased information.

Information, education and communication

The support from UNFPA and other donors to the family planning programme had recently developed new leaflets for individual methods to be provided to clients and community members in order to enable a choice

among methods. However, although these provided general information about each method in order to facilitate choice, they contained insufficient information to enable clients to use the method. Therefore, the project supported the development and distribution of increased numbers of existing IEC materials on all methods and flipcharts for each service delivery point and the production of a DMPA leaflet along similar format lines, but with more and balanced information on the method.

In addition, the project also produced detailed information, “user sheets”, for all family planning methods, including lactational amenorrhea and fertility awareness, in order to assist clients to use a particular method. The user sheets included information on how to use the method, effectiveness of the method, ability to become pregnant after use of the method, what to do if a problem with use occurred (for example, forgetting to take a pill, the bursting of a condom, IUD expulsion), ability to use the method when breastfeeding, protection provided by the method against STDs/HIV/AIDS, side-effects and what to do, benefits of the method, danger signs and information reinforcing clients’ right to stop use of the method whenever they desire plus an invitation to visit a service provider if they have questions or concerns.

At the end of the project, the research found that provider bias had been decreasing. As one provider stated: “We emphasize the advantages and disadvantages of each method, provide users with the correct knowledge of the method — we cannot ask them to use one method more than another”. A mass organization member said: “In my opinion, only what method is best for the individual” is what should be emphasized. Women also echo this change and managers emphasize managerial changes that are required to promote counselling, including training, appropriate space for counselling, and the use and the availability of IEC materials.

Clinic organization

During the baseline situation analysis, the lack of space for counselling of clients was identified as a barrier to providing quality of care. In each location, the clinic staff, with assistance from the project team, used existing resources to develop a separate and private area for the counselling of clients. A major barrier to practising infection-control measures in the clinics, especially at the commune level, was the lack of a water supply in the room where procedures were undertaken. The clinic staff developed ways of ensuring that water and soap were available to wash hands at the point of delivery; these included the purchase of a water container with tap

and assigning a staff member to till this as a daily duty. Other improvements in infection control included finding local means of safely disposing of waste, and the reinforcement by supervisors to include infection control as part of their routine supervision checklist. Staff were trained on better logistical management practices for storerooms, and supervision of logistics was included in the supervisory checklist.

Management information system

The baseline situation analysis also identified how the daily client register book and other method-specific registers did not enable follow-up of clients over time, or for a provider to identify clients due for re-injection. A logbook was provided to encourage follow-up and continuity of care for clients, which enabled the provider to review the client's re-injection due dates and date of return. It also enabled the recording of the side-effects experienced to facilitate provider follow-up at the next visit. The providers felt that the analysis enabled them to review, at the local level, their performance and needs. In addition to the logbook, client-held user cards were developed. These expanded upon the concepts used for IUD user cards already in operation in parts of the country. The modifications undertaken included the following: developing user cards for all family planning methods, placing key messages about side-effects and protection against STIs/HIV/AIDS, and a list of follow-up needs and dates on the card.

Supportive supervision

The central team developed a supervisory checklist that was used by provincial and national supervisors on a three-monthly basis. This assisted in ensuring that issues such as privacy, waste disposal and client flow were reviewed regularly. In addition, it encouraged feedback and discussion at the end of the supervisory visit by the supervisors and the centre staff to develop plans of action to address issues and problems identified. These plans of action were then reviewed as part of the next visit. Over time, the breadth and depth of supervision did improve, as did the ability to identify problems and to develop action plans with the local staff.

The importance of supportive supervision for management needs greater emphasis. Although supervision at the clinical sites was more thorough and regular, gaining client and community feedback was not a regular feature of the visits. This situation was often reported as being due to the "difficulty" in finding clients when on visits. The project also found that the concept of feedback and joint problem-solving at the local level was appreciated but often not followed through.

Management of side-effects of DMPA

The management of side-effects has been an area of major discussion in the project, especially among senior-level providers. The DMPA side-effects management protocol was developed based on a review of the international best practice. The project provided the oral pill packets and ethanol oestradiol cyprinoate injections according to the estimated need and protocol. However, providers and clients still complained about shortages of medicines to treat side-effects. It was found that this was usually due to incorrect management of side-effects, such as the use of antibiotics or injectable oestrogen for irregular menstrual bleeding; and the reluctance of providers to change their manner of treatment. In addition, client demand for medicines and lack of understanding of the role of oral contraceptives in treating prolonged and heavy menstrual bleeding caused problems in supply.

Other managerial aspects

The project was a collaborative activity between three organizations: MOH, NCPFP and VWU. This activity included the formation of joint steering committees at the national, provincial and district levels that met at least quarterly and undertook joint supervisory activities (Huynh Thi Kim Chi, 1997a; Bui Thi Am, 1997). The project found that this collaboration was feasible, and assisted in ensuring consistency in the programme. Working together, especially at the local level, helped to harness local resources for addressing quality issues.

The Stage II management experience has assisted the central team to learn “hands-on” about management capacity and systems. They have identified the need for more structured supervision, and the need to improve the quality of training through trainer selection, training of trainers and the provision of training tools. The team also found that the time required and understanding of the need for feeding research findings into project management were not fully appreciated. For example, data collected on reasons for discontinuation or re-visit were not initially reviewed during supervision for quality of care (Do Trong Hieu, 1997).

Research activities

The research activities included quantitative studies on acceptability and continuation, whereas qualitative research was focused on user perspectives and service delivery issues.

Acceptability and continuation research

To measure rates of acceptance, continuation and discontinuation, and identify client characteristics associated with the choice of DMPA, the project utilized structured interviews to collect information. These interviews were undertaken at two points in time during the project — at the time of initial acceptance of the method and when the women had either continued their use of DMPA from one of the project sites for a year or when she decided to discontinue its use. After 647 women were initially interviewed as new acceptors during the period from June 1996 to March 1997, the project ceased interviewing additional acceptors in order to permit all women to be followed up after one year of possible use.

Informed consent was obtained from each woman when she accepted DMPA and chose to participate in the study. Each woman had the right to withdraw from the study at any time, yet remain a DMPA user if she desired. She also had the right to specify where and when she wished to be interviewed. A trained female interviewer at each site, who was independent of the health system, conducted the interviews. Three interview forms were used, namely an acceptor interview, a one-year continuation interview, and a discontinuation interview. These forms were developed based upon international standards and then field tested.

The acceptance interviews were conducted at the clinic, immediately after the first injection if the women consented. A woman was defined as an acceptor of DMPA whether or not she had previously used DMPA from another source. The discontinuation interviews were conducted when the interviewer noted that a woman had not returned for a re-injection. Discontinuation interviews were held with all consenting women either in their homes or in the clinic. Discontinuation was defined as having occurred when a woman had not returned within two weeks after the due date for her next injection, independent of the reason for not attending the clinic. If a woman did not have a second, third, fourth or fifth injection, project staff contacted her and administered a questionnaire about her experiences with the contraceptive and her reasons for not continuing. A total of 298 discontinuer-interviews were conducted. A continuer was defined as a woman who has used DMPA beyond 12 months; continuation interviews were conducted after a woman had received her fifth injection.

During the first year of the project, 647 women accepted DMPA and were enrolled in the project from the district and provincial levels (Nguyen

Thi Thorn and Larson, 1998a, 1998b). The acceptors who participated in the study can be divided into three categories depending on the immediate reasons that led them to receive DMPA at the study sites. The first group of women were new acceptors of DMPA. The second group comprised 115 women who were switching their source of DMPA from the private sector to the provincial and district facilities that offered them free injections. Finally, the third group comprised the 112 women who had had a menstrual regulation procedure immediately before accepting DMPA. Other methods such as oral contraceptives and IUDs were not appropriate for these women and clinics did not have condoms. Over the study period, progressively smaller proportions of acceptors were switching sources or adopting DMPA after a menstrual regulation procedure. Despite month-to-month fluctuations, an average of 30-40 acceptors per month in each province were sustained throughout the study.

The research found that the profile of acceptors in this study was similar to the profile of all ever-married Vietnamese women aged 15 to 49 years described in the Viet Nam Intercensal Demographic Survey (Nguyen Van Phai, 1995) in terms of economic situation, the percentage living in urban areas and working in agriculture. However, DMPA acceptors were almost twice as likely to have attended secondary school. As one would expect, the DMPA acceptors did not include as many young women, or women with fewer than two children. Most women (85 per cent) wanted no more children, and 21 per cent of acceptors were currently breastfeeding. The vast majority (97 per cent) of acceptors were ethnic Kinh; however, 24 women were from minority groups and they comprised 15 per cent of all acceptors at the Phuoc Long District Clinic.

Acceptors reported a high level of awareness of family planning methods. Three quarters of the women had heard about DMPA before they came to the clinic. All women could mention at least one supply source for family planning methods and 69 per cent could give at least two sources. Family and relatives as well as family planning motivators and health workers were important sources of information. By the end of the study, other DMPA users became very important sources of information. Except for those who accepted DMPA after menstrual regulation, most women came to the clinic with an interest in DMPA, but made their final decision for themselves at the clinic and after counselling.

Table 1. Continuation rates for DMPA in the Viet Nam Stage II project

Source of supply	(per cent)			
	First three months	3-6 months	6-9 months	9-12 months
District and provincial supply in first year 1997-1998 (n = 647)	76	63	54	49
Commune supply (second phase, nine months) 1998 (n = 1,348)	81	66	53	-

Overall, DMPA acceptors had used an average of two contraceptive methods prior to joining the study. Many of the women had reasons to be dissatisfied with previous methods. A third (33 per cent) had become pregnant while using a method. Withdrawal, IUD, condoms and rhythm were the methods mostly commonly mentioned as having failed. Three quarters (76 per cent) of the women who had recently used oral contraceptives said that the method was inconvenient. IUD users complained of side-effects or other health concerns. Condom users found the method inconvenient or feared pregnancy; similar opinions were expressed by users of withdrawal and rhythm.

In the second phase of the project, 1,348 women from the commune level accepted DMPA; only 13 per cent of them had switched from the district or provincial hospital to the commune levels. The remainder were new acceptors in the public sector. Their continuation rate was assessed through analysis of logbooks at service delivery sites.

The one-year continuation rate varied among provinces between 42 and 54 per cent (table 1), which is higher than the rates experienced in non-clinical trials in Viet Nam and is comparable with the range of international experience. Continuation rates reported for DMPA in the WHO multicentre trials conducted in nine developing countries and two developed countries indicated that over half of the women enrolled in the clinical trials would continue using it after 12 months (Lande, 1995).

The users' experience of side-effects was also similar to international experience. The majority of users of DMPA had experienced amenorrhoea (67 per cent), many had experienced spotting (42 per cent), irregular bleeding (20 per cent) and prolonged bleeding (21 per cent). Of all the users interviewed, only 6 per cent reported heavy bleeding experiences.

Among all users, 19 per cent reported having a loss of libido and 10 per cent a dry vagina. More than one quarter of the women using DMPA supplied from the commune level made a visit to the centre for a reason other than re-injection. The most often cited reasons were menstrual spotting (44 per cent) and amenorrhoea (38 per cent). The WHO multicentre studies found that prolonged bleeding affected 43 per cent of DMPA users in the first three-month interval, and this proportion declined in successive three-month intervals. By contrast, amenorrhoea became more common over time, rising from 11 per cent in the first three-month interval to 39 per cent in the fourth three-month interval (Lande, 1995).

The main reasons listed in the interview of 223 women discontinuing, who had commenced DMPA at the provincial or district levels, were as follows: prolonged bleeding 31.4 per cent, headache 21.1 per cent, spotting 16.1 per cent, irregular menses, 10.3 per cent and amenorrhoea 12.6 per cent. Of these women, 8.5 per cent no longer needed a contraceptive method, 13.9 per cent discontinued because of access or other service-related reasons and 6.7 per cent discontinued because other people (such as husband) objected to the woman's use of DMPA. These findings are also similar to those of the WHO multicentre trials (Lande, 1995).

User perspectives and service-delivery research

The objectives of this research were to assess user attitudes towards the contraceptive methods provided and their perspectives on contraceptive services in project service-delivery sites. This study utilized focus group discussions and in-depth interviews.

An independent team constituted by the Centre for Social Sciences and Health (CSSH) conducted this research in two phases to enable the research to capture the variation in experiences over time. In the first phase interview, guides and methodologies were developed, field-tested and refined during the period from August to October 1996 through a series of workshops; the same process was undertaken for the second phase in October/November 1997. The first phase was held in December 1996 and the second phase between February and March 1998. In all, 49 focus group discussions and 43 in-depth interviews with women who were continuing to use or had discontinued using DMPA were undertaken in the project areas. The focus groups were held with four main groups as follows: men; women who had accepted and used DMPA; women who were using

oral contraceptives, IUDs, condoms and sterilization; and women who were using provider-independent or “self” family planning, including withdrawal, periodic abstinence, lactational amenorrhoea or no method (Phan Thuc Anh and Dao Xuan Vinh, 1997; Phan Thuc Anh, 1998; Phan Thuc Anh and others, 1998; Trinh Bao Ngoc and others, 1997; Whittaker and others, 1998).

Trained medical observers, who were part of the CSSH research team, also conducted a total of 97 observations of contraceptive and abortion service delivery. These observers, using checklists, observed a range of reproductive health and family planning activities including the provision of DMPA at provincial, district, inter-communal and commune service delivery sites in the project provinces.

Women's perspectives on quality of care

The women interviewed in this study identified the following major considerations in their choice of methods: safety, appropriateness, side-effects, especially menstrual-related ones (Whittaker, 2000) and their management, effectiveness, their own experiences and the experiences of others with certain methods. Women also considered convenience issues such as their working hours, time required to obtain the method, source of supply, supplementary costs to use, and beliefs about short- or long-term impact on work ability and capacity. Few women discussed the need for a method that could be used “secretly”. However, the effect on their own and their husband’s sexual feelings and their sexual relationship was highlighted by some women. Very few women discussed the role of protection against STDs or HIV/AIDS when deciding on a method.

In our study, an important factor limiting women’s ability to choose was the influence of “others” who included husbands, providers and motivators (parents and parents-in-law did not feature prominently). Some women described experiencing a shortage of supplies when they went to their usual source, which limited their ability to choose. Women identified the need for a diversity of methods because “not all women are alike”.

The women interviewed clearly saw the advantages of being provided with sufficient information. They discussed how it helped them to make an informed choice, as well as to manage problems and concerns. Generally, most women knew about a variety of methods. However, few women could describe how to use most methods, or their advantages and disadvantages,

and their side-effects. The observers found that usually the information provided was not enough for a woman to decide how to solve any problems she might experience with the method. Some women also highlighted the need for men to be provided with information in order to support a woman's choice of method, to make informed choices and to use their own methods effectively.

Women desired more than one source of information, and they liked to be able to consider the methods, perhaps even discuss them with husbands and friends at home, before they made their choice. Women also discussed how they needed to hear about or read about methods and their characteristics more than once. Providers and counsellors need to maintain the difficult balance between allowing the user to make a fully informed voluntary choice and helping the women analyse the risks and benefits when giving advice. Many women expect and desire the provider or others to advise them on what is appropriate for them, although women still want to make the final informed decision. The counselling provided by the health staff was noted to have improved by the end of Stage II, based upon the findings of the observational studies and client and provider interviews. However, the counselling improved mainly for DMPA — despite the training and supervisory emphasis being put on counselling for all methods.

The most common issues related to the provider-client interaction that was mentioned in interviews with women was the importance of the provider showing concern for the woman through warmly welcoming her, inquiring about her health, providing attention to details when required, and asking the woman if she wants any more information or assistance, or would like to talk about other things. The observational study found that the warmth and friendliness of greeting varied by provider and site. All women agreed that they wanted privacy for the physical examination and many complained that it was not available. Familiarity with a provider was highly regarded. The reliability of services being provided (at commune health station/hospitals and by mobile teams) rated highly in women's "assessment" of the quality of interaction. Having to wait too long was seen as a reflection of an uncaring attitude by the providers. The women interviewed dealt with poor quality of care by avoiding the use of services as much as possible, or they asked someone with whom they felt familiar to intercede on their behalf, or they went to another provider in their area. Examples of good care were highly appreciated by the women and related to their method use

and health-care-seeking patterns. They were willing to pay for good services, if affordably priced; however, fees and informal charges were a negative feature for many women, as they eroded women's confidence in the providers and the service.

Clients measured the technical competence of staff through various means, such as the incidence of unplanned pregnancies; the occurrence of some side-effects, particularly if the side-effects were felt to be related to poor IUD position, the cleanliness of clinic or staff, and misdiagnosis or poor examination of pregnancy. Women appreciated being given advice and measured competence according to the provision of advice. Another parameter that women used in order to measure "technical competence" included the attitude shown to them by the staff, the provision of privacy and the appearance of measures to control infection.

There were mixed opinions about the competence of providers and readiness of facilities to provide technically competent services. This situation varied by site, as well as among individuals. Infection control was a weak aspect of family planning service delivery. The researchers often observed that providers did not wash their hands between clients, gloves were re-used without adequate cleaning between each client, and there were inadequate facilities for rubbish disposal. The observers often found that equipment such as specula and uterine sounds were not sterilized between clients during IUD insertions and removals, particularly for services provided by mobile teams. Many providers would remove the IUD from its packet and put the arms into the inserter in a non-sterile manner. The ability to be referred to higher levels if such care were needed was important to the women interviewed and made them feel satisfied. Many in the second round of interviews at the commune level reported that the centre was cleaner than two to three years earlier, so now "we feel at ease going there to have our delivery".

Women actively sought follow-up, especially for the management of side-effects, concerns about the health effects of their present method of contraception, switching of methods or a related "gynaecological" problem. But often the advice received did not help her to resolve problems or concerns. The observations of consultations confirmed this poor attention to follow-up by providers. It was not lack of time or opportunity that led to inadequate follow-up at the clinic. The need for women to pay for follow-up

services also seemed to inhibit many from seeking them. Women felt that they should be given priority for a package of follow-up reproductive health services, especially if they are family planning users. Reassurance from a provider assists a woman to continue with her method and if women received this follow-up care, they rated the service provider or location highly.

In the interviews, access was a major topic of discussion. The use of public sector facilities is closely linked to the accessibility of the service and the provider/client interactions. The closer the service delivery point is to the home, the better for many women. This is not only “convenient for them” but also enables regular contact, if required. Direct and indirect costs were often discussed by women when talking about accessibility of services. For some, the hours of opening are also important — with some willing to pay private providers for the convenience of service “after working hours”.

Views of providers and managers

Discussions with providers and managers involved in family planning services noted that women are seen as the main users of family planning methods. Men are given little attention in mobilization for family planning, and often do not accept methods. The providers felt that, in general, a range of contraceptives is available and clients can access them. Sometimes they noted problems with supplies, organization of services and inadequate privacy at some service delivery points. There were many opinions about treating the side-effects of all contraceptive methods, including DMPA. The need to supply adequate quantities of appropriate drugs for the management of side-effects as well as training of providers on the correct management of these side-effects was highlighted by the providers and managers. They also noted that the counsellors and providers often were not providing adequate information to clients about family planning methods. Their counselling skills were not adequately developed, the time spent for counselling was limited, and sometimes they did not pay much attention to counselling.

Early in the project, the providers had expressed concern about women’s capacity to absorb large amounts of information as well as the fear that providing information on side-effects may make women afraid of the methods. However, when interviewed in the second round after the interventions, the providers stated that they appreciated the need for clients

to have more information. The providers spoke more positively about having IEC materials provided that women could understand and use, and they noted that women appreciated having more information given to them.

Perspectives on DMPA

The project found that there is an interest in and demand for DMPA as a method among Vietnamese women, and the majority of providers and managers at all of the sites. The provision of DMPA filled a niche for a range of women: women who have started using a family planning method, but had never used a “modern” method before; women who find that the IUD or pill do not suit them; and women who desire no more children. The provision of DMPA at the commune level made the method more accessible to women and facilitated acceptance, follow-up and continuation.

Reasons given by women for choosing DMPA included the following: health reasons (the safety or health benefits of the method), convenience or ease of use, its high level of effectiveness and the disadvantages or side-effects of other methods. Many women said that they used DMPA because they had experienced unacceptable side-effects with other methods, particularly the IUD (see also Do Trong Hieu and others, 1993). The data from the in-depth interview and focus group discussions suggest that women’s reasons for continuation are similar to those for acceptance of DMPA. The research findings also indicated that the users are more likely to continue using DMPA where the counselling and follow-up care are better. The key variable determining women’s use of the method is its impact on “health”. If their health remains good, then they are satisfied; if their health becomes negatively affected, then they will discontinue using the method.

At the start of their participation in the study, these acceptors of DMPA were satisfied with their choice. In fact, three quarters (77 per cent) of them said that they would recommend the method to friends interested in family planning. Women who had experienced no side-effects considered DMPA the best method because of its very high effectiveness, safety and convenience, and that it allows for secrecy and no trace is left in the body (no residual effects). They also felt that the method was appropriate for women working under agricultural conditions, as it was easy to use, requiring re-injection only once every three months. Some women felt that using DMPA helped them to eat and sleep better, and gain some weight,

although some other women also complained about these as side-effects of DMPA and even discontinued use because of them.

reported that it made them “hot” and dizzy, dried the vagina and reduced their sexual desire. They disliked the irregularity of menstruation after the injections. Those who were worried described concerns, including worry that they were pregnant, concern about the accumulation of blood inside the body and concern that maybe they were entering menopause. Heavy bleeding or regular spotting was of concern to women in terms of fear of disease or infection, a negative influence upon their health and the need to spend money on drugs to treat the bleeding.

Overall, the studies on user perspectives suggest that quality of care in many areas is improving, choice and access are better with DMPA provided at the commune level, and that women will continue to use this method if they receive good counselling and support. The service delivery research suggests that counselling, some aspects of infection control and knowledge of methods have improved, and that provider bias is less obvious. However, gaps remain especially in the quality of counselling for all methods and for other reproductive health interactions. Commune services are able to provide the method in a good quality manner and perhaps counselling is even better in such locations. Local programme managers, family planning motivators and members of mass organizations are also demonstrating some improvements in attitudes. Demand for DMPA appears to be increasing at the commune level, not only as a result of increased access, but also because women are “learning” from others in their commune about the method and its “safety” and “suitability” for women like them.

Stage III: wider introduction of DMPA

The final Stage II project workshop to disseminate the results of research and evaluation of activities recommended that DMPA should be more widely introduced in selected districts in other provinces, which meet minimum standards for quality service delivery. This should be done in a careful manner, giving equal attention to improving the quality of care for all methods. Accordingly, a Stage III proposal to assist in the wider introduction of DMPA through scaling-up of Stage II programme interventions was prepared by the central team (MOH, NCPFP and VWU), with funding from UNFPA, WHO and GTZ.

The strategy for wider introduction is as follows. First, the programme interventions of training, IEC, MIS, supervision tools and criteria for selection of districts were refined and supporting materials were packaged in the form of a “tool kit” providing concrete explanations for steps to be followed for the wider introduction of DMPA in the context of improving quality of care for all methods. Also included in the tool kit were training modules, IEC materials, supervisory tools and MIS formats to assist in implementing these steps.

Second, workshops to orient provincial teams, comprising representatives of MOH, PCPFP and VWU from each of 21 selected provinces, for the wider introduction of DMPA were implemented using the tool kit. The provinces are expected to follow the steps outlined in the tool kit. However, to assist them in this process, special assistance is provided for Stage II sites to enable them to continue to serve as demonstration sites as well as for strengthening supervision from the central team to the provinces.

Third, policy advocacy and technical support for quality of care is being strengthened. A workshop of social scientists will be organized to strengthen their skills in the research methodology for user perspectives and service delivery research. The Ministry of Health has been reviewing and developing national standards for various contraceptive technologies in the country, similar to guidelines developed for DMPA. Finally a broader consensus from the policy makers and programme managers of various functions at different various levels is needed in order to enhance the emphasis on quality of care. Therefore, policy briefs based on lessons learned from the Stage II project have been prepared to orient managers of various functions -training, IEC, logistics, MIS and supervision.

Conclusion

The experience of implementing the strategic approach in Viet Nam has demonstrated that it can be effectively utilized to introduce new contraceptive technologies while improving the quality of care for all methods in the family planning programme.

Considerable effort is required, however, to enhance policies and orient programme managers to focus on improving the quality of care. Several lessons have been learned in this regard. First, the introduction of a new method could and should be effectively utilized as an opportunity to

improve the quality of care for all methods. Unless the quality of care is ensured, the introduction of additional methods would neither expand contraceptive choice for women nor promote the use of new methods in the long term. Second, improving the quality of care requires many changes in the programme: improved counselling by providers, improved IEC materials and activities, safe means of disposing of needles and syringes and other sharp instruments and contaminated waste, comprehensive practical skills-based family planning and reproductive health training for all providers, refresher training, use of supervision as an important management tool, and client-centred management information systems. Third, mechanisms need to be evolved by various agencies (MOH, NCPFP, VWU and others) for more joint management activities aimed at improving the quality of care. Finally, the advantages or disadvantages of the incentive systems in family planning should be reviewed, including the influence on provider biases and client freedom to choose a method.

The conceptual framework and the participatory, field-based qualitative assessment process of the strategic approach have demonstrated it to be a useful tool for strategic planning and the identification of approaches to improve quality of care in reproductive health service delivery. Based on the successful experience in the use of the strategic approach, the Ministry of Health chose to initiate the Stage I strategic assessment to address the abortion issue in Viet Nam. This assessment examined ways of decreasing the recourse to abortion as well as improving the safety and quality of current services. The recommendations covered a wide range of policy and programme adaptations as well as research issues, which included the need for strengthening post-abortion family planning, improved counselling, as well as various aspects of technical quality of care (HRP/WHO, 1999).

In conclusion, this project has contributed towards supporting the programme in making a transition to the quality of care approach, but such a transition also requires long-term commitment and support within the country by donors and advisers. Major problems and constraints remain, however, for improving the quality of care in the national population and family planning programme. Technological updates of the providers at all levels are necessary, particularly for the management of side-effects. Changing long-held provider attitudes, biases and behaviour, especially those based in the work environment (salary, incentives and manager biases

towards quantitative achievements rather than quality of service delivery) in which they operate, requires persistent and consistent policy and programme interventions.

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