

Interim Progress Report



Division of Reproductive Health (Technical Support) Progress Report 1998

**Interim Progress Report of
the Biennium 1998-1999**

*Reproductive Health and Research
World Health Organization
Geneva*

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Acronyms

AIDS	Acquired immunodeficiency syndrome
AZT	Zidovudine
CHS	Health Systems and Community Health, WHO
CST	Country Support Team
DALY	Disability adjusted life year
DFID	United Kingdom Department for International Development
FAPHPE	Framework for Action Planning in Health Promotion and Education
FHI	Family Health International
GBD	Global burden of disease
HIV	Human immunodeficiency virus
HRP	UNDP/UNFPA/WHO/The World Bank Special Programme of Research, Development and Research Training in Human Reproduction
ICD-10	International Classification of Diseases, Tenth Revision
ICM	International Confederation of Midwives
IEC	Information, education and communication
IPPF	International Planned Parenthood Federation
IUHPE	International Union for Health Promotion and Education
MSI	Marie Stopes International
NGO	Nongovernmental organization
PATH	Program for Appropriate Technology in Health
PSI	Populations Services International
RHR	Department of Reproductive Health and Research
RHT	WHO's former Division of Reproductive Health (Technical Support)
STI	Sexually transmitted infection
TSS	Technical Support Services
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHD	WHO's former Women's Health and Development Unit
WHO	World Health Organization

Introduction

WHO's former Division of Reproductive Health (Technical Support), which was established in 1996, was a major part of WHO's reproductive health programme. In late 1998, following restructuring at WHO headquarters, the Department of Reproductive Health and Research (RHR) was formed within the cluster on Health Systems and Community Health (CHS). RHR consists of a combination of the former RHT and the UNDP/UNFPA/WHO/The World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP). This interim report refers to activities carried out during 1998 by the former RHT. These activities are being continued by RHR. References to both RHT (the former division) and RHR (the present department) are found in the report.

Aims and goals

During 1998, RHT worked closely with HRP to articulate its overarching aim: to enable people to promote and protect their own health and that of their partners in relation to sexuality and reproduction, and to enable them to have access to and receive quality reproductive health care services when needed. RHT and HRP focus on strengthening the capacity of countries to achieve this aim through advocacy, research and technical support, including the development of norms, standards and guidelines.

Four programme goals have been developed to guide work in the area of reproductive health. These are to ensure that people can exercise their sexual and reproductive rights in order to:

- experience healthy sexual development and maturation and have the capacity for equitable and responsible relationships and sexual fulfilment;
- achieve their desired number of children safely and healthily, when and if they decide to have them;
- avoid illness, disease and disability related to sexuality and reproduction and receive appropriate care when needed;
- be free from violence and other harmful practices related to sexuality and reproduction.

These programme goals can be attained only through collaboration among many partners at local, national and international levels. These partnerships are reflected in this report; it is clear that such partnerships are essential to the effective impact of the various products, especially at country level.

Programming issues

This interim report describes progress towards implementation of the products listed in RHT's *Proposed Programme Budget for 1998-1999*. The budget was organized according to the programming issues outlined in the box below which show more clearly the complementarity of the research and normative/technical support activities of WHO's reproductive health programme. Funds permitting, RHT expected to be working during the 1998-1999 biennium on a total of 108 products. Each product received, for reference purposes, an identifying number which is also used in this *Progress Report*.

RHT Programming Issues
Planning and programming for reproductive health
Fertility regulation
Maternal health
Perinatal health
Unsafe abortion
Reproductive tract infections including cervical cancer

Budget priorities

The RHT *Proposed Programme Budget 1998-1999* described the process through which products were prioritized. The criteria for priority setting included impact, feasibility and WHO's comparative advantage. Those that were identified as "Priority 1" would normally be undertaken if the level of income during the biennium was similar to that in 1996-1997 (approximately US\$ 10 million). "Priority 2" products would be initiated only if the funding in 1998-1999 was greater than US\$ 10 million. During 1998, because of its funding situation, RHT implemented a budget based on "Priority 1" products only, and for this reason "Priority 2" products are not included in this report.

It should be remembered that the present document was compiled to describe progress during the first year of a biennial programme of work. In this regard, not every "Priority 1" product from the 1998-1999 budget is reported on because work on some was not begun during the first half of the biennium. Next year will see a detailed report of all WHO's work in reproductive health during the 1998-1999 biennium, and will include descriptions of work on products that were initiated only in 1999.

Planning and programming for reproductive health

(001) Policy guidelines describing essential elements of reproductive health care

Following a consultative process, a generic document describing the process of operationalizing reproductive health care was developed in 1998. This draft document was disseminated to regional and country colleagues through the annual meeting of Country Support Team Advisers and shared with partner agencies in reproductive health.

(003) Review of lessons learned in community involvement for reproductive health

During 1998, a literature review was carried out on community involvement in safe motherhood as a basis for input to community-based interventions in the *Essential Care Practice Guides*. Three internal review papers were prepared, revised and discussed. They cover: the establishment and strengthening of links between the community and health care services; factors affecting iron supplementation compliance; and the development of strategies for emergency transport and timely referral of complications. These papers provide

the foundation for further work in RHR on family and community practices relevant to safe motherhood. A guidance tool, aimed at the district level and describing essential interventions in which the community should be involved to make motherhood safer, is proposed for development in 1999. It will be field-tested in two countries and finalized in 2000.

(004) Review of lessons learned on improving client-provider interaction

During 1998, RHT worked together with HRP to develop materials to supplement *The Female Condom. An Information Pack* developed by WHO and UNAIDS. Recognizing both the diversity and common points in the examples provided, the five new components in this series address the following areas:

- the development of information, education and communication (IEC) materials, including ideas for involving and targeting both women and men;
- the establishment and introduction of counselling and training strategies;
- the use of social marketing to expand distribution and use of the female condom;
- effective ways of addressing common problems with female condom use;
- sample educational materials that could be adopted for use in other countries.

This new set of documents describes some of the key lessons learned in settings where the female condom has been introduced thereby helping programme managers, who are interested in developing or expanding female condom programmes, to address some operational and promotional issues.

These materials are being reviewed by health professionals working with government agencies, nongovernmental organizations (NGOs) and the private sector in countries where the female condom is currently being promoted and used. On the basis of feedback from this review, and with some financial assistance from UNAIDS, it is expected that the materials will be finalized by late 1999.

(005) Training material on health promotion and IEC in reproductive health

A methodology was developed by WHO to help policy-makers, as well as programme managers, implementers and evaluators, plan action-oriented and participatory health promotion and IEC interventions with measurable outcomes and impact. The methodology, called a *Framework for Action Planning in Health Promotion and Education* (FAPHPE), was designed to focus health promotion and IEC efforts on objectives that are achievable and takes account of both possible opportunities and obstacles. It emphasizes the need for partnerships with others working towards the same objectives and describes effective ways to establish and maintain such partnerships.

This methodology promotes an innovative planning process that can be used in different settings to integrate health promotion and education in existing reproductive health initiatives with no extra programme expenditures. It is based on the premise that advocates for reproductive health initiatives can use an action-planning process to induce collaboration among policy-makers and programme managers, health service and education personnel, consumers and their families and peers, and community organizations. All these players must become involved and committed in order to have an impact on the reproductive health

situation of the population. Jointly, these groups can create priorities and action plans that will move a reproductive health agenda forward at national, regional and local levels.

Collaborative relationships were initiated between the International Union for Health Promotion and Education (IUHPE), the US Department of Health and Human Services and WHO. This laid the foundation for a larger international partnership that has been maintained through an electronic discussion list. It has created a knowledge base which helped in the development of training sessions on the FAPHPE for the XVI World Conference of the IUHPE in June 1998.

In June 1998, the original three project partners sponsored a workshop on the use of the FAPHPE. During this, several participants from the orientation meeting served as facilitators to incorporate lessons learned from applying the FAPHPE and building and maintaining partnerships at local level, as well as to help further develop training materials for introducing the FAPHPE internationally.

Countries where people have been trained to apply the methodology include Argentina, Bolivia, Canada, Chile, Estonia, Kenya, Nepal, Nicaragua, Nigeria, Romania, and the United States including Puerto Rico. Those who have been trained in the methodology and are applying it find it extremely useful in helping them focus their activities more directly and in providing them with information that can help them be accountable to donors and government overseers.

Over time, the FAPHPE has been refined, expanded and revised, taking into consideration lessons learned from its application. It has been translated into Spanish. Workshops held to date have led to the formation of new partnerships, and have laid the groundwork for the development of a trainers' guide for teaching the FAPHPE. It is hoped that some of the people already trained in the use of this methodology will become training focal points in their geographical areas and will offer technical assistance to others who choose to apply it. The expected "training of trainers" guide will be essential in helping them to move forward in this way.

Training initiative in gender and reproductive health

This international training initiative for programme managers and policy-makers was initiated by WHO's Women's Health and Development Unit (WHD) in 1996, and was implemented in 1997-1998 by RHT, WHD and HRP. It represents collaboration between WHO, the South African Women's Health Project and Harvard University, and is a direct effort to operationalize priorities set at the 1994 International Conference on Population and Development held in Cairo and the 1995 Fourth World Conference on Women in Beijing.

The Initiative developed and launched, in South Africa in 1997, a 3-week course in Gender and Reproductive Health, which now continues on an annual basis. The Initiative currently collaborates with regional partners in Argentina, Australia, China and Kenya to offer regional versions of the Core Course in Gender and Reproductive Health.

The goals of the course are:

- to build institutional capacity in training institutions worldwide to offer regionally-appropriate, high-quality training in gender and reproductive health research, service-delivery and policy development;
- to increase the number of health planners, managers and policy-makers with both a gender perspective on health and the technical skills base needed to increase access, quality and comprehensiveness of reproductive health services.

In November 1998, several representatives of each of the five regional collaborating institutions participated in an 11-day regional adaptation workshop in Geneva. During the workshop the pilot course was reviewed and adapted for regional use, and regional teams demonstrated model sessions for teaching gender and reproductive health in their regions. By the end of the workshop new region-specific adaptations of the curriculum were drafted. A second outcome was the development of common evaluation tools for the 1999 regional courses which will be held in Argentina, Australia, China, Kenya and South Africa. Following completion of the 1999 regional courses, the coordinating committee will meet to finalize plans for the next regional evaluation workshop.

(008) *Mother-Baby Package Costing Spreadsheets and reproductive health costing guidelines and diskettes*

WHO developed the *Mother-Baby Package Costing Spreadsheet* in order to assist in estimating the cost of implementing a set of interventions at district level. The model includes a standard set of assumptions that represent a hypothetical rural district population. For a rough estimate of cost, based on "standard" treatment, the base inputs can be used with minimal modification or adaptation. For a more rigorous analysis that better reflects the local situation, the inputs can be more critically examined and modified. The model can be used to estimate the total programme cost for the district under study or the incremental cost of upgrading the existing district health system. The model provides estimates of total, per capita and per-birth costs for the district. The estimates are broken down by input (drugs, vaccines, salaries, infrastructure, etc.), by intervention (haemorrhage, eclampsia, sepsis management, etc.), and by service location (hospital, health centre, health post).

The spreadsheet and accompanying *User Guide* are designed for use by a local health economist with minimal external support. The spreadsheet may also be of interest to potential programme donors or other interested parties.

In 1998, RHT brought the development of this important tool closer to completion. An initial field test was successfully completed in Bolivia and a second and final field test was carried out in Uganda.

The field test in Bolivia confirmed that it is feasible to apply the model in a short time period, and that an application of the model provides information that is useful to safe motherhood planners and managers. Furthermore, the Bolivia field test provided an opportunity to calibrate the generic spreadsheet model. The results of this study were published locally in Spanish and have been submitted for publication.

In Uganda, the national authorities have decided to develop a programme to intensify national efforts to reduce maternal mortality. Part of this effort included applying the spreadsheet in

two districts of the country. As in Bolivia, the field test in Uganda was supported by WHO staff and consultants who, in addition to assisting the national authorities, also assessed the global spreadsheet tool and made recommendations for refinement. At the same time, the WHO team worked with a team from USAID Partnerships for Health Reform to validate the results of the Uganda application. In late 1998, the model was revised and finalized. It will be published in late 1999.

(012) Materials for a national workshop on policy-setting, prioritizing, and planning for the implementation of the essential elements of reproductive health

A draft framework was developed to assist national planners in assessing priorities for the implementation of reproductive health interventions. This work was carried out in collaboration with the WHO Policy Action Co-ordination team.

(013a) Guidelines on reproductive health in refugee settings

RHT has contributed to the preparation of *Reproductive Health During Conflict and Displacement. Guidelines for the Design and Management of Reproductive Health Programmes*. This WHO publication provides practical guidance on how to plan and implement reproductive health care services during the different stages of conflict and displacement – pre-conflict (emergency preparedness), conflict (exodus and emergency), stabilization, and post-conflict (return). Gender violence and inequities permeate each phase of conflict and displacement and this guideline particularly focuses on how to respond to the needs of victims of gender violence during each phase. The guidelines have been developed in collaboration with other programmes in WHO, an external consultative group and an Inter-Agency Working Group. The publication has been extensively reviewed and is currently being prepared for printing.

RHT has also contributed to the revision of the field-test version of the *Inter-Agency Field Manual on Reproductive Health in Refugee Situations* which is currently being printed.

(014) Up-to-date electronic *The WHO Reproductive Health Library*

The first issue of *The WHO Reproductive Health Library* in CD-format was published in 1998 by RHT and HRP. WHO received and distributed 15,000 copies of the library and began compiling a subscription list for future issues. The copies were distributed to HRP and RHT mailing lists, to schools of nursing and midwifery and departments of gynaecology in developing countries, and in bulk to WHO's Regional Offices for forwarding to appropriate persons in countries. Development of the second issue of *The Reproductive Health Library* was also completed and the copies of the new issue, now expanded to two disks, were received in January 1999. Distribution plans have been made and distribution of this issue has begun.

(015) National reproductive health plans initiated, formulated and reviewed

Uganda

In 1998, a technical team from WHO headquarters visited Uganda for a planning mission for future support in reproductive health. Findings were presented to a high level meeting of Ministry of Health officials and representatives of UN organizations, NGOs and other national and international bodies involved in implementation of reproductive health interventions. The meeting decided to conduct an in-depth situation assessment and stakeholder analysis. A consultant was hired and a situation analysis was carried out. The findings of the analysis were discussed at the stakeholders' meeting where senior staff from various ministries, UN organizations, The World Bank, NGOs and different associations and institutions were present. A consensus was reached to develop an essential package for reproductive health. Three national consultants were engaged in order to move forward on the recommendations of this meeting. Nurses and midwives from district teams were trained in life-saving midwifery skills. Community mobilization activities were carried out in order to develop a community response to the challenges posed by safe motherhood. In association with WHO's Adolescent Health and Development Unit, a strategy and plan were developed for adolescent reproductive health activities in Uganda. In the meantime, 15 district medical officers were trained in the Safe Motherhood District Planning process (see below). The *Mother-baby Package Costing Spreadsheet* was applied in two districts, which provided valuable information on the cost of strengthening maternal health (see description under product 008).

Lao People's Democratic Republic

Following meetings with relevant officials, including the Deputy Minister of Health, a team from WHO headquarters went to the Lao People's Democratic Republic to carry out an initial situation analysis. As a result of this visit, a decision was taken to conduct an in-depth situation analysis which is currently under way..

(016) Safe motherhood and reproductive health district plans developed through introduction of district workshop materials

Uganda

Following on from policy and planning at national level, and particularly in the context of health sector reform, districts need to develop detailed plans of work on safe motherhood, focusing on implementing the national plans of work. In order to assist countries in this process, RHT developed generic workshop materials that focus on the improvement of delivery care and the provision of life-saving skills at upgraded health centres, in an attempt to decentralize essential obstetric care functions as much as possible. Staff from RHT paid a monitoring visit to one district in mid-1998, in the period prior to the second field test of the Safe Motherhood District Level Planning Workshop in Uganda.

(019) Technical support to UNFPA country projects and programmes

Technical Support Services (TSS) staff from WHO headquarters developed documents on health promotion and IEC, gender, and human resource development in collaboration with Country Support Team (CST) advisors and WHO regional offices. Published and review documents in reproductive health were sent regularly to update the knowledge base of CST advisors. TSS staff carried out field visits at the request of CSTs, providing technical support to UNFPA country projects and programmes globally.

(020) Technical support to UN sister agencies (e.g. UNFPA, UNICEF, The World Bank)

Collaboration with other agencies and institutions, especially at country level, is essential if the work of RHT is to have a real impact in countries. RHT continued to place high priority on strengthening work with partners at all levels, especially its UN sister agencies and The World Bank, linking WHO's normative and technical capacity with the operational capacity of its partners.

WHO is a partner in the UNFPA-funded interagency TSS by providing technical support directly to UNFPA country programmes through CSTs, as well as technical backstopping to the CSTs from headquarters staff. WHO also works closely with UNFPA headquarters, as well as with agencies such as UNICEF and The World Bank, to provide technical support for their work in various areas of reproductive health. In carrying out this activity during the year, for instance, technical support was provided to The World Bank missions in Bangladesh.

(021) Technical support to WHO Regional Offices

WHO headquarters provided backstopping support to the regional offices and also country support at the request of a regional office. In 1998, 25 separate missions were undertaken by WHO headquarters to regional offices and meetings and activities organized by the regional offices.

(022) Technical briefing on WHO's work in reproductive health

Twenty reproductive health consultants at WHO headquarters were briefed on WHO's activities in reproductive health. During 26-30 October 1998 a successful five-day thematic workshop was held in Geneva in collaboration with UNESCO on "Application of IEC and Advocacy to Reproductive Health" for all relevant CST advisors. Also in October 1998, a joint planning mission was carried out in the South-East Asia Region with the Regional Office. Feasible joint activities were agreed upon and are in the process of being implemented. Staff from WHO headquarters visited regional offices and facilitated various workshops conducted by regional offices to brief regional consultants.

(024) Materials on national reproductive health indicators for global monitoring

During 1998, RHT continued working with UNFPA, UNICEF, The World Bank and other partners on indicators for monitoring and evaluating reproductive health. *Selecting Reproductive Health Indicators: A guide for district managers* and *Monitoring Reproductive*

Health: Selecting a short list of national and global indicators were published and disseminated. The former is designed to assist both in selecting indicators and in generating the information and data needed for the indicators. The short list of indicators for global monitoring aims to avert unnecessary proliferation of reproductive health indicators on which countries are asked to report. The indicators were chosen on the basis of criteria, described in the guidelines, of which feasibility and usefulness for programme management were considered particularly important. A direct outcome of this work has been the compilation of country profiles which assemble, on a country-by-country basis, available data on each of the reproductive health indicators identified in the short list.

To assist countries in generating the data needed for the compilation of the short list, RHR is currently working on a number of guidelines. The first of these guidelines was published in 1998 and provides information to aid decision-making on the choice of the sisterhood method to estimate maternal mortality (WHO/RHT/97.28). The sisterhood method is an indirect measurement technique of the kind often used to measure other health parameters such as infant mortality. The method was designed to overcome the problem of large sample sizes and thus reduce costs. It reduces sample size requirements since it obtains information by interviewing respondents about the survival of all their adult sisters. Many countries have used the method in recent years. As experience has built up, it has become apparent that a number of issues need to be taken into account before opting to use the methodology to measure maternal mortality, particularly for those wishing to evaluate progress towards the reduction of maternal mortality.

The indicators are currently being field-tested in a number of settings. Results from a district in Bangladesh found that only 3% of births took place in facilities able to provide life saving obstetric care and, more critically, only 17% of the total anticipated complications took place in such facilities. Only 0.04% of deliveries took place by caesarean section and the case fatality rate for complicated deliveries that did reach the facility was as high as 6.7%. These results led health planners to adopt a strategy to increase the supply of essential obstetric care facilities while simultaneously undertaking community mobilization on the issue of rapid recourse to a health care facility in cases of complications.

Qualitative approaches

Process indicators can be used to draw attention to issues that require further investigation, although by themselves they are insufficient as a diagnosis of the underlying determinants of a problem or as a guide to the needed programme changes. For the latter in particular, more detailed information is necessary. One way of obtaining such detailed information is through the use of qualitative techniques such as the maternal death case review. This is described in detail under product 059, Guidelines on conducting a case review of maternal deaths (*Safe Motherhood Needs Assessment* module).

Table 1. Summary of the types of data sources which can be used to measure Maternal Mortality Rate or Ratio

Data source	Consider using if:	Advantages	Disadvantages	Comments
Routine vital data	The fact and cause of all adult deaths are recorded (medical certification of cause of death). All births are registered.	Relatively easy to calculate measures. Inexpensive where vital registration is established and maintained. Gives time trends.	Often gives an underestimate because usually incomplete (e.g. marginalized groups not covered, may not have a record of pregnancy, may not have correct cause of death).	In the absence of active case finding, cannot be assumed to correctly identify all maternal deaths. Maternal deaths often missed or misclassified.
Birth records linked with death records	Have good computerized vital registration system with ability to link births with deaths of women of reproductive age.	Cheap and relatively easy. More accurate than routine data only.	As for routine data, only as complete as % of births and deaths recorded. Needs computing skills.	More accurate MMR than from vital statistics alone.
Health service statistics	Most deliveries occur with health service staff attending.	Relatively easy as health services data often routinely collected (though often inadequately exploited and analysed).	As above but more likely to exclude marginalized groups. Maternal deaths not in obstetric wards often missed.	Rough figure, may also grossly overestimate MMR if more difficult deliveries and deaths occur in hospital.
Surveillance	Potential of ongoing reporting and identification exists.	Improves on routine data sources. Gives time trends.	Requires ongoing effort and resources. Need to provide regular feedback to providers of data. Resource-intensive.	
Hospital record linkage	Have complete death registration and most deaths occur in presence of health service worker.	As above. Also allows collection of data on causes of death.	Needs extra resources to check medical records, interview relatives or health workers, if latter can only go back a few years.	Gives cause-specific data.

Data source	Consider using if:	Advantages	Disadvantages	Comments
Multiple sources	Have incomplete registration of deaths or cause of death but good data on population at risk, e.g. from census or special survey.	More accurate than single information sources. Also allows collection of data on medical causes of death and risk factors.	As for hospital record linkage. Resources needed to identify deaths from other sources. Community involvement required.	Can provide some information on cause of death and risk factors.
Revised WHO/UNICEF 1990 estimates	Have no easily available data from routine data or special surveys.	Modelling exercise already done.	Marker for health service access used in model may not accurately reflect quality of health care. Cannot be used for monitoring.	Approximate figure. Many underlying assumptions.
Cross-sectional surveys	Only if there are resources for intensive training on identifying maternal deaths.	Can also provide information on cause of death and risk factors.	Extremely costly and time-consuming. Large sample size needed. Only possible if high incidence area. Can only ask reliably about deaths up to a few years ago.	Provides best estimate of MMR in countries where few births and deaths are officially registered.
Prospective surveys	If active surveillance of births and deaths being done for another reason.	As above and more accurate information on risk factors before death over long periods of time.	Very costly and time-consuming with long follow-up periods. Large sample size needed. Only appropriate in high incidence areas. Biased if out-migration occurs. Problem of a "Hawthorn effect" whereby the presence of field staff may have an effect on maternal mortality even in the absence of specific interventions.	Provides most reliable information on risk factors for maternal deaths. Raises ethical issues related to availability of health care.

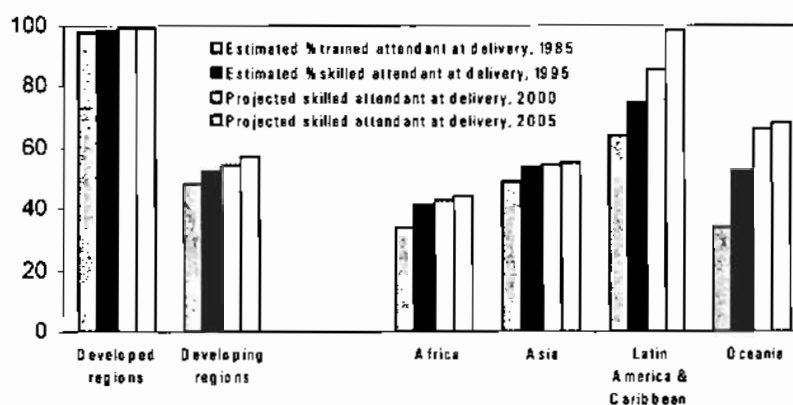
(028) Updated reproductive health databases, including "short list" of reproductive health indicators for global monitoring

The reproductive health, maternal and newborn databases bring together seven indicator databases linked to a reference database. Information on aspects of maternal and newborn health and safe motherhood is systematically collected and extracted. In the absence of reliable reporting of essential indicators from a majority of countries, the indicator databases fulfil a function of bringing together whatever information is available from vital registration, community and hospital studies in the published and unpublished literature, both nationally and subnationally. The indicator databases provide source material for WHO estimates of a number of maternal and newborn health indicators. The reference database serves as a source of information for in-depth analysis covering the epidemiology, etiology, determinants and risk factors for reproductive ill-health conditions and also provides information on use of maternal health care services. The system is currently being improved to allow multiple active users, thereby making it more effective for data maintenance and optimizing information-sharing capabilities.

The indicator databases cover maternal mortality, coverage of maternity care, anaemia in women of reproductive age, incidence of and mortality from unsafe abortion, infertility, low birth weight and pre-term birth, and perinatal and neonatal mortality.

The coverage of maternity care database lists data on antenatal care, deliveries in health institutions, skilled attendant at delivery and postpartum care. Most recent estimates were issued in 1998 (Figure 1). The percentage of women who have the assistance of a skilled attendant at delivery has been identified as a key intermediary variable for the formulation of ICPD milestones and targets related to maternal mortality reduction. Plans are under way for closer collaboration with Macro International in order to increase the reliability of health care providers' data. The percentage of women coming for repeat antenatal visits is included to increase the validity of the data set.

Figure 1. Estimates of attendant at delivery and projections at current rate of improvement



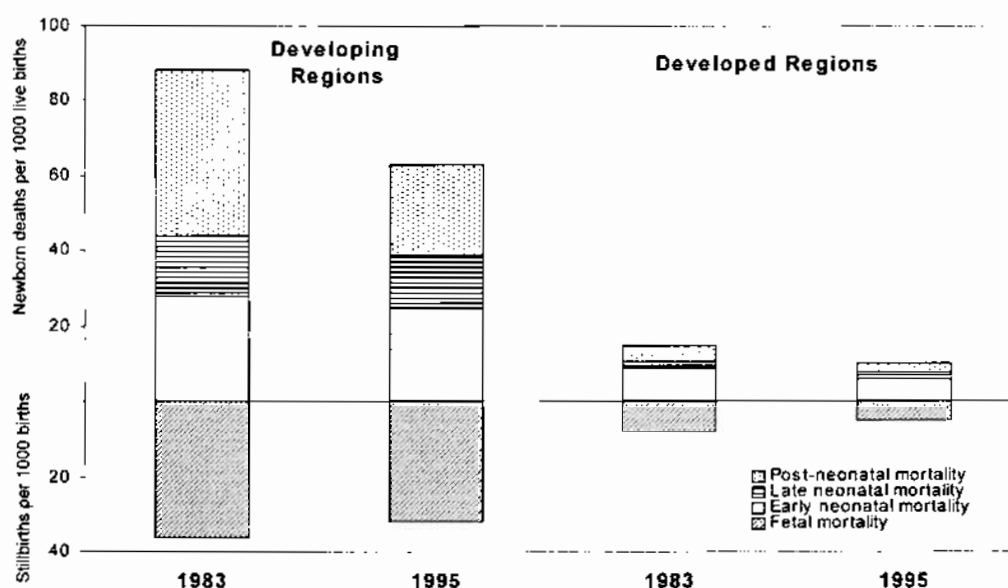
The database on unsafe abortion covers a sensitive area where reliable data are rare. In order to make optimal use of such data as are available, the database includes a range of different indicators on incidence and mortality. These are used to prepare estimates of incidence of and mortality from unsafe abortion at global and regional levels, last issued in 1998. The review showed that some 20 million unsafe abortions take place worldwide, contributing to 13% of maternal deaths.

The perinatal and neonatal mortality database has been used to develop country and global estimates of perinatal and neonatal mortality in 1995. Worldwide there are 53 perinatal deaths per 1000 births. Improvement of this indicator takes place slowly; only a slight reduction

from 58 per 1000 occurred since 1983 (Figure 2). The database on low birth weight and preterm birth lists birth weight distributions, percentage of preterm births and preterm low birth weight infants.

The anaemia database lists haemoglobin data for pregnant and non-pregnant women of reproductive age. In addition, data on haemoglobin distributions is collected to allow evaluation of the severity of the condition. It also contains a section on serum levels of some essential micronutrients.

Figure 2. Stillbirths and early neonatal deaths improve very slowly in developing regions



(029) Reproductive health home page on the World Wide Web

As part of its information dissemination activities during 1998, RHT developed its first web site. The site describes the overall aim and goals of what was then the Division of Reproductive Health (Technical Support) as well as giving an overview of the dimensions of reproductive ill-health and WHO's main activities in the areas of maternal and newborn health, family planning and reproductive tract infections. The site was designed to be user-friendly for the most basic hardware and software.

A comprehensive listing of resources is also available through this site, along with details of how to obtain them. Work began, and is still ongoing, to make the documents available in html format for easy downloading.

(030) Marketing research study on reproductive health information needs

To strengthen its activities in advocacy and information and to plan related work in a strategic manner, RHT undertook an assessment of its existing activities and policies. The assessment looked primarily at the production and dissemination of RHT documents. The focus was on assessing where documents are going, how they are being targeted and how they are perceived. The work was carried out by an outside consultant who had in-depth discussions with staff from RHT and related programmes. Reviews of existing mailing lists, distribution

systems and the role of the RHT document centre in responding to requests also took place. A questionnaire on a selection of documents was prepared and sent through the regional offices to countries. A report on the above, together with recommendations for a future dissemination strategy and communications priorities will be submitted in 1999.

Fertility regulation

(036) Guidelines and training materials on quality family planning service delivery

RHT initiated work with the International Planned Parenthood Federation (IPPF), AVSC International, the Program for Appropriate Technology in Health (PATH) and the Population Council to develop guidelines and training materials on quality family planning service delivery.

While some of the more common myths and misconceptions surrounding family planning and contraceptive use are known and addressed by various organizations, many misconceptions among health workers and clients have not been systematically reviewed and answered. In collaboration with IPPF in the United Kingdom, WHO approached 70 family planning associations, WHO country representatives, institutions and NGOs with an international survey to determine the common myths and misconceptions prevalent in each country. The response rate was high and the data are currently being analysed. A systematic review of the latest research findings and principles of best practice will be undertaken to provide evidence-based answers to correct the myths and misconceptions.

WHO, IPPF, AVSC International, PATH and the Population Council began discussions to produce a joint publication for supervisors, managers and trainers in order to improve the quality of family planning services.

Work continues with Family Health International (FHI) to evaluate the impact of WHO's guidelines on quality of service delivery.

WHO collaborated with the Johns Hopkins University in publishing the Population Report *GATHER Guide to Counselling* (Series J, No 48), 1998.

(036a) *Essential care practice guide* for family planning

The process of developing an *Essential Care Practice Guide* for family planning was initiated by staff, and discussions were held with FHI, Johns Hopkins University, PATH, Population Council, IPPF and others. An informal meeting of the relevant groups is planned for 1999. To ensure consistency, finalization of the *Essential Care Practice Guide* for pregnancy and delivery care (see below) is awaited.

(039) Simplified guidelines on family planning methods for clients at different stages of reproductive life

WHO is working with FHI in developing fact sheets on different family planning methods and their use by various age groups. The draft document was sent to relevant international experts and WHO staff for review. It will be discussed at a meeting of experts before being finalized.

(040) Information package: update on family planning methods

WHO worked with Johns Hopkins University in publishing the Population Report *Family Planning Methods: New Guidance* (Series J, No. 44), 1998.

Regional workshops are planned to bring programme officers and representatives of NGOs, donors and institutions together to actively introduce WHO's guidelines on family planning, to develop plans for country review, to revise or develop country policy and service delivery guidelines, and to provide technical support for implementation of the plans. The first such meeting is being organized in the South-East Asia Region in 1999.

The female condom

The development of the female condom has introduced onto the market what is considered to be a viable barrier method against unwanted pregnancy and the transmission of STI/HIV that is under the control of women. RHR maintains a Working Group on the Female Condom that collaborates closely with UNAIDS, Population Services International and the Female Health Company. WHO and UNAIDS have:

- developed and widely disseminated an information pack on the female condom;
- negotiated a special public sector price with the manufacturer;
- worked with countries in eastern and southern Africa to explore different IEC strategies that can be used to ensure the successful introduction and sustained use of the female condom (an information pack on how to promote the female condom is in its final stage of preparation); notably worked with a national project in South Africa to introduce the female condom and conduct research to determine the feasibility, acceptability and safety of re-use of female condoms;
- developed a review of lessons learned on improving client-provider interaction (see 004).
- supported biomedical research to generate additional information and evidence regarding the efficacy of the female condom as a contraceptive and as a barrier to the transmission of STI/HIV.

(041) Recommendations for revising medical eligibility criteria for contraceptive methods

Discussions were held with relevant experts to review and carry out the necessary revision of WHO's medical eligibility criteria for initiating and continuing use of different contraceptive methods. Preparations are being made for a meeting of an expert committee to revise WHO's medical eligibility criteria for contraceptive use in late 1999 or early 2000.

(045) Guidelines for improving method mix in family planning services

HRP has developed a Strategic Approach to Contraceptive Introduction. It is a methodology designed to assist policy-makers and programme managers to improve the quality of care of reproductive health services. Originally developed to guide the introduction of new contraceptives, the use of the approach is now being adapted to focus additionally on other reproductive health technologies and interventions. RHT has been collaborating with HRP in developing a field guide on *Expanding Options in Reproductive Health: A Field Guide for Assessing the Need for Technology Introduction*.

(046) Guidelines for introducing emergency contraception in family planning programmes

The technical and managerial guidelines *Emergency Contraception: A Guide for Service Delivery* were published in 1998. Demand for this document is high and 7000 copies have been distributed to date. The introduction of emergency contraception will also be included in the regional workshop in South-East Asia, as described under product 040.

(047) Handbook on integrated STD and HIV prevention and care for family planning services

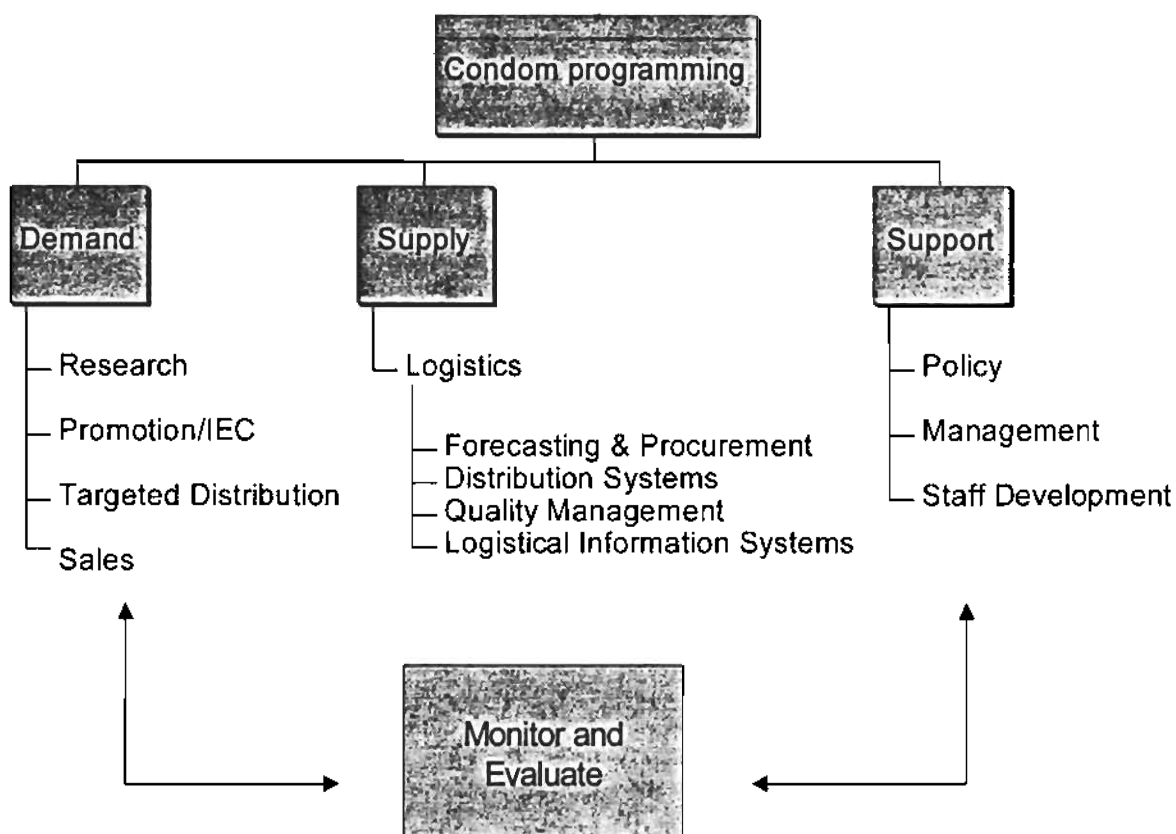
In response to identified country needs and donor interest, RHT produced a document intended for programme managers at national and district levels who are responsible for the planning and implementation of reproductive health care programmes. RHT used a wide consultative process to produce an initial draft of this document. It was subsequently reviewed internally and externally and by an expert panel in order to distil principles of best practice into specific guidance on the technical and managerial issues involved in the partial or full integration of these various programmes. The document is currently being reviewed by the RHR Gender Advisory Panel and will be published in 1999.

(047a) Technical guidance on contraception and HIV

As a result of recent findings on modern contraceptive methods and increased viral shedding of HIV through the reproductive tract, the need arose to revise WHO's medical criteria for contraceptive use. A consultant was hired to review all information and study results on HIV and contraceptive methods and submit a paper to help guide WHO in developing technical guidelines. The paper will be assessed by WHO and UNAIDS staff and a meeting of experts is planned in late 1999-early 2000 to review WHO's medical eligibility criteria for contraceptive use (see product 041).

(048 & 049) Fact sheets: condom programming**The male latex rubber condom**

WHO and UNAIDS, in collaboration with the private sector and scientific, technical and programmatic experts, published a package of materials *The Male Latex Condom* designed to summarize the latest scientific evidence and principles of best practice in a number of key areas of condom programming (see Figure 3).

Figure 3. Condom programming

This compendium of materials contains the following documents:

Specification and Guidelines for Condom Procurement focuses primarily on procurement issues related to condom quality since these procedures differ significantly from those used to procure other health products.

10 Condom Programming Fact Sheets review the latest scientific evidence and best practices on key elements of condom programming.

The monograph, *The Latex Condom – Recent Advances and Future Directions*, produced by Family Health International and published in collaboration with WHO and USAID. The monograph supports the information provided in the fact sheets by reviewing published studies and articles concerning many aspects of condom quality, performance in human use, acceptability and user behaviour.

The publication of this material is the first of a series of activities designed to support national family planning and STI/HIV/AIDS prevention programmes. The aim is to operationalize this information and improve the quality of condom programming activities as part of an integrated programmatic approach to the prevention of STI/HIV/AIDS and unwanted pregnancies.

Social marketing

RHT has collaborated with UNAIDS in the development of a comprehensive strategy to support condom programming activities for the prevention of STI/HIV/AIDS and unwanted pregnancy. The social marketing of products, services and behaviour change communication will be part of this package of strategies to initiate activities in the area of social marketing. UNAIDS convened a two-day meeting with WHO, UNFPA, IPPF, Marie Stopes International (MSI), Populations Services International (PSI), Futures Group, Horizons/Population Council, the United Kingdom Department for International Development (DFID) and USAID in order to develop a framework for a forum at which all major stakeholders can explore the best means of utilizing social marketing approaches to strengthen efforts that are already under way to prevent the transmission of STI/HIV/AIDS and unwanted pregnancy. This forum will be organized by WHO and UNAIDS and is scheduled to be held in September 1999.

Maternal health

(050) Clinical training materials for antenatal care

(050a) *Essential Care Practice Guides* for pregnancy support

(051) Clinical training materials for delivery and postpartum care

(051a) *Essential Care Practice Guides* for delivery and newborn care, including obstetric complications

The *Mother-Baby Package*, published in 1994, brought together the main clinical interventions necessary to make the pregnancy, birth, postpartum and newborn periods safer. The *Mother-Baby Package* is much used in countries to revitalize activities in the area of maternal and newborn health.

The *Essential Care Practice Guides* aim to provide a set of tools that will facilitate the implementation of the *Mother-Baby Package* from peripheral health units upwards. They are targeted at an audience with at least one year of pre-service training. Work on the *Essential Care Practice Guide* for maternal and newborn care has been progressing steadily since July 1997. Task lists for essential care in health posts and health centres were developed in late 1997 and, in 1998, the Maternal and Newborn Health/Safe Motherhood Unit reviewed the scientific evidence in order to resolve technical questions. The team working on the *Essential Care Practice Guides* had a productive working meeting in Geneva in November 1997, and team members met again in March, August and December 1998.

Crucial technical questions have been resolved in a number of critical areas such as prevention and treatment of malaria, treatment of intestinal parasites, screening and treatment of STIs, anaemia, and prevention and treatment of pre-eclampsia/eclampsia. Work on remaining key questions is ongoing and additional discussions are necessary, particularly on the immediate newborn care component and on the summary of current recommendations on clean and safer home delivery.

The team has produced drafts of comprehensive charts with treatment boxes for the pregnancy and post-pregnancy support components of the guides. These deal with obstetric first aid, antenatal care, postnatal care and post-abortion care, as well as delivery and newborn care.

In addition to the development of the chart booklets, the team is formulating technical basis papers to serve as the scientific basis for the national adaptations of the *Essential Care Practice Guides*. Pre-testing of the major components is planned for 1999.

(050b) Development of a strategy for the implementation of *Essential Care Practice Guides*

The development of the strategy for the implementation of the *Essential Care Practice Guides* started in the last quarter of 1998. It is expected to become a high-priority activity for RHR in 1999.

(051b) Report of technical working group on postpartum care

This document, *Postpartum Care of Mother and Newborn: A Practical Guide* reports the outcomes of a technical consultation on a full range of issues relevant to the postpartum period for the mother and the newborn. Taking women's perceptions of their own needs during this period as its point of departure, the text examines the major maternal and neonatal health challenges; nutrition and breastfeeding; birth spacing; immunization and HIV/AIDS; and concludes with a discussion of, and recommendations for, the crucial elements of care and service provision in the postpartum period. The text ends with a series of recommendations for this crucial but under-researched and under-served period in the life of the woman and newborn. It also includes a classification of common practices in the postpartum period: those which are useful, those which are harmful, those for which insufficient evidence exists, and those which are frequently used inappropriately. The report has been widely disseminated in English and will shortly be available in French.

(052) Clinical manual on prevention and management of obstetric complications

This manual is for use by doctors, midwives and other senior health workers who are responsible for the inpatient care of pregnant women. It is focused on the emergency care of women and newborns suffering complications of pregnancy, birth or the immediate postpartum period. It is thus targeted for use at the district hospital, which is defined as a facility that can provide comprehensive obstetric care, including operative delivery and blood transfusion.

Work on the manual began in June 1997 and a symptoms-based approach for emergency obstetric care was adopted. The manual was subject to outside review during its inception phase and has been under the scrutiny of an in-house editorial committee. In July 1998 the manual was further developed with the assistance of JHPIEGO. A meeting hosted by JHPIEGO reviewed the manual and discussed future collaboration between JHPIEGO and WHO on effective distribution to health workers in district hospitals. An Internet working group was set up to provide feedback on changes suggested during the working meeting.

Final stages will include a thorough outside review and an initial print run in 1999 of 10,000 copies in English. Plans include translation of the manual into other languages. It is hoped that the manual will be accompanied by both reference and training materials in the near future.

RHR will actively disseminate the *Emergency Obstetrics Manual* through WHO's regional and country offices, professional organizations, other UN agencies working in countries, and through partners in the Safe Motherhood Initiative.

(053) Guidelines on maternal health care provision for adolescents

This text, *Adolescent pregnancy. Health Problem and Health Care. A Review of the Literature with Emphasis on the Tailoring of Clinical Management Practices to meet the Special Needs of Adolescents*, developed by WHO's Adolescent Health and Development Unit with input from RHT, is currently undergoing an external review and is due to be published in late 1999. This exhaustive review of the literature and consultation with WHO regions and country experts has resulted in a thoroughly documented text that explores the many aspects of health care provision for childbearing adolescents. With its many examples of care provision and its analysis of the challenges of maternal health care provision to very young women and girls, fills a gap in the literature on a subject that has attracted insufficient attention.

(053a) Guidelines for strengthening midwifery for safe motherhood

The presence of a skilled attendant at birth has been clearly demonstrated to improve both maternal and neonatal outcomes. These guidelines, *Strengthening Midwifery Services*, offer ministries of health and programme managers a collection of papers on different aspects of establishing, strengthening and maintaining quality midwifery services. Issues of legislation and regulation, of standard-setting processes and teacher preparation, of basic curriculum and of core competencies are each explored and brought together under a single cover for easy reference. The text, from multiple contributors, is in an advanced stage and should be published in late 1999.

(054) Modular workshop materials to support the safe motherhood district managers planning process

The second field test of the *District-Level Safe Motherhood Planning Workshop* was held in Kampala, Uganda, and modifications were made to the materials on the basis of the lessons learned during the field test. More emphasis has now been put on empowering workshop facilitators through more detailed examples and case studies in the facilitator guide. The materials are now ready to be finalized after a last field test in Asia. They will be finalized in 1999 in the context of developing tools for the activities of the Health Systems and Community Health cluster.

(057) Maternal mortality estimates and projections

In 1996, WHO and UNICEF published revised maternal mortality estimates for the year 1990. These estimates were widely disseminated and used by international agencies and others. The estimates generated considerable comment from national governments, most of which focused on the differences between these figures and those officially reported by governments themselves.

In October 1997, an international technical consultation on safe motherhood took place in Sri Lanka. The issues of measuring maternal mortality and monitoring progress were the

subject of both plenary and working group sessions. There was consensus among participants that, given the difficulties of measuring maternal mortality, increased efforts should now be directed to measuring process indicators.

Following further discussions among countries, agencies and WHO Regional Advisers, it was agreed that a number of intercountry workshops should be organized during 1998 in order to ensure full regional and national participation in the development of new estimates for 1995. The first such consultation, co-organized by WHO, UNICEF and UNFPA, was hosted by WHO's Regional Office for the Americas/Pan American Health Organization in Washington DC in April 1998. The second consultation took place in Bangkok in June 1998, and involved countries of the WHO regions of Eastern Mediterranean, South-East Asia and Western Pacific.

The aim of the consultations was to facilitate exchange of experiences in relation to maternal mortality measurement and estimation and to increase understanding of the methodological and interpretation issues involved. Specifically, the consultation aimed to:

- provide a forum for the exchange of views on previous estimates of maternal mortality;
- increase understanding of the difficulties of measuring maternal mortality and the problems of using the maternal mortality ratio as an indicator of progress;
- add to participants' knowledge of different measurement approaches and their limitations;
- identify individual country concerns and the most appropriate ways of addressing them;
- evaluate approaches for developing 1995 estimates of maternal mortality based on country inputs and model-based approaches;
- reach consensus on ways of presenting the estimates to a variety of constituencies;
- consider alternative approaches to monitoring progress using process indicators.

Participants at the consultations were mainly staff responsible for generating and analysing health information in ministries of health or related bodies. Reports of the consultations are now available. Other regions have expressed interest in organizing similar consultations and further interregional consultations for the countries of the African and South-East Asia regions are planned for 1999.

Inputs from the regional consultations have provided the basis for the development of new estimates of maternal mortality for 1995. This work is currently under way with the collaboration of UNICEF and UNFPA.

(058) Revised maternal and perinatal death definitions for ICD

There is considerable discussion on the definition of maternal death and ways of simplifying it. A first step in this direction was the incorporation into the *International Classification of Diseases, Tenth Revision* (ICD-10) of an additional definition, namely, pregnancy-related death. This has the advantage of not requiring information on the specific cause of death; instead it defines as pregnancy-related all deaths among women of reproductive age who were pregnant at death or who had been pregnant within the previous 42 days. However, in many settings, even those with relatively good vital registration coverage, the fact of pregnancy is not routinely recorded on death certificates. Several suggestions have been made as to how records might be improved. One is the inclusion in the death certificate of a check box indicating whether or not the woman was pregnant at the time of death.

Further research on the feasibility and effectiveness of including such a check box on the death certificate is needed. As a first step, RHT brought together what is known of country experiences. This report describes country experiences, discusses the underlying rationale and makes recommendations to strengthen the identification of maternal deaths in vital registration systems. The report was used as a background paper for the Expert Committee on Vital Registration, convened by the United Nations Statistics Division in late 1998.

The information collected and described in the report contributed to a series of recommendations for enhancing the identification of maternal deaths by vital registration systems. The recommendations are assembled into four broad groups: political/policy issues, education, data issues, and areas for further research.

The report concludes that, although vital registration systems are active and reliable only in some areas of the world, they are recognized as providing the foundation for surveillance of mortality, including maternal mortality. Investing in vital registration systems not only yields the benefit of improved information but also builds capacity in data management, educates data collectors and communities about the relevance of maternal mortality, and has potential to enrich a country's appreciation of health, health information and social benefits to health.

(058a) Internally consistent global and regional estimates of the global burden of disease, with The World Bank

The World Bank's *World Development Report 1993* highlighted the need to set priorities with regard to resource allocation in public health. An essential component of the report was the development of internally consistent global and regional estimates of the global burden of disease (GBD), comprising deaths and disabilities due to more than 140 diseases and conditions. The GBD study was designed to promote consistency and to bring some reality to advocacy for disease-based programmes, each of which tends to claim more than its share of total mortality and morbidity. The measure used for these calculations was the disability adjusted life year (DALY) which permits, for the first time, an assessment of the burden resulting from both deaths and disability. However, there are some concerns about using DALYs as a basis for public health policy and resource allocation given that the data on the incidence and prevalence of reproductive ill-health are very limited.

With a revision of the GBD study planned for 2000, and the application of DALYs in national burden of disease studies in a number of developing and developed countries, continued debate and refinement of the approach, as well as clear recommendations to better capture the burden of reproductive ill-health, are essential. An informal consultation on "DALYs and Reproductive Health" held at WHO headquarters, in April 1998, provided an important opportunity to discuss the use of the DALY as a measure for estimating the burden of disease due to reproductive ill-health. The consultation was attended by experts in reproductive health and measurement of disease from 12 countries.

The objectives of the consultation were:

- to clarify the value judgements and assumptions made in using the DALY measure to estimate the GBD;
- to highlight major concerns and gaps in the 1990 GBD analysis;
- to identify improvements for the GBD exercise for 2000;
- to suggest further research to identify better the burden of reproductive ill-health.

The report, *DALYs and Reproductive Health: Report of an Informal Consultation*, is now available. It describes the rationale for and objectives of the meeting, and includes a short introduction to DALYs, their development, and their use within the GBD study. The report also describes what is meant by reproductive health, how much of the burden of reproductive ill-health DALYs actually capture, and the barriers to measuring this in the 1990 GBD study. It considers how DALYs can better measure the burden of reproductive ill-health, concentrating on the following areas: the epidemiological database, valuing health states, and capturing the gender dimension of burden.

The report includes a section on the use of the DALY as a tool for priority-setting. It was stressed that the DALY measure is designed to assist cost-effectiveness analysis but that clearly any single outcome measure will have serious limitations as only a limited number of dimensions of health and population can be taken into account. Participants expressed concern that the methodology may reinforce the medical model of health care and "vertical" approaches. Thus, it was repeatedly stressed that DALYs should not be used as the only tool for prioritization or resource allocation but should be assessed along with criteria such as justice and equity, human rights, community preferences, etc. The conclusions and recommendations of this report summarize the main problems, research needs and next steps identified at the consultation.

(059) Guidelines on conducting a case review of maternal deaths (Safe Motherhood Needs Assessment module)

A maternal death review is a qualitative, in-depth investigation of the causes and circumstances surrounding a small number of maternal deaths occurring at selected health facilities. The maternal death review brings together elements of existing qualitative approaches to investigating maternal deaths such as facility audit, verbal autopsy and confidential inquiry. Conducting the maternal death review involves 10 distinct steps that are described in a field manual which will be field-tested as part of this project.

The review involves taking as a starting point deaths occurring in health care facilities which are then investigated in some detail to identify avoidable factors and barriers to access to care. The maternal death review goes a step beyond the facility-based audit because it seeks to trace the "road to death" by extending the scope of inquiries outside the facility by interviewing family members and other knowledgeable informants. WHO has developed a draft guideline on conducting such in-depth case reviews which was field-tested in Mozambique and Uganda during 1998. The information can be a useful addition to quantitative data derived using other sources such as the *Safe Motherhood Needs Assessment*.

(060) Tool for the use of critical events reporting for monitoring maternal health programmes

A key challenge for safe motherhood programmes is to improve the quality of obstetric care at health care facilities. Achieving high-quality care depends on many factors, of which the availability of sound information on which to base decisions is particularly important. This project aims to assist decision-making and improve the quality of care by enhancing information flows within health care facilities and strengthening outreach to the community.

The project tests two approaches to meeting these information needs:

- maternal death case review;
- critical events reporting.

The objectives of the two approaches are:

- to provide data for improving quality of care;
- to rationalize routine statistics gathering and reporting;
- to stimulate the development of reporting systems that are responsive to changing needs in the health service;
- to strengthen linkages between users and collectors of data;
- to provide timely feedback relevant to improving quality of care;
- to promote communication between communities and health care providers.

The two approaches have a number of common features. Both take as their starting point an event within the health care facility and both use periodic information collection and qualitative methods. They are intended as educational tools and require the involvement of a multiprofessional team. The main differences between the approaches are that the maternal death case review studies only maternal deaths (though it could be adapted to examine other adverse outcomes such as near-misses or perinatal deaths). Critical events reporting, by contrast, examines other health events (which may be positive or negative) occurring at facilities. The maternal death case review has an important community involvement component and gathers data in the community as well as in health facilities; critical events reporting gathers data only in health facilities.

A draft guide to conducting a maternal death review was originally developed as part of the WHO *Safe Motherhood Needs Assessment*. Subsequently it was agreed that the maternal death case review could also be a stand-alone assessment and quality improvement tool. To ascertain its usefulness in the field, it was decided to undertake a formal study of the approach. In addition, a more informal evaluation was proposed and an evaluation form developed for distribution to all potential users.

Although there has been considerable experience in the use of qualitative approaches for studying maternal mortality, there has been little formal evaluation of their feasibility and usefulness in developing country settings. This is particularly true of critical events reporting which is an innovative approach that has not yet been field-tested. A first field test comparing and contrasting the two approaches is under way in Uganda.

The objectives of the feasibility study are:

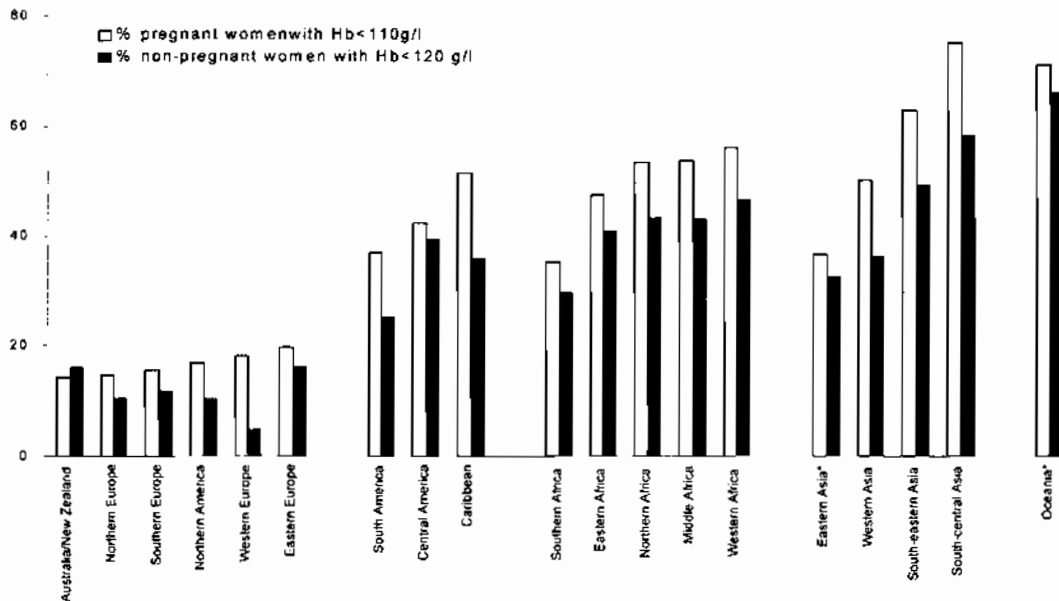
- to field-test the two approaches in terms of feasibility, usefulness and cost;
- to develop accompanying documentation and field manuals to permit the adaptation of the approaches in other settings.

(063) Data tabulation on anaemia in pregnancy, including country data and global estimates, based on new methodology

The “anaemia in women” indicator database is continuously updated. It lists available haemoglobin data for pregnant and non-pregnant women. In addition, data on haemoglobin distribution is collected to allow evaluation of the severity of the condition. The database also contains a section on serum levels of some essential micronutrients. Several new data areas

are added to support the data interpretation. This allows the processing of data analysis to proceed with the aim of arriving at new global and country estimates. Figure 4 shows the severity of anaemia in different parts of the world. Data is currently being screened and prepared for a third edition.

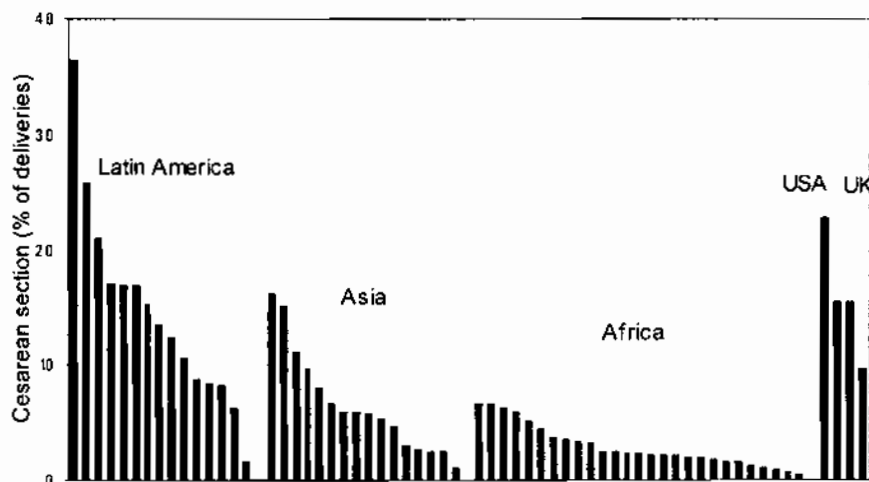
Figure 4. Anaemia, particularly in pregnant women is severe in many regions in the world



(064) Data tabulation: A Global Review of Caesarean Section

There is a great demand for data on caesarean section, and guidance on appropriate levels of this and other operative delivery interventions is frequently sought. Figure 5 shows caesarean section as a percentage of deliveries in some countries. National data has been assembled for an initial review and a structure for a potential database on caesarean section has been prepared.

Figure 5. Caesarean section as a percentage of deliveries in Latin America, Asia and Africa as compared to some developed countries



(069) World Health Day events

World Health Day on 7 April 1998 had the theme of safe motherhood. As in previous years, the event was marked by publicity and events all around the world. In Geneva, WHO headquarters hosted an exhibition of art on the theme of safe motherhood with paintings and sculptures from countries on all continents. WHO's Regional Offices held their own celebrations and publicity campaigns. Local groups in many cities, towns and villages also organized events on the theme of safe motherhood.

An information pack was prepared and widely disseminated. It contained two posters, one of which was a statistical wall chart with data on maternal and perinatal mortality and maternal health care and carrying the World Health Day message "Pregnancy is special - let's make it safe". The information pack also contained 11 fact sheets, each one focused on one of the key messages that emerged from the international technical consultation on safe motherhood that took place in Sri Lanka in October 1997. Three video clips were prepared and distributed to television networks worldwide and RHT staff gave a number of radio, newspaper and magazine interviews.

(071) Global advocacy of safe motherhood through collaboration with professional organizations

The mutual gain realized through effective collaboration with appropriate NGOs has long been acknowledged by WHO. For this purpose, a designated technical officer maintains a working relationship with the International Confederation of Midwives (ICM) with a view to strengthening maternal and neonatal care provision worldwide. Activities in 1998 included:

- participation in the International Symposium on Safe Motherhood, which brought together representatives from some 22 countries in New Delhi in February and was backed by the ICM Asia Pacific Region which ran a safe motherhood workshop with emphasis on evidence-based care;
- ongoing work on the Delphi reviews of the midwifery core competencies;
- preparation for the pre-congress workshop "Frontiers of Midwifery – STDs/HIV/AIDS", Manila, 1999, prior to the triennial ICM congress, organized by ICM in collaboration with UNAIDS, UNICEF and WHO;
- participation in the first ICM Francophone midwifery congress for safe motherhood held in December in Montpellier, France, which incorporated a workshop for midwives from 14 Francophone developing countries. The focus, strengthening research capacity in support of safe motherhood, resulted in the first steps towards the creation of a network for nurturing research capacity among Francophone midwives.

WHO collaborates with FIGO in the WHO/FIGO Alliance for Women's Health and also, since 1998, in the steering group of the Save the Mothers Fund, an effort to improve access to essential obstetric care in developing countries.

(071a) Joint statement on maternal mortality reduction

During 1998, UNFPA, UNICEF, The World Bank and WHO developed a joint statement on maternal mortality reduction. This builds on the lessons learned in the 10 years of the Safe Motherhood Initiative, 1987-1997, which were also reflected at a technical meeting held in Sri Lanka in October 1997. The draft joint statement was also discussed at a meeting of the Coordinating Committee for Health in Geneva, in July 1998.

The Joint Statement will be printed in 1999, launched with joint dissemination activities and subsequently distributed through the networks of the organizations involved.

(072) Evidence on best practices for active management of the third stage of labour

Postpartum haemorrhage is one of the major causes of maternal mortality. Active management of the third stage of labour, to reduce postpartum haemorrhage, includes three components – routine administration of an oxytocic drug after the birth of the child, early clamping of the cord, and controlled cord traction. This has been proved effective in developed countries but the feasibility of implementing it in resource-poor settings has not been fully tested. The introduction of active management of the third stage in a developing country with high maternal mortality will now be analysed in Luanda, Angola.

The research protocol was developed by the Karolinska Institute, Stockholm, Sweden, and was revised in collaboration with PATH and RHT. The project was cleared by SCRIHS, by the authorities in Angola, and by the Ethical Committee of the Karolinska Institute. The oxytocin has been provided by Gedeon Richter Ltd, and has been filled into single-use Uniject syringes by the Centro A.F. de Estudios Tecnológicos, Mexico. The project will be undertaken in both a peripheral and a central maternity in the Luanda province. It will be carried out in 1999. Following the study, monitoring of the routine use of active management of the third stage of labour will be done over a longer period using oxytocin in regular syringes.

(073) Evidence on best practices for use of misoprostol in management of the third stage of labour

This HRP project designed and implemented with input from RHT will be completed in late 1999. The results will determine policy guidelines on which drug to use for the active management of the third stage of labour, to be disseminated by RHR.

(074) Evidence on best practices for antenatal care in non-complicated pregnancy

This large multicountry study, coordinated by HRP with input from RHT, has been finalized. The results will be available in 1999 and will have a bearing on the type (number of visits, contents) of antenatal care to be recommended by WHO. The results are therefore eagerly awaited and will be incorporated into programme and policy guidelines.

(074b) Task force on nutrition and maternal health

Since mid-1998, regular meetings have been taking place between RHT and WHO's Nutrition Programme. The main focus of work is maternal and newborn health. The issues raised include recommendations for optimal micronutrient supplementation during pregnancy and innovative ways of managing protein-energy malnutrition during pregnancy. The work is based on reviews published by HRP and the Nutrition Programme. Current attention to vitamin A supplementation during pregnancy emphasizes the importance of this growing collaboration.

Perinatal health

(075) Standards and guidelines for basic newborn care

In 1998, RHT completed the review of evidence for three interventions in basic newborn care, namely newborn resuscitation, *Newborn Resuscitation: A Practical Guide*; cord care *Care of the Umbilical Cord. A Review of the Evidence*; and eye care (to be printed). Findings are being integrated into the *Essential Care Practice Guides* case management charts for birth attendants.

Research

A multicentre study was completed on the feasibility of newborn resuscitation using a simple mouth-to-mask device at the most peripheral level of the health care system. Results from Bangladesh, India, Indonesia and Iran showed that the device is safe for use with the training and supervision provided in the study. The findings of the study contributed to the development of the practical guide in newborn resuscitation.

(078) Standards and guidelines for care of sick newborns

In 1998, a systematic review of evidence for the identification, assessment and management of newborn illness after birth was commenced. The results of this work are being used to develop case management charts for birth attendants and multipurpose workers at health posts.

(087a) Interventions to reduce mother-to-child transmission of HIV

This work is being undertaken jointly by RHT and the Initiative on HIV/AIDS/STIs. For a number of years, treatment of HIV-infected pregnant women with Zidovudine (AZT), during late pregnancy and birth, and six week treatment for newborns has become routine in developed countries. This has substantially reduced mother-to-child transmission of HIV. However, the treatment has been too complicated and costly for most developing country settings. In early 1998, results of a study of a simplified AZT treatment in Thailand were published. Oral treatment during the last weeks of pregnancy and childbirth, without treating the newborn, were also found to be effective against HIV transmission. Though not quite as effective as the longer treatment, this new regimen is feasible in many developing countries.

In early 1998, three separate meetings at WHO dealt with different aspects of the new AZT regimen. One of these was concerned with programme implementation, and two with aspects of infant feeding. RHT was closely involved in all three meetings.

An interagency working group (WHO, UNAIDS, UNFPA, UNICEF) has been formed to carry out pilot projects in sub-Saharan Africa, and other initiatives have also been taken to increase the availability of the new, short-term regimen.

At the Global Conference on HIV/AIDS held in Geneva in July 1998, this issue was presented and analysed in a number of sessions and RHT contributed to the discussions. Together with the WHO Regional Office for Africa intensive efforts to prepare for pilot interventions in the African Region have been taking place including a policy-makers meeting in Harare, Zimbabwe, in December 1998. Four guides on HIV management in maternity settings have been drafted for health care providers; they deal with voluntary counselling and testing, antenatal care, delivery and newborn care, and postpartum care. These draft guides will be reviewed by a technical meeting in 1999 before being field-tested, finalized and distributed. This work is now being undertaken jointly by RHR and the Initiative on HIV/AIDS/STIs in the CHS cluster.

(087c) Systematic review of HIV and maternal care

This review was completed in July 1998. It describes what is known about vertical transmission of HIV and about factors that can prevent such transmission, and it recapitulates universal precautions in maternity settings. A draft was distributed at the Geneva Global Conference on HIV/AIDS in July 1998 and the final document will be published in 1999.

Unsafe abortion

(091) Midwifery training module on abortion care and vacuum extraction, to supplement existing modules

The original midwifery training modules were published in 1996 and have since been widely used. The first volume focuses on safe motherhood in the community, and the others are practice-based volumes on eclampsia, haemorrhage, obstructed labour and sepsis. They were designed to expand the life-saving capacity of midwives in the field when faced with obstetric complications. The consequences of unsafe abortion account for an estimated 13% of maternal deaths worldwide – a figure that is much higher in some places. Access to caesarean section is not universal and the problem of obstructed labour can often be effectively handled by judicious management with vacuum extraction, a technique that is well within the competence of trained midwifery personnel. For this reason, two additional training modules are currently in preparation. A module on incomplete abortion care was drafted and is currently being finalized with publication anticipated during 1999. Work on the text for a vacuum extraction module began recently.

Reproductive tract infections, including cervical cancer

(096) Modular training materials on implementing maternal and congenital syphilis control in reproductive health services

Although the problem is complex and influenced by behaviours that are difficult to change, much more could be done to control reproductive tract infections. First, prevention efforts must begin well before sexual activity starts, which means that health promotion aimed at young people should address this issue. Second, there has been a failure to apply available and effective tools for the management of sexually transmitted infections (STIs). This is especially true in services that address other aspects of reproductive health such as maternal and newborn care. For example, prevention of congenital syphilis through screening and treatment of pregnant women is one of the most cost-effective interventions in public health but many maternal and newborn health programmes do not include this as a priority in their antenatal care.

Addressing this need for guidance on interventions to be included into maternal and newborn health and family planning services, the development of training materials – initially managerial and subsequently clinical aspects – remains a high priority. For this reason elements of congenital syphilis control were integrated into the *Essential Care Practice Guide* on pregnancy and delivery care, described elsewhere in this report (products 050, 051).

(096a) Work with MotherCare on STIs

In 1997 and 1998, a staff member of RHT provided support to MotherCare in return for USAID funding of a portion of the staff member's salary. This consulting focused on issues related to STIs and reproductive tract infections in pregnancy, but also included assistance in developing a community component to a safe motherhood needs assessment. The activities included reviewing and providing technical assistance on a maternal and congenital syphilis elimination project in Bolivia and on a study of the prevalence of STIs in South Kalimantan, Indonesia. In the latter case, assistance was provided to help in-country investigators develop manuscripts based on the research undertaken with the assistance of MotherCare.

(098) Update of STI treatment guidelines

WHO's treatment guidelines for STIs need to be updated because of the development of new antibiotics, changing patterns of antimicrobial resistance and recent changes in treatment guidelines from developed countries. There is also a need to adapt the guidelines to developing country settings (taking into account epidemiological patterns, antimicrobial resistance and available resources).

The planning for this product has been completed and a technical consultation of international experts will meet in Geneva in 1999. The meeting will review the evidence for new therapeutic agents for STIs and assess which of these are appropriate for developing countries. This process is undertaken to complete the update of WHO's treatment guidelines for STIs. In addition, consideration will be given to WHO's recommended syndromic approach to the management of STIs and whether the evidence from the past seven years of use indicates any need for change.

(100a) Prioritization of STI activities

In cooperation with UNAIDS and the WHO Initiative on HIV/AIDS/STIs, a meeting is planned for July 1999. One of the principal goals of this product will be to assess the best approaches to developing WHO's activities in the area of STIs and ensuring that these approaches are most responsive to countries' needs. Experts and representatives from more than 30 countries will attend.

STI Regional Advisors meetings

In March 1998, at the initiative of WHO's Unit of AIDS and Sexually Transmitted Disease, the Regional Advisors on STIs, who are important partners in RHT's relations with countries, met in Geneva for a meeting. RHT took part in that meeting, assisting in setting priorities that included expanding the Regional Advisors' networks to include other reproductive health issues.

(101) Case studies on integrating STI prevention and care into other reproductive health services

Guidelines and training materials on the prevention and care of STIs are urgently needed by reproductive health programmes. However, some aspects of prevention and care require further operations research to refine tools and approaches, especially in the context of other reproductive health services. Gathering empirical evidence of successful and not so successful experiences in integrating management and care of STIs into other reproductive health services is an essential step in the further development of guidance on the topic.

Integration of the management of STIs into family planning services is probably the most common form of integration in reproductive health services. A paper reviewing what is currently known about this integration was commissioned and completed. This comprehensive review makes clear that the evidence on which to base judgements about the benefits of, or approaches to, the integration of STI management into family planning services is very limited.

Following this activity, an agreement was reached with the Population Council's Frontiers project to develop a protocol for further case studies on integration. Under the terms of this agreement, WHO, in partnership with UNAIDS, will conduct additional case studies and Frontiers will subsequently use these case studies as the basis for developing and implementing some specific models of integration. These models will be evaluated over a two-year period to assess their utility in improving reproductive health. The protocol for the case studies has been developed and case studies are currently being planned or implemented.

(101a) Review of interface between STI and family planning

During 1998, RHT worked with UNAIDS, UNFPA and WHO's Regional Office for Europe in drawing up a proposal to hold two consultations. The first consultation will address the gap that exists between the official policy of international organizations favouring the promotion of condoms as a family planning method for those at increased risk of STI/HIV and the ways in which that policy is made operational in field activities. This consultation will be co-funded by WHO, UNAIDS and UNFPA and will take place in the second half of 1999.

The second consultation will build on the outcome of the first and will develop an action plan to address this gap in eastern Europe and the Newly Independent States. WHO's Regional Office for Europe and UNAIDS have agreed to co-fund this second consultation.

(103) Improved flow chart for syndromic diagnosis and management of vaginal discharge, with special attention to adolescents

The vaginal discharge algorithm or flowchart is one of the key components of WHO's syndromic management approach to STIs. However, the possibilities of improving the performance of this algorithm through any technical means is limited, especially in resource-constrained settings. It is also clear that many national programmes are not optimally designed to address the problem of established reproductive tract infections and much more could be done with existing methods to improve the situation.

Thus, in 1998, together with UNAIDS and the Population Council's Horizons project, RHT and HRP developed a research project that aims to assist countries by testing a strategic approach for assessing and planning interventions for the prevention and care of sexually transmitted and reproductive tract infections. This programmatic approach aims to guide national programme managers in considering the widest range of possible interventions and prioritizing them, often with little or imperfect data on which to base decisions. The major part of the preparation for this work has been completed.

Background documents that have been prepared describe: a conceptual framework from which possible interventions can be derived; a strategic approach for collecting existing data and for filling gaps in data through rapidly conducted qualitative research; and a process for prioritizing and building consensus on best choices of interventions. These documents were reviewed by experts in the field and by national programme managers at a meeting held in Geneva. The documents are now ready for field-testing.

Two levels of evaluation are planned: the first will focus on the process itself and the effect it has on programme design and implementation, while the second is more intensive and will include an assessment of possible impact. The field studies are now being prepared and will take place in four selected countries beginning in the second half of 1999. Evaluation of this strategic approach will be carried out over the following two years.

(104) Guidelines on programming for cervical cancer control in low-resource settings

Cervical cancer is the most common cancer among women in many developing countries, and accounts for the deaths of some 300 000 women each year. Cervical cancer is now known to be associated with infection with the human papilloma virus, and is therefore ultimately preventable. It is also curable if detected and treated early. The mainstay of cancer control programmes in developed countries, where cervical cancer mortality rates have decreased substantially, is cytological screening by Pap smear combined with appropriate treatment. However, Pap smear testing is neither feasible nor affordable for widespread use in low-resource settings. In general, developing countries do not have a comprehensive cervical cancer control programme.

In 1998, RHT contributed to support for a meeting held in Nairobi, Kenya, on cost-effective methods of addressing this important public health problem. The consultation dealt with the prevention, detection and treatment of cervical cancer in low-resource settings in east and southern Africa. Experience from countries in this region make it clear that, while resources are generally constrained, what is possible varies. In large urban centres, Pap smear and other sophisticated techniques are feasible, while in more rural settings low-cost visualization techniques are required. A report of the consultation has been widely distributed.

