



Department of Reproductive Health and Research
including the
UNDP/UNFPA/WHO/World Bank Special Programme
of Research, Development and Research Training
in Human Reproduction (HRP)



Annual Technical Report 2011



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**World Health
Organization**



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UNDP • UNFPA • WHO • World Bank
Special Programme of Research, Development
and Research Training in Human Reproduction

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Contribution to WHO's Medium-term Strategic Plan 2008–2013



The Programme contributes to the achievement of five WHO Strategic Objectives (SOs):

Strategic Objective 2 “To combat HIV/AIDS, tuberculosis and malaria”.

Within this objective, the Programme contributes to *“Policy and technical support provided to countries towards expanded gender-sensitive delivery of prevention, treatment and care interventions for HIV/AIDS, tuberculosis and malaria, including integrated training and service delivery; wider service-provider networks; and strengthened laboratory capacities and better linkages with other health services, such as those for sexual and reproductive health, maternal, newborn and child health, sexually transmitted infections, nutrition, drug-dependence treatment services respiratory care, neglected diseases and environmental health”.*

Strategic Objective 4 “To reduce morbidity and mortality and improve health during key stages of life, including pregnancy, childbirth, the neonatal period, childhood and adolescence, and improve sexual and reproductive health and promote active and healthy ageing for all individuals”.

Within this objective, the Programme contributes to achieve results related to *“National research capacity strengthened as necessary and new evidence, products, technologies, interventions and delivery approaches of global and/or national relevance available to improve maternal, newborn, child and adolescent health, to promote active and healthy ageing, and to improve sexual and reproductive health”.* The work on the development of norms, tools and guidelines contributes to *“Guidelines, approaches and tools made available, with provision of technical support to Member States for accelerated action towards implementing the strategy to accelerate progress towards the attainment of international development goals and targets related to reproductive health, with particular emphasis on ensuring equitable access to good/quality sexual and reproductive health services, particularly in areas of unmet need, and with respect for human rights as they relate to sexual and reproductive health”.*

Strategic Objective 5 “To reduce the health consequences of emergencies, disasters, crisis and conflicts, and minimize their social and economic impact”.

Within this objective, the Programme contributes to *“Effective communications issued, partnerships formed and coordination developed with other Organizations within the United Nations system, governments, local and international non governmental organizations, academic institutions and professional associations at the country, regional and global levels”.*

Strategic Objective 6 “To promote health and development, and prevent or reduce risk factors for health conditions associated with use of tobacco, alcohol, drugs and other psychoactive substances, unhealthy diets, physical inactivity and unsafe sex”. Under this objective the Programme contributes to *“Evidence-based and ethical policies, strategies, interventions, recommendations, standards and guidelines developed and technical support provided to Member States to promote safer sex and strengthen institutions in order to tackle and manage the social and individual consequences of unsafe sex”.*

Strategic Objective 10 “To improve health services through better governance, financing, staffing and management, informed by reliable and accessible evidence and research.

Within this objective the Programme contributes to *“Coordination of the various mechanisms (including donor assistance) that provide support to Member States in their efforts to achieve national targets for health-system development and global health goals improved”*.

Universal access to sexual and reproductive health in the context of the primary health care approach

Summary

Key objectives

The work of the Department focusing specifically on “universal access” within a “primary health care” approach aims to promote and support acceleration of progress towards achieving universal access to reproductive health, the second target of Millennium Development Goal 5 (MDG 5B), including through primary health care.



Major achievements

- A high-level annual event featuring policy and programmatic innovations that have succeeded in expanding access to reproductive health and family planning was initiated in collaboration with the Aspen Institute. This was the inaugural event for Member States on the Geneva Policy Dialogue Series on Reproductive Health, an annual series to be hosted at the time of the World Health Assembly each year from 2011 to 2014.
- Case-studies on policy, financing, and service delivery innovations to improve reproductive health and health-care outcomes were carried out and published in the form of policy briefs.
- A study exploring effective strategies to reduce maternal mortality was submitted and accepted as a peer-reviewed journal article. The findings from six countries indicate that strategies that have worked in reducing maternal deaths are:
 - introducing innovative financing measures;
 - strengthening pre-service education and in-service training for health-care providers;
 - enhancing obstetric care including infrastructure, equipment and quality of services;
 - investments in the broader determinants of maternal mortality, particularly family planning, education, and women’s empowerment.
- Implementation of the WHO *Global reproductive health strategy* was assessed largely through a survey of countries and a progress report was submitted for review by the Executive Board and the World Health Assembly.
- The country survey on implementation of the WHO *Global reproductive health strategy* elicited comprehensive information on progress in 58 countries. The results, among others, suggest that increasingly interventions developed by the Department to reduce maternal mortality and improve reproductive health were being put into practice, although this varied across different interventions. For example, in 95% of the countries that responded, magnesium sulfate is registered for use in reducing deaths from eclampsia; and in more than 95% countries, reproductive health essential medicines were on the national essential medicines list. Approximately two thirds included emergency contraception among contraceptive methods provided through public health

programmes; while about three quarters reported screening for early detection of cervical cancer.

- At the same time, countries identified barriers to the improvement of reproductive health services. These barriers include: political instability or crisis; poor quality of care; poor coordination of efforts; insufficient human resources and poorly motivated staff; lack of funds and commodities; poverty; low levels of community engagement; and sociocultural factors.
 - *Implication of research findings for policy and programmes:* systematic identification of barriers to access to reproductive health care should inform development of policy and strengthening of programmes that address or take into account the relevant barriers. A review of the evidence on health promotion interventions in reproductive health and family planning was carried out to provide input in development of a package of evidence-based, outcome-oriented health promotion actions in the context of primary health care, by the WHO Health Promotion Department.

1. Introduction

The work of the Department focusing specifically on “universal access to sexual and reproductive health” within a “primary health care” approach aims to promote and support acceleration of progress towards universal access to reproductive health, the second target of the Millennium Development Goal (MDG) 5 (MDG 5B), including through primary health care.

The overall workplan of the Department is aligned with the key aspects of the WHO Global Reproductive Health Strategy, that defines the elements of sexual and reproductive health as: improving antenatal, delivery, postpartum and newborn care; Providing high-quality services for family planning, including infertility services; Eliminating unsafe abortion; Combating sexually transmitted infections, including HIV, reproductive tract infections, cervical cancer and other gynaecological morbidities; and Promoting sexual health. The areas of work aim to enhance the methods, interventions and approaches to improve outcomes as relating to all thematic aspects of sexual and reproductive health, through enhancing elements of universal access (availability, information, cost/affordability and quality/acceptability). The cross-cutting work reported here focuses on specific activities targeting promotion of universal access to sexual and reproductive health especially within a primary health care approach.

2. Promote accelerated actions for achievement of universal access to reproductive health

2.1 Progress

The report *Universal access to reproductive health. Accelerated actions to enhance progress on Millennium Development Goal 5 through advancing target 5B*, has been effectively disseminated, including at a high-level event at the time of the World Health Assembly (WHA) in May 2011.

2.1.1 Geneva Policy Dialogue series on Reproductive Health: *Delivering on the promise of universal access to reproductive health: countries leading the way*

In collaboration with the Aspen Institute, the inaugural event of the Geneva Policy Dialogue Series on Reproductive Health, an annual series to be hosted at the time of the WHA each year from 2011–2014, was held in May 2011, at the United States of America (US) Mission in Geneva (see Figure 1). This inaugural event set the tone for a conversation that will continue over the next 5 years, searching for policy and programmatic innovations that have succeeded in expanding access to reproductive health, honouring the achievements and learning from successes.

The event, hosted by the US Permanent Representative to the United Nations in Geneva, featured high-level speakers including: the Minister of Health of Ethiopia; the Secretary of Health and Population of Nepal; the Executive Director of the United Nations Population Fund (UNFPA); the US Surgeon General; the Director of the Office of Global Health Affairs in the US Department of Health and Human Services; the Secretary-General of the YWCA and Member of the United Nations Commission on Information and Accountability for Women's and Children's Health; and the Director-General of the International Planned Parenthood Federation.

Figure 1. The inaugural event of the Geneva Policy Dialogue Series on Reproductive Health.

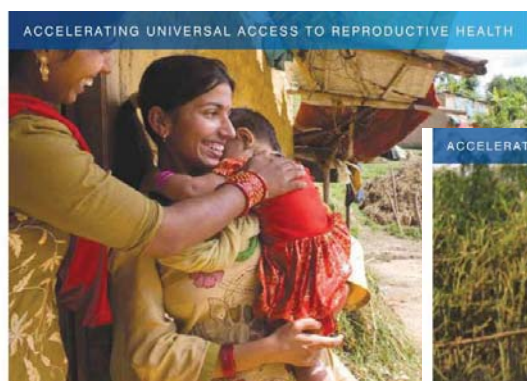


The event highlighted several policy, financing, and service-delivery innovations that have helped promoting and accelerating progress in universal access to reproductive health within a primary health care approach. For example, Nepal has made universal access to family planning a constitutionally protected right. Additionally, the sector-wide approach (SWAp) and female health volunteers have broadened access to reproductive health, resulting in dramatic improvements like the drop in fertility rate from 6.3 births per woman in Nepal in 1976 to 2.9 per woman in 2009. In Ethiopia, the Health Extension Worker programme has put two female high-school graduates into each village and is credited with raising the country's modern contraceptive prevalence to 14% in 2005 from barely 7% in 2000. This innovation was based on an agriculture extension programme showing the intersectoral cooperation in the context of Ethiopia's government-wide campaign to end poverty, where the common focus on the ultimate end goal helps different ministries to be "team players" when it comes to discussions of finance. The Rwanda Ministry of Health was able to put reproductive health on Rwanda's financing agenda, emphasizing the cost-effectiveness of meeting the existing demand for family planning.

The inaugural event announced creation of the Resolve Award, to be awarded at future Geneva Policy Dialogue Series for Reproductive Health. The award will honour innovative approaches by governments as they accelerate progress toward universal access to reproductive health through innovative policy development, financing or service-provision methods. Joint work with the Aspen Institute is ongoing, to identify innovations for expanding access to reproductive health, to inform the selection process for the Resolve Award.

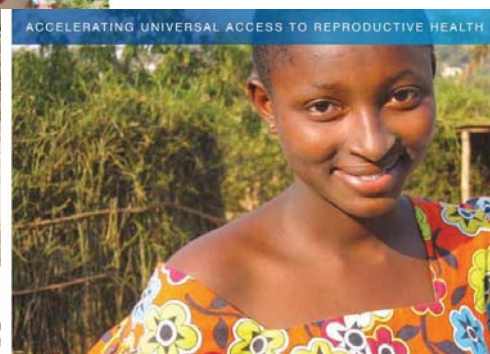
2.1.2 Synthesis of information on strategies to promote universal access to reproductive health

Case-studies from countries that have improved reproductive health and health-care outcomes were carried out. Strategies that contributed to improvements in the use of family planning and reducing unmet need for family planning in Ethiopia, Malawi, Nepal and Rwanda were analysed and published in the form of policy briefs as background documents for the Geneva Policy Dialogue Series on Reproductive Health event (see Section 2.1.1). A paper prepared on strategies that have helped to reduce maternal mortality in Bangladesh, Cambodia, Gambia, Morocco, the Plurinational State of Bolivia and Rwanda was prepared, submitted and accepted as a peer-reviewed journal article.



Nepal

To achieve its long-term goal of reducing fertility and under-5 mortality, Nepal planning as a priority element of an Essential Health Care Service in its Health (2004), Nepal Health Sector Programme-Implementation Plan (2004-2009), Long-term Health Plan (2007-2011).



Rwanda

In 1995, the Ministry of Health of Rwanda began health sector reforms in accordance with the Lusaka Declaration. These reforms included decentralization of the health system, development of the primary healthcare system, and community participation in managing health service financing.

The strategies that appear to have worked in reducing maternal mortality include those relating to innovative financing measures; investment in human resources, both in terms of strengthening pre-service education and emphasizing in-service training for health-care providers; strengthening obstetric care by enhancing infrastructure and equipment, as well as quality of services; and investments in the broader determinants of maternal mortality, particularly family planning, education, and women's empowerment.

2.1.3 Support to regions/countries in development of policy and programme frameworks for universal access to reproductive health

During 2011, one regional workshop on assessment of progress towards achievement of reproductive health through development and strengthening monitoring frameworks for reproductive health programmes was carried out

in October 2011, in Bangkok, Thailand, in collaboration with the UNFPA Asia Pacific Regional Office. The workshop was attended by 20 country teams and provided an update on global and regional monitoring frameworks relevant to reproductive health and introduced the WHO/UNFPA indicators framework for monitoring achievement of universal access to reproductive health in the context of national programmes. In addition to guidance on measuring elements of access to reproductive health, the indicators framework, developed and published in 2008, immediately after the official inclusion of the MDG 5B on achievement of universal access in the MDG monitoring framework, supports decision-making on identification and implementation of interventions to accelerate progress in its achievement. Country teams have developed action plans to revise and strengthen monitoring frameworks. In December 2011, a national workshop was organized in Indonesia, as the first step of implementing their action plan.

The Department provided technical input in the Pretoria Declaration adopted by a Health Ministers' Conference convened by Partners in Population and Development in October in Pretoria, South Africa. The conference was convened to discuss the linkages between population dynamics, climate change and sustainable development. The declaration, among others, recommended to ensure universal access to sexual and reproductive health services, to empower individuals and couples to decide freely and responsibly the number, timing and spacing of their children; to support scaling-up of successful family planning programmes; and to ensure family planning programmes become an important and integral part of adaptation to climate change. Investing in family planning and reproductive health programmes and ensuring that adolescents are provided with information, skills and services for preventing pregnancy at an early age were other key recommendations of the health ministers.

2.2 Planned activities

Collaboration with the Aspen Institute will continue with the annual events of the Geneva Policy Dialogue Series on delivering on the promise of universal access to reproductive health. In relation to the selection of the recipient of the Resolve Award, work will continue to be carried out to identify countries that have made improvements in reproductive health and health-care measures, especially in the area of family planning, and to explore potential contributors to these successes.

Support will be provided to regions and countries to strengthen monitoring frameworks for effective tracking of interventions for universal access to reproductive health and helping in decision-making for enhancing programmes. Such support might include in some cases, supporting implementation research in identification of barriers, and helping development of interventions to achieve universal access.

3. Monitoring implementation of the WHO Global Reproductive Health Strategy

The 2004 WHA, through Resolution 57.12, endorsed the first WHO Global Strategy on Reproductive Health ("the Strategy") to accelerate progress towards attainment of international development goals and targets related to reproductive health. As part of the requirement to provide a biannual progress report to the WHA, country-level progress is examined through a questionnaire survey to Member States, which is used to inform the progress report.

3.1 Progress

A questionnaire survey exploring progress made in implementation of the Strategy by Member States was carried out during February to May 2011. Out of The information elicited was synthesized and incorporated in the progress report submitted for review by the WHO Executive Board. Responses from 58 countries that have received questionnaires through all WHO regional offices indicate that progress has been made and facilitated by:

- strengthening partnerships aimed at improving health-system capacity, and training and retaining skilled health workers;
- updating legislative and regulatory frameworks aligned with national strategic plans;
- gaining political commitment through demonstrating the vital connection between improved reproductive health and development;
- strengthening monitoring, evaluation and accountability to improve the evidence base for priority setting;
- allocating national resources for reproductive health.

The results of the survey also show that interventions developed by the Department to reduce maternal mortality and improve reproductive health were increasingly being put into practice, although this varied across different interventions. For example, in 95% of the countries that responded, magnesium sulphate is registered for use in reducing deaths from eclampsia; and in more than 95%, essential medicines for reproductive health were in the national essential medicines list. Only about two thirds, however, included emergency contraception among contraceptive methods provided through public health programmes; and only three quarters reported screening for early detection of cervical cancer.

At the same time, Member States identified barriers to the improvement of reproductive health services. These barriers include: political instability or crisis; poor quality of care; poor coordination of efforts; insufficient human resources and poorly motivated staff; lack of funds and commodities; poverty; low levels of community engagement; and sociocultural factors.

3.2 Planned activities in 2012

An expanded summary of the survey findings will be developed, with regional summaries of progress. The review of the progress report by the Executive Board and the WHA will be followed up.

4. Strategies to expanding access to reproductive health through primary health care

4.1 Progress

The Department provided input in development of a package of evidence-based, outcome-oriented health-promotion actions in the context of primary health care, by the Health Promotion Department, which is expected to be finalized in 2012. A review was undertaken of the evidence on health-promotion interventions in reproductive health and family planning. The review explored effective health-promotion interventions in promoting healthy sexual behaviours and increasing the uptake of family planning, especially among disadvantaged population

groups, as well as the potential factors that contribute to the effectiveness of such interventions.

The review found a wide range of health-promotion actions provided by community health workers to promote reproductive health, especially family planning. For example, use of simplified charts and educational activities for adolescents and young couples about reproductive health raised community awareness and support for delaying marriage and childbearing. Education of women in relation to health information and behaviours, together with ensuring access to midwifery consultation services free of charge, increased the use of contraception. However, the evidence was scarce and studies were of low quality. This calls for further research and systematic synthesis of research using suitable designs for evaluating the effectiveness of public-health interventions aimed at improving reproductive health.

4.2 Planned activities in 2012

A systematic review will be carried out to synthesize and document beneficial health-promotion activities to improve reproductive health and reduce the number of unintended pregnancies.

QUESTIONS TO STAG

1. STAG is asked to advise on how academic and research institutions collaborating with HRP, including those being supported to strengthen research capacity, can best contribute to strengthen efforts in low income countries towards achievement of universal access to sexual and reproductive health?
2. STAG is asked to advise on how best to integrate the primary health care approach in the Department's efforts to accelerate progress towards achievement of universal access to sexual and reproductive health.
3. During 2013, the UN Secretary-General is planning to take up an initiative that focuses on the health of young people. This high-level focus is along the lines already adopted which saw the establishment of a Commission on Information and Accountability and the current proposal for a Commission on Commodities. RHR is well-positioned to build on its work on universal access to reproductive health in the context of MDGs and ICPD, to ensure a stronger focus on improving adolescent sexual and reproductive health.

STAG is asked to advise on strategies to enhance RHR/HRP's overall work on young people with a focus on accelerating progress on achievement of universal access to sexual and reproductive health.

Promoting family planning

Summary

Key objectives

In 2011, the Promoting Family Planning area of work was geared towards improving the quality of and access to family planning services, including contraception and infertility services. It focused on disseminating updated evidence-based materials, developing tools and furthering research to address the unmet need for family planning products and services. Social science and biomedical research have provided information for improving the quality of services and improving access to and use of contraceptive technologies. Work in infertility continued, with further recommendations for research and development.



Major achievements

- The *Medical eligibility criteria for family planning*, 4th edition (MEC) was awarded first prize in the Obstetrics and Gynaecology category of the 2011 British Medical Association Book Awards. More translations of the MEC book and MEC Wheel, and electronic and mobile phone versions were also developed and disseminated to meet a high demand from Member States.
- *Family planning – a global handbook for providers* was updated in 2011. Various new formats for media, such as those for the Kindle and the mobile Android phone developed by the Knowledge for Health project, are being disseminated to increase access to and use of the information in this guideline at the country level.
- RHR supported a master training of trainers in family planning and reproductive health for Iraq's Ministry of Health, and included members of Jordan's Ministry of Health. The workshop included updates on contraceptive technology, a session on WHO guidelines and tools, clinical skills demonstrations and sessions on counselling and communication skills.
- In late 2011, RHR issued a technical statement in response to the Heffron et al. study on the safety of using hormonal contraceptives for women at risk of HIV infection. This statement was used by ministries of health to respond to concerns regarding the safety of the use of hormonal contraception with respect to HIV acquisition.
- The fifth edition of the *WHO laboratory manual for the examination and processing of human semen* (2010) was translated into five languages in 2011; additional translations are underway. This was the most frequently downloaded document from the RHR web site in 2011, illustrating the worldwide demand for WHO's leadership in this area.
- Infertility due to unsafe abortion or maternal sepsis was identified as the fifth ranked disability, based on prevalence, in low- and middle-income countries, for ages 0–59 years. This result was obtained following statistical analysis of DHS data and fertility surveys and presented in the first WHO and World Bank *Report on Disability* (2011).
- In collaboration with partners, a "ToolBox for ART data collection" has been developed. Monitoring and surveillance of assisted reproductive technology (ART) infertility services will facilitate comparison over time and will allow an examination of the impact of national and regional regulations, or the lack of any regulations, on treatment outcomes.

1. Introduction

The Department implements a programme of work aimed at improving the quality of family planning and sexual and reproductive health care globally. This includes development and dissemination of evidence-based guidelines and tools, research into users' and providers' perspectives on family planning and sexual and reproductive health services and technologies, development of improved or new methods of fertility regulation, evaluation of the long-term safety and efficacy of existing methods, and technical assistance to country family planning and sexual and reproductive health programmes. Progress towards achieving the programme of work for 2011 is presented, with near-term future plans.

2. Family planning guidelines and tools

2.1 Progress

2.1.1 The Continuous Identification of Research Evidence system and family planning guidelines

In 2011, the Internet-based Continuous Identification of Research Evidence (CIRE) system identified new evidence on the following topics for which systematic reviews were prepared:

- progestogen-only methods and obesity
- emergency contraceptive pills (ECPs) and prevention of nausea and vomiting
- ECPs and management of vomiting
- ECP use 72 hours after unprotected sexual intercourse
- use of the ECP as a single dose
- the progestogen-only method use among breastfeeding women.

External peer review of these systematic reviews has confirmed that the guidance in the MEC and Selected practice recommendations for contraceptive use (SPR) remains consistent with the body of evidence for these topics. Three reviews related to the safety of using hormonal contraceptives among women at risk of HIV, or HIV-infected women, are being prepared.

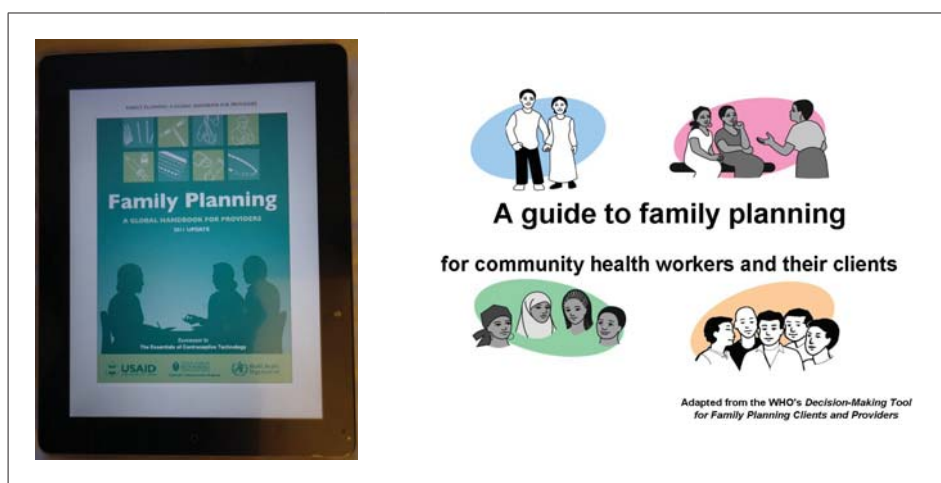
The fourth edition of the *Medical eligibility criteria for family planning* (MEC) (2010) was widely disseminated in 2011. The French and Spanish translations were published on the World Health Organization (WHO) website and will be printed. CD-ROMs with these translations were distributed at selected events. In September 2011, this guideline was awarded first prize in the Obstetrics and Gynaecology category at the 2011 British Medical Association Book Awards.

2.1.2 Family planning tools – development and updates

Family planning – a global handbook for providers was updated in 2011 in English and French, through the Knowledge for Health project of the Johns Hopkins Bloomberg School of Public Health (see Figure 1). The update includes use of the lactational amenorrhoea method by women who are breastfeeding and taking antiretroviral drugs (ARVs), use of combined hormonal contraceptives by women who are postpartum and not breastfeeding and provision of progestin-only injectables by community health workers. Knowledge for Health also developed the Kindle version and the Android phone application of the handbook.

In collaboration with the United States Agency for International Development (USAID) and FHI 360 (formerly Family Health International), RHR is developing a training resource package for family planning (TRP), based on the guidance in Family planning – a global handbook for providers. The TRP contains the curriculum components and tools needed to design, implement and evaluate training.

Figure 1. Some family planning tools updated in 2011.



The English versions of the Decision-making tool for family planning providers and clients (DMT) and the Reproductive choices and family planning for people living with HIV tools are being updated to reflect the most recent guidance from the MEC and SPR. A new module for the DMT on provider-initiated testing and counselling (PITC) is being finalized after field-testing in Zimbabwe.

A guide to family planning for community health workers and their clients and its training and adaptation guide have been finalized for publication and are available on the RHR web site (see Figure 1).

Figure 2. Samples of the MEC applications on the mobile phone.



In response to the widespread demand for and use of the MEC wheel, mobile phone applications (MEC mobile) are being developed on various platforms. These will be available for download via wireless application protocol (WAP) and through authorized applications sites (see Figure 2).

Promoting Family Planning (PFP) and sexually transmitted infections (STI) staff worked closely with staff from the HIV/AIDS Department, and the Department of Maternal, Child and Adolescent Health (MCA) to produce guidance documents for the prevention of mother-to-child transmission of HIV. Interdepartmental collaboration was critical in preparing the practical guidance to support the integration of reproductive, maternal, newborn and child health into the next round of proposals to the Global Fund to Fight AIDS, Tuberculosis and Malaria.

The fifth edition of the WHO laboratory manual for the examination and processing of human semen (see innovations report) was translated into Chinese, Turkish, Japanese, Italian and German in 2011; other translations are ongoing and planned.

The WHO International Committee for Monitoring Assisted Reproductive Technologies (ICMART) glossary of terms was translated into Spanish and Portuguese. These have been widely disseminated in hard copy and electronically, and presented in conferences. In collaboration with ICMART, a "ToolBox for ART data collection" was developed. Monitoring and surveillance of assisted reproductive technology (ART) services will facilitate comparisons over time and allow an examination of the impact of national and regional regulations on treatment outcomes.

2.2 Planned activities

- Preparations to develop the fifth edition of the MEC and the third edition of the SPR will be initiated, in anticipation of a 2014 meeting of the expert committee.
- In response to recent data suggesting that use of hormonal contraception may increase the risk of HIV acquisition, a consultation will review the published evidence on the use of these methods and HIV acquisition, progression and infectivity/transmission. Experts will assess whether current WHO guidelines are consistent with the evidence or if revision is required. Priorities for research will be identified and published, along with commissioned systematic reviews. WHO will issue a statement and policy briefs on contraceptive use in settings of high HIV incidence and prevalence. A stakeholders' meeting will review funding needs arising from the recommendations.
- Development of programmatic guidance to promote family planning services for postpartum women will continue. Proposed issues for systematic review include: integrating family planning services, expanding counselling opportunities, reaching women in community settings and immediate provision of long-acting methods. An expert consultation is tentatively planned for mid-2012.
- In collaboration with USAID, the Population Council, FHI 360 and the Institute of Reproductive Health at Georgetown University, a community-based counselling tool on family planning incorporating the Balanced Counselling Strategy, is being developed. Field-testing and a validation study are planned for 2012.
- In 2012, a strategy will be developed to revise the WHO infertility guidelines. Systematic reviews will be commissioned or updated for key questions.
- FertiSTAT, a short fertility self-assessment tool developed at Cardiff University and adapted by WHO into a counselling tool, will be field-tested and adapted for mHealth applications and as a client-provider counselling tool for infertility.

3. Family planning research

3.1 Progress

3.1.1 Developing new contraceptive technologies

In 2011, a prospective, open-label, single-arm, multicentre study was initiated to evaluate whether oral levonorgestrel (1.5 mg), taken at the time of sexual intercourse, can offer an acceptable level of safety and contraceptive efficacy and to establish any advantages of the regimen over a traditional daily pill, in terms of convenience and ease of use among women who have infrequent sexual intercourse. Recruitment will begin in early 2012, and women will be followed for 6.5 months of method use.

The intervention phase of the phase II trial of a combined progestin + androgen approach to male fertility control was terminated prematurely in April 2011, due to side-effects. The remaining participants were transitioned into the recovery phase of the study. The early termination of the regimen will compromise the precision of a final estimate of the contraceptive failure rate of this regimen. The side-effects attributable to the regimen and their possible causes will be explored as a key outcome.

3.1.2 The long-term safety and efficacy of existing methods

All seven sites implementing the multicentre, randomized clinical trial of safety, effectiveness and acceptability of Jadelle and Implanon have completed recruitment. Two sites (Turkey and Hungary) were closed down in 2011; the Brazil site will be closed in early 2012. The last centre will complete follow-up in 2013. Admission and third-year data are currently being analysed for publication.

3.1.3 Social science research on user perspectives in family planning

Results of a study in Argentina demonstrate that there is a need for refinement of health services to meet the specific needs of HIV-positive pregnant women and their male partners. Health-care providers need to be sensitized to the importance of initiating conversations about contraceptive and reproductive intentions, in order to prevent unwanted pregnancies and promote safer pregnancies among this population.

A study in Uganda, which focused on assessing the impact of a community-based intervention to reduce physical and sexual domestic violence, showed that inconsistent or non-use of condoms was a risk factor for intimate-partner violence.

A systematic review of 19 eligible trials established that appropriately trained community health workers can screen depot medroxyprogesterone acetate (DMPA) clients effectively, provide injections safely and counsel on side-effects appropriately.

3.1.4 Research priority-setting exercise

This critical consensus-building activity uses the Child Health and Nutrition research Initiative (CHNRI) methodology to align the global research agenda and funding opportunities towards efforts with the greatest impact on improving quality of care in family planning and reducing unmet need for family planning products and services. Researchers and representatives of ministries of health, technical agencies, donor agencies, family planning service providers and the

private sector contributed to the process. The first round of responses includes topics related to the following areas: epidemiology, social science, health systems and policy, implementation research and development of new methods. The next stage will rank and prioritize these questions through further rounds of consultative feedback.

3.1.5 Infertility research

RHR, together with three European universities and three WHO collaborating centres in developing countries, developed an operations research proposal to identify ways to improve access to affordable diagnosis, management and treatment for fertility problems during the periconceptional period.

HRP worked with the WHO Global Burden of Disease group to develop an algorithm to estimate, from various data sources, prevalence levels of infertility as a cause of disability. The estimated number of women worldwide who experience disability as a result of infertility due to unsafe abortion or maternal sepsis is 33.4 million, as published in the first *World report on disability* (WHO and World Bank, 2011). Most (97%) cases of resulting disability occur in low- and middle-income countries, where infertility is ranked as the fifth-leading cause of disability in persons aged 0–59 years.

3.2 Planned activities

- A combined retrospective analysis is planned of data from four WHO trials of 1.5 mg of levonorgestrel for emergency contraception. The failure rate of the regimen will be compared among women according to ethnicity, weight, repeated acts of unprotected sexual intercourse and other characteristics.
- Follow-up of couples in the male contraceptive study will continue until mid-2012. Hormone analyses and a detailed analysis of adverse events will be initiated, with publication of these results expected in late 2012. The publication of the final safety, efficacy and acceptability results is expected in late 2013 or early 2014.
- Two manuscripts from the implant study are being prepared for publication. The first will present baseline data (participant baseline characteristics, study methodology and events around insertion) and the second will provide results of the first 3 years of client follow-up.
- “Injectable contraceptive service delivery and utilization: understanding the practices of patent medicine vendors, and experiences of previous and current injectable users in rural communities” will be implemented in Oyo State, Nigeria.
- Research to investigate the operational issues and effect of integrating family planning services with the delivery of immunizations will be conducted in Pakistan.
- A quasi-experimental study on assessment and comparison of the impact of two voucher schemes on family planning uptake in Pakistan will be launched in early 2012.
- A draft RHR-developed evaluation framework for mHealth interventions focused on family planning will be tested and evaluated at country level.
- After completion of the research priority-setting exercise, a stakeholders’ meeting will be planned to finalize the document and to define future steps.

- In collaboration with the Geneva Foundation for Medical Education and Research (GFMER), a workshop group to develop capacity for infertility research, including systematic review development and proposal preparation, has been formed, and workplans will be made in the coming year.
- A stakeholders' meeting to map and prioritize research gaps in affordable and integrated infertility care is planned.

4. Support to countries

RHR cosponsored the Second International Family Planning Conference in Dakar Senegal, in late 2011. The conference addressed developments in family planning programmes and research, including linkages with other health services, and considered the prevailing unmet need and inequity in family planning services. There were over 2000 participants, including service providers, programme managers, parliamentarians, journalists, and young people, signalling the expanding interest in family planning and its health, social and economic benefits.

In December 2011, RHR and MCA provided technical support to the WHO Regional Office for the Eastern Mediterranean and UNFPA Regional Office for Arab States intercountry workshop on reproductive health counselling, with the main goal of developing regional and specific country workplans on reproductive health (in particular family planning and maternal and newborn care) counselling and training skills. Sixteen participants from seven countries attended the workshop in Beirut, Lebanon.

In June 2011, RHR supported a master training of trainers in family planning and reproductive health organized by the Iraq Ministry of Health, in Amman, Jordan. The workshop was attended by Iraqi physicians and included updates on contraceptive technology, a session on WHO guidelines and tools, clinical skills demonstration and sessions on counselling and communication skills.

PFP developed a five-session module on family planning for the GFMER online training course. Topics included Principles of population and demography, Using WHO family planning guidelines and tools, Updates on contraceptive technology, and family planning counselling and reproductive rights.

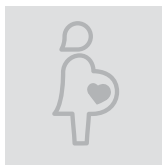
In collaboration with the European Society of Human Reproduction and Embryology (ESHRE) Special Task Force "Developing countries and infertility" and other collaborating institutions, RHR supported a meeting on "Sociocultural and ethical aspects of biomedical infertility care in poor resource countries" in November 2011, in Genk, Belgium.

Improving Maternal and Perinatal Health

Summary

Key objectives

The overall objective of the work undertaken by RHR in the area of Maternal and Perinatal Health is to contribute to the United Nations Secretary-General's Global Strategy for Women's and Children's Health by developing, assessing and implementing effective interventions and by addressing barriers to improving access to quality maternal and perinatal health care, particularly in middle- and low-resource settings.



Major achievements

- RHR continued to strengthen the global collaborative research and implementation efforts of institutions and individuals working to reduce maternal and newborn deaths, and thus continuing to position HRP at centre stage within the international scientific and public health communities in this area.
- Publication in *The Lancet* of the results of the "Active management of third stage of labour trial", which concluded that controlled cord traction can be omitted with little increase in the risk of postpartum haemorrhage in settings where skilled birth attendants are not available.
 - *Implication of research findings for policy and programmes:* in settings where skilled birth attendants are not available but injection capability exists, oxytocin intramuscular injection after birth to be incorporated into programme guidance.
- Research on an innovative device (Odon device) to deliver the fetus when complications occur in the second stage of labour has been consolidated and was among the winners of a global call for innovations.
- Two new landmark trials in the field have been initiated and will be coordinated and managed by HRP: a trial to assess short-term catheterization following fistula repair; and a trial to assess whether periconceptional calcium supplementation in high-risk women reduces the incidence of recurrent pre-eclampsia.
- The multicountry survey on maternal and newborn health with focus on the management of severe complications in pregnancy and childbirth reached the projected sample size of 300 000 women in 29 countries.
- Publication of two WHO guidelines and one manual has advanced this area, namely: *WHO recommendations for induction of labour*; *WHO recommendations for prevention and treatment of pre-eclampsia and eclampsia*; and *Evaluating the quality of care for severe pregnancy complications: the WHO near-miss approach for maternal health*.
 - *Implication of research findings for policy and programmes:*
For induction of labour, low-dose misoprostol and mechanical methods should be included in clinical protocols.

In facilities where full dose of magnesium sulfate is not possible health care workers are recommended to initiate treatment with loading dose before referral.

In areas with low calcium intake calcium supplementation should be incorporated in antenatal care protocols.

For women at high-risk of developing pre-eclampsia low-dose acetylsalicylic acid should be included in antenatal care protocols.

For monitoring of quality of maternal and newborn health care at facilities the WHO maternal and newborn near-miss monitoring tool is recommended. In Peru, this approach is currently implemented as national policy.

- Development of the Women Create Life (WCL) business plan as an innovative financial mechanism for maternal and infant health; and the implementation of a pilot project with the company “Moleskine” to produce a WCL notebook.

1. Introduction

The work undertaken in the area of Maternal and Perinatal Health (MPH) taps into a wide range of disciplines with the aim to coordinate research and normative efforts from the laboratory to health systems, public health, politics, society and culture, and to increase the awareness of the general public to issues related to maternal and newborn health. Work in these disciplines is briefly described below.

2. Basic sciences

2.1. Progress

In 2011, HRP continued to convene the annual meeting of The Preterm Birth International Collaborative (PREBIC), with one of the major achievements the completion of the Preterm Birth Genome Project (PGP). This led to the identification of common genetic variants associated with preterm birth using extant samples from different countries. A manuscript with the results is being prepared and the research protocol will be expanded to include non-Caucasian populations.

3. Clinical research

In 2011, HRP continued to play a unique role in coordinating clinical trials and other studies in the area of maternal and perinatal health.

3.1. Progress

3.1.1. Odon device

The Odon device is a new, low-cost instrument to deliver the fetus when complications occur during the second stage of labour. This device may be potentially safer and easier to apply than forceps and vacuum extractor for assisted deliveries and a safe alternative to some caesarean sections in settings with limited surgical capacity and human resource constraints.

HRP is leading the research on the Odon Device which is being tested in a two-phased study in health care facilities in Argentina and South Africa. In July 2011,

the Odon device was among the winners of the global call for innovations, “Saving Lives at Birth: a Grand Challenge for Development”, issued by USAID, the Bill & Melinda Gates Foundation, the Government of Norway, Grand Challenges Canada, and the World Bank.

3.1.2 The role of controlled cord traction in the active management of third stage of labour: A randomized non-inferiority controlled trial (AMTSL)

HRP completed a multicountry trial to assess whether simplified management of the third stage of labour without controlled cord traction was non-inferior to the full package for prevention of severe haemorrhage in eight countries with 24 390 women. Results showed that controlled cord traction is safe. Scaling-up haemorrhage prevention programmes for non-hospital settings can safely focus on oxytocin. The results were submitted to *The Lancet* for publication.

3.1.3 Fetal growth standards

HRP is implementing a multicountry study to develop fetal growth standards for international application by assessing fetal growth under nutritionally unrestricted conditions in populations of different ethnic and geographic backgrounds. The study is ongoing with 10 countries participating and 240 pregnant women recruited by October 2011.

3.1.4. Periconceptional calcium supplementation trial

Calcium supplementation has been shown to reduce risk of pre-eclampsia when supplementation starts at around mid pregnancy. However, calcium supplementation in the second half of pregnancy may be too late to fully affect pre-eclamptic pathogenesis, and further improvements in outcomes may be achieved by earlier supplementation. In 2011, HRP started a randomized trial in South Africa and Zimbabwe to assess whether periconceptional calcium supplementation reduces the incidence of recurrent pre-eclampsia more effectively than supplementation starting at 20 weeks. Recruitment has begun in two sites. The trial is expected to last four years.

3.1.5 Non-inferiority of short-term catheterization following fistula repair surgery

In 2011, HRP started a multicentre randomized controlled trial to examine whether short-term (7 day) catheterization is not inferior to longer-term (14 day) catheterization in terms of incidence of fistula repair breakdown. At each site, 507 women with simple fistula presenting at eight African countries will be recruited over the course of 16–18 months. The trial will be managed by HRP in collaboration with EngenderHealth. The trial will start recruitment in January 2012.

3.2. Planned activities

3.2.1 International collaboration on obstructed labour

Starting with two technical meetings in 2011, HRP is working with the Bill and Melinda Gates Foundation, Effective Care Research Unit in South Africa, and Aga Khan Development Network to focus on community level and first level of care research to reduce the consequences of prolonged and obstructed labour. The project is expected to start in late 2012 and will include a series of clinical and social science studies leading to the development of a large multicountry cluster randomized controlled trial.

3.2.2 Tanguieta funnel

The Tanguieta funnel is an intraperitoneal blood-saving device. It is used to recuperate blood after haemorrhage in case of ruptured ectopic pregnancy followed by immediate autotransfusion of this blood to the woman. This could represent an important life-saving innovation in low-resource settings. HRP will support research for the evaluation of this device subject to the availability of funds.

4. Social sciences

4.1. Progress

Women's magazines represent an important source of information on pregnancy and delivery that can influence women's opinion and decisions. In 2009, MPH initiated a multicountry review of the information published in these magazines on caesarean section (CS) vs vaginal delivery. Results from Brazil were published in 2011 in the *BMJ* and the Spanish review results will be published in 2012.

5. Epidemiology

In 2011, HRP continued with unique large epidemiological studies that are action oriented to generate needed evidence and foster the use of datasets from studies conducted in the past.

5.1. Progress

The WHO Multicountry Survey on Maternal and Newborn Health is a large cross-sectional study involving 370 health-care facilities in 29 countries. This project focuses on the management of severe complications of pregnancy and childbirth. Data collection was initiated in May 2010 and finalized in December 2011. As of early December 2011, the projected sample size of around 300 000 observations has been achieved. The main analysis of this project is expected to be completed in May 2012. Further development of the network is focusing on the establishment of routine surveillance sites in partnership with the Norwegian Public Health Institute.

The WHO Global Survey on Maternal and Perinatal Health (2004–2008), produced in 2011 three secondary analyses that were published in the scientific literature.

6. Health policy, NGOs and linkages with other institutions

6.1. Progress

- In 2011, MPH led a systematic review to map and assess the contribution of faith-based organizations in maternal and newborn health care in Africa since 1990. The review concluded that maternal/newborn health services provided by FBOs were similar to those offered by governments, but the quality of care received and the satisfaction reported to be better. MPH is planning to continue working in this area as an untapped route to achieving MDG 4 and 5.
- In aligning with the UN Secretary-General Strategy for Woman's and Children's Health, in 2011, MPH fostered collaboration with NGOs and other institutions

working in the field on maternal and infant health. Work with Doctors with Africa CUAMM, an NGO operating in Africa since 1955 in the area of health and development, has resulted in the development of a tool to measure equity in access to emergency obstetric care in Ethiopia.

- In 2011, HRP/RHR participated in the meeting at the European Parliament to launch a landmark publication: *Caring for tomorrow: EFCNI white paper on maternal and newborn health and aftercare services in Europe* result of a collaboration with the European Foundation for the Care of Newborn Infant (EFCNI). Following this meeting, HRP has been invited to be part of the organizing committee for a hearing at the European Parliament in 2012 focusing on maternal and newborn health.

6.2. Planned activities

- HRP has been invited to be part of the scientific and organizing committee for the 20th FIGO World Congress of Gynecology and Obstetrics 2012 (FIGO) in Rome, and the 2012 World Congress of the International Society for the Study of Hypertension in Pregnancy (ISSHP), in Geneva. WHO will be leading and coordinating a number of sessions in both Congresses increasing visibility and repositioning HRP's work and priorities in the global agenda.
- Since 2009, HRP, in collaboration with the Italian NGO O.N.Da, organizes an annual meeting on sexual and reproductive health with a group of Italian Parliamentarians. Following the G8 meeting held in Italy in July 2009 and the launch of the Global Strategy for Women's and Children's Health, the group maps the Parliamentarians' actions in support of MNCH. In March 2012, the group will reconvene in WHO to discuss international aid for women and children health and post partum depression.
- The WHO near-miss approach for maternal health was released by RHR in 2011 and has attracted the interest of a number of ministries of health for local adaptation and implementation. The Ministry of Health of Peru has requested technical support to MPH for this purpose.

7. Humanitarian aid

7.1. Progress

In 2011, HRP continued its involvement in a number of IAWG (Inter-agency Working Group on Reproductive Health in Crises) activities including the publication and dissemination of the *Inter-agency field manual on reproductive health in humanitarian settings, 2010 revision for field review* in collaboration with the WHO Department of Health Action in Crises. In addition, in collaboration with CDC International Emergency and Refugee Health Branch (IERHB) and the Women's Refugee Commission, an implementation research project is being conducted to evaluate the applicability of the interagency field manual.

8. Implementation science

8.1. Progress

- Implementing the UN Secretary-General's Global Strategy for Women's and Children's Health: during 2011 HRP continued the active involvement in international collaborative efforts focusing on implementation science to address barriers to the delivery of effective interventions for maternal and newborn health. Preliminary activities have started as proof of concept in Malawi aiming at improving delivery of PMTCT services, family planning and quality intrapartum care.
- MPH continued in 2011 the collaboration with the US National Institutes of Health (NIH) Global Network for Women's and Children's Health Research to implement a trial to increase the use of corticosteroids for the prevention of mortality in preterm newborns. The trial will start recruitment in 2012.
- Antenatal care in Mozambique: in the context of a cluster randomized trial that addresses barriers to the implementation of the WHO antenatal care model in Mozambique, formative research has identified shortages and rupture of stock of commodities as one of the major factors affecting the implementation of the model. An intervention is being developed to improve the supply of commodities needed at health-centre level to delivery adequate antenatal care.

8.2. Planned activities

- HRP convened a technical consultation on request from H4+ partners to evaluate misoprostol use in the community in 2010. The meeting was followed with engagement with local research groups in 2011 and it is anticipated that an implementation research project will be launched in 2012 in collaboration with Gynuity Health Projects.

9. Advocacy and innovative financing

9.1. Progress

- In 2011, MPH finalized the business plan for Women Create Life (WCL). WCL builds on artistic creativity, the drive of global development, and the need for innovation in financing in order to develop a new mechanism to advocate and mobilize resources for maternal and infant health. When brand-name designed WCL products are purchased, a percentage of the sale is invested in grass-roots initiatives to improve the health and life conditions of women and their families. Five brand-name companies have already produced prototypes of WCL items. This WCL partnership was officially launched in Rome in June 2011 and, in December, in collaboration with the company Moleskine, MPH started a piloting to test the potential appeal of WCL to the general public. Moleskine launched a special limited edition of their classic notebooks featuring WCL. With the purchase of every WCL notebook, a percentage of the sale is donated to the Permanent Mission of Italy to the United Nations and included in the annual contribution of Italy to the WHO, for women's and children's health.

10. Norms and standards

10.1. Progress

In 2011, the following guideline-related activities were undertaken in HRP/RHR:

- *WHO Recommendations for induction of labour*: following the development of the guidelines in 2010, the final document was released in early 2011.
- *WHO Recommendations for prevention and treatment of pre-eclampsia and eclampsia*: the preparatory work was conducted in 2010 while an international consultation was held in April 2011, and the document was released in September 2011.
- Optimizing the delivery of key health-care interventions to improve maternal and perinatal health: following preparatory meetings and electronic forum discussion on priorities involving over 600 stakeholders, a technical working group meeting was held in May 2011 and the evidence base preparation is being carried out. The international consultation and document release will take place in 2012.
- Guidelines on postpartum haemorrhage: in 2011, MPH initiated the process for updating the two postpartum haemorrhage guidelines. A new comprehensive document on prevention and treatment of postpartum haemorrhage will be released in 2012.
- Antenatal care guidelines: in 2011, an overview of systematic reviews related to antenatal interventions to prevent stillbirths was conducted. A formal statement on the findings of the updated systematic review suggesting increased stillbirths with the fewer visits model was published. In 2012, other systematic reviews will be updated for new WHO recommendations on antenatal care in 2013.
- Guidelines on birth spacing: the systematic review was finalized in 2011 and the evidence profiles are being prepared. The expert consultation and drafting of the document with WHO recommendations are planned for 2012.

10.2. Planned activities

The systematic reviews to inform the antenatal care guidelines will be finalized in 2013.

HRP is in discussions with the Bill and Melinda Gates Foundation to coordinate a large project on preventing the maternal and infant consequences of obstructed labour. The project will include development of guidelines for management of first and second stage of labour.

Preventing unsafe abortion

Summary

Key objectives

The Department's programme of work on Preventing Unsafe Abortion strives towards the goal of eliminating unsafe abortion, using a multidisciplinary approach that includes estimating the magnitude of the problem; conducting clinical, operations and social science research; developing appropriate guidelines and tools; and providing technical support to countries using the strategic approach.



Major achievements

- Completion of the sixth edition of *Unsafe abortion: global and regional estimates*. According to these estimates, there was a rise from 19.7 million in 2003 to 21.6 million unsafe abortions in 2008.
- The second edition of *Safe abortion technical and policy guidance for health systems* was approved by the WHO Guidelines Review Committee.
- Twenty-five research projects (clinical and operations research) were completed or are ongoing. "Induced abortion: incidence and trends worldwide from 1995 to 2008" was published in *The Lancet*: between 1995 and 2003 the abortion rate per 1000 women of childbearing worldwide dropped from 35 to 29. In 2008 the global abortion rate was 28 per 1000, almost unchanged since 2003. The study found that nearly half of all abortions worldwide are unsafe procedures, and almost all unsafe abortions occur in the developing world.
- Over 20 peer-reviewed publications from staff and partners supported by HRP were published in a range of journals. The study on safety and efficacy of midlevel providers in providing medical abortion was published in *The Lancet*. A paper on the global rates of abortion, as well as one on the randomized controlled trial on cervical pretreatment prior to surgical abortion were accepted for publication in *The Lancet* to be published in 2012.
- Demonstration projects to introduce or scale-up safe abortion care were completed in the Republic of Moldova and Ukraine.
- The Kyrgyzstan Ministry of Health, with support from the United Nations Population Fund (UNFPA) and WHO, conducted a strategic assessment on unintended pregnancy, contraception and abortion.

1. Introduction

About 21.6 million unsafe abortions occur worldwide each year, about 5 million women suffer permanent or temporary disability due to complications of abortion, and abortion related deaths constitute at least 13% of all maternal deaths. Addressing this preventable cause of death remains an important element of achieving the Millennium Development Goal (MDG)5 targets, and is a key recommendation of the WHO Global Reproductive Health Strategy. HRP's activities include producing estimates of the magnitude of the problem; generating relevant clinical, health-system and policy-relevant evidence; developing evidence-based guidelines and tools; and providing technical support to countries.

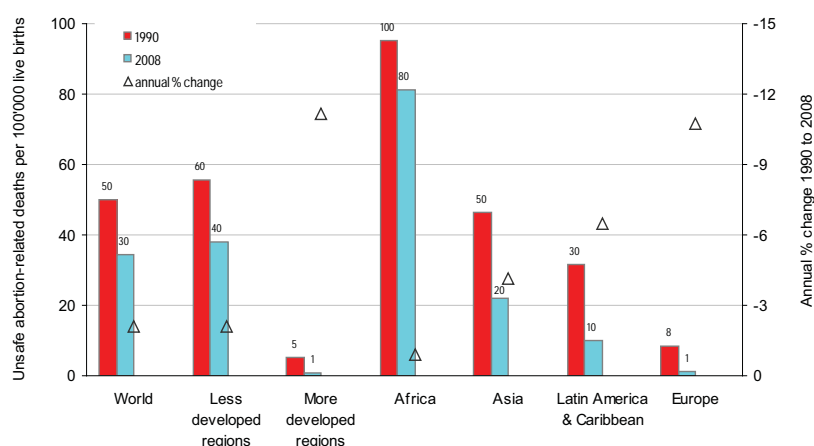
2. Estimates of the magnitude of unsafe abortion

2.1 Progress

The sixth edition of *Unsafe abortion: global and regional estimates* was launched in March 2011. The key findings were notably that 21.6 million unsafe abortions occurred in 2008 (up from 19.7 million in 2003); 1 in every 10 pregnancies ends in an unsafe abortion; and there were 14 unsafe abortions per 1000 women aged 15–44 years globally, with unsafe abortion rates being disproportionately higher in the least-developed countries and in sub-Saharan Africa.

Additional analysis was produced this year examining the trends in mortality associated with unsafe abortion. Globally, deaths related to unsafe abortion were estimated to have declined from 69 000 in 1990 to 47 000 in 2008, with an increased momentum of decline between 2003 and 2008 that may reflect improvements in care for complications, as well as increasing availability of drugs like misoprostol. Progress is uneven, however, and remains the slowest in Africa. The 1% annual reduction in unsafe abortion mortality ratios between 1990 and 2008 in Africa is much lower than in Asia, which showed a 4% annual reduction in unsafe abortion mortality, or Latin America, which has shown an annual rate of decline of over 6% (see Figure 1).

Figure 1. Number of unsafe-abortion-related maternal deaths per 100 000 live births and annual percentage change from 1990 to 2008.



The Guttmacher Institute and HRP worked to update the estimates of induced abortion (safe and unsafe). A paper examining the global and regional trends in safe and unsafe abortion was published in *The Lancet* in January 2012.

2.2 Planned activities

It is planned to disseminate the estimates to policy-makers and advocates, using simplified information sheets (briefs) and posters.

3. Norms, tools and guidelines

3.1 Progress

The process of updating and revising the second edition of *Safe abortion: technical and policy guidance for health systems* was completed, and the guidance was cleared by the WHO Guidelines Review Committee in October 2011. However, at the time of reporting, final approval from the WHO Director-General's office is still awaited. Updates reflect changes in methods of abortion and related care, service delivery as it applies to the availability and use of new methods, and application of a human-rights framework for policy-making related to abortion. In a parallel process, a companion document targeting health-care providers, the *Clinical practice handbook for safe abortion care*, was developed and successfully field-tested in Ethiopia and Nepal.

An expert technical consultation on task shifting of abortion care to midlevel providers was held in June 2011, and the conclusions from that meeting are being developed into normative guidance on the role of midlevel providers in abortion care.

3.2 Planned activities

- Once the final approval for the guidelines is received, an active launch is planned, with dissemination through multiple activities (development of simplified briefs and tools, regional workshops, etc.).
- Development is planned of an evaluation tool that will be used at regional level to collect information on the use and implementation of the abortion guidelines in countries, following their active dissemination.
- Publication of a compilation of WHO's evidence-based recommendations on the use of misoprostol for various indications is also planned.

4 Clinical research

4.1 Progress

Results from a previous multi-country study to compare efficacy, side-effects and women's perceptions of two intervals and two routes of administration of misoprostol-only medical abortion were further analysed to evaluate the acceptability of misoprostol-only medical abortion as compared to vacuum aspiration. Data from six international centres (Ha Noi, Mumbai, New Delhi, Tbilisi, Trivandrum and Yerevan), where 2410 women had the choice between misoprostol-only medical abortion and vacuum aspiration, showed that women choosing medical abortion reported being "highly satisfied" or "satisfied" 93% of the time, compared with 75% of women requesting surgical abortions. Regarding

side-effects, 16% of women receiving a medical abortion reported experiencing more pain than they had expected, contrasting with 59% in the surgical abortion group. Bleeding was reported as "more than expected" by 34% and 16% of the medical and surgical abortion groups respectively. In the medical abortion group, 21% of women felt the procedure took too long, compared with 3% in the surgical abortion group.

The results from the multicentre, randomized, placebo-controlled trial of pretreatment with 400 µg vaginal misoprostol 3 hours before surgical abortion in the first trimester, were finalized and will be published in the coming months.

The protocol for a double-blind, placebo-controlled randomized clinical trial to determine whether prophylactic administration of ibuprofen is superior to administration after pain begins, in terms of reducing maximal reported pain levels among women having early medical abortion, was approved by the technical panel. Ethical review committee clearance is awaited.

4.2 Planned activities

A randomized controlled trial in South Africa of placement of osmotic dilators compared with 400 µg misoprostol for cervical priming prior to surgical abortion (dilatation and evacuation) in the second trimester is planned. Enrolment is anticipated to begin in early 2012.

5. Operations research

5.1 Progress

Eleven studies were completed under the ongoing social science and operations research initiative on expanding access to medical abortion. Eight more studies were initiated and a further five project proposals have been approved by the technical review panel and await clearance from the ethics review committee.

The landmark study (findings reported in STAG 2010) that showed that midlevel health-care providers can provide medical abortion as safely and effectively as physicians was published in *The Lancet* in 2011. *The Lancet* also published a commentary on this that stated that "[The authors] have shown, unequivocally, that appropriately trained midlevel providers are able to do both surgical and medical abortions as competently as are doctors in relatively low-resource settings where the need is greatest ... As we begin the countdown to 2015, task-shifting to midlevel health-care providers and the upgrading of their skills to provide safer care in pregnancy and reproductive health could be key to achievement of the fifth UN [United Nations] Millennium Development Goal".

The findings from the 10 other completed studies have been developed into research papers that will be published in a supplement of the *International Journal of Gynecology and Obstetrics* in the coming months. These papers broadly cover four themes (i) barriers to accessing medical abortion from the perspectives of women (India, Mexico, Nepal, and Plurinational State of Bolivia); (ii) providers' knowledge and perspectives on medical abortion (China, India, Turkey); (iii) post-abortion contraceptive uptake and continuation of use among women having medical compared to surgical abortion (India); and (iv) applying a risk-reduction model for improving access to safe abortion (Uruguay).

As a set, these studies, from diverse cultural, legal and services contexts, provide evidence of high uptake of contraception following abortion and no difference in the level of uptake or continuation of use among women accepting medical as compared with those having surgical abortion. These studies also show that medical abortion is making significant inroads and is acceptable, though its full potential remains untapped because of legal restrictions, poor knowledge among women, and misperceptions among women and providers about its safety and efficacy.

Findings from the Mexican study were widely disseminated at the Fourth Research Meeting on Unwanted Pregnancy and Unsafe Abortion: Public Health Challenges in Latin America and the Caribbean, held in Mexico City in October 2011. In Plurinational State of Bolivia, the report of the study was launched with a group of parliamentarians. The event had good media coverage and generated discussions with policy-makers and nongovernmental organizations (NGOs) working to improve the reproductive health of Bolivian women.

New projects have an intervention focus and are looking at the feasibility of midlevel providers (Mexico, Uganda); providing medical menstrual regulation at primary health centres (Bangladesh); the role of community workers (Nepal, South Africa) and pharmacists (Nepal, Kenya); changing the nature of unsafe abortion due to misoprostol availability (Ghana, Lao People's Democratic Republic, Myanmar, Nigeria); and health-systems costs of providing post-abortion care versus abortion care (Colombia).

5.1 Planned activities

In addition to in-country disseminations, several regional and a global dissemination meeting are planned. As well as peer-reviewed publications, research and policy briefs to reach a wider audience are being planned.

6. Technical support to countries

6.1 Progress

6.1.1 Activities in Eastern Europe and Central Asia

- *The Republic of Moldova*: the first phase of scaling-up outpatient abortion care that began in June 2010 was completed. The project targeted two secondary-level health facilities selected by the Ministry of Health and included infrastructure improvements; comprehensive abortion-care training for 18 health-care providers; and implementation of the newly approved national abortion standards. A national workshop in June 2011 disseminated the project results. Scale-up activities are a direct result of the HRP-supported strategic assessment conducted in the Republic of Moldova in 2005 and the subsequent development of national standards and training materials and a successful pilot project.
- *Ukraine*: the first phase of the project "Comprehensive Care for Unwanted Pregnancies" was implemented jointly by the Ukraine Ministry of Health, the NGO Women's Health and Family Planning, and WHO in 2010–2011, with financial support from the Swiss Agency for Development and Cooperation (SDC). The main goal of the project was to strengthen women's reproductive health and rights by developing new national standards for safe abortion care,

and implementing those standards in selected model centres. The project results showed substantial progress in implementing the new guidelines. The use of manual vacuum aspiration and medical methods increased at the model centres, with dramatic reductions in the use of sharp curettage and intra-amniotic instillation methods. Reporting of abortion procedures had also improved considerably.

- A national workshop was held in Kiev (the Russian Federation) on 25–26 May 2011 to disseminate findings from phase I of the project. Priority recommendations for the next phase of project implementation were developed by participants and presented to the Ministry of Health. Key recommendations included: the importance of scaling-up access to outpatient services and capacity building for health-care personnel; introducing, more widely, safer methods for second-trimester abortion; and further strengthening monitoring and evaluation. The Ministry of Health agreed that a national scaling-up strategy should be developed during the next phase of the project, in order to better institutionalize the provision of evidence-based comprehensive care for unwanted pregnancies.
- *Kyrgyzstan*: HRP provided funding and technical support to the Ministry of Health in Kyrgyzstan to conduct a strategic assessment on issues related to unintended pregnancy and abortion, in August 2011. The national dissemination workshop was held in November. Key recommendations included the need to: implement evidence-based medical-eligibility criteria for contraceptive use; replace dilatation and curettage with options for manual vacuum aspiration and combination mifepristone–misoprostol for abortions before 12–14 weeks' gestation; replace intra-amniotic saline with combination mifepristone–misoprostol for abortion after 12–14 weeks' gestation; replace heavy sedation and general anaesthesia with analgesia and paracervical block; and conduct a pilot study to examine the feasibility of training midwives to provide medical abortion, thus extending safe abortion services to underserved women in rural areas.

6.1.2 Technical opinions on unintended pregnancy and abortion

In 2011, HRP received several requests for evidence-based technical opinions, including a request from the WHO country office in the Republic of Moldova for an evidence-based opinion on a draft resolution of the Parliamentary Assembly of the Council of Europe on prenatal sex selection; and a request from two NGOs – the European Parliamentary Forum on Population and Development, based in Brussels, and the All Russian Association for Population and Development, based in Moscow – to draft a technical opinion of proposed (restrictive) amendments on access to abortion in the law on “Basics of health protection of the citizens of the Russian Federation” and proposed (restrictive) legislative amendments to the federal law on “Basic guarantees of the rights of the child in the Russian Federation”.

6.2 Planned activities

Implementation of strategic assessments in the next biennium will be planned based on requests from countries, and is likely to include assessments related to prevention of unsafe abortion in Eritrea and Kenya. Activities to follow up recommendations from previous assessments and/or for initial scaling-up of successful new interventions will continue in Kyrgyzstan, the Republic of Moldova and Ukraine.

7. Other activities

7.1 Progress

The interagency statement on preventing sex selection was launched in June 2011 at Geneva. The statement, developed in collaboration with the Office of the High Commissioner for Human Rights (OHCHR), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA) and UN Women makes a strong argument for addressing the root causes of sex selection without impinging on the availability of safe abortion services. The statement was also launched at the global meeting on "Skewed sex ratios at birth" organized by UNFPA in Ha Noi in October 2011, and generated media interest as well as keen discussions among country teams that participated.

Controlling Sexually Transmitted and Reproductive Tract Infections

Key objectives

Key objectives

The goal of the Department of Reproductive Health and Research in the area of Controlling Sexually Transmitted and Reproductive Tract Infections is to prevent and control sexually transmitted and other reproductive tract infections through a systematic programme of work that covers: (a) mapping and generating evidence, testing interventions, and improving technologies; (b) developing evidence-based norms, tools, and guidelines; and (c) providing technical support to countries.



Major achievements

- Completion of work on prevalence and incidence of selected sexually transmitted infections: *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, syphilis and *Trichomonas vaginalis* for 2005 (published) and 2008 (to be published in 2012).
 - *Implication of research findings for policy and programmes*: Generation of global estimates of sexually transmitted infections should be informed by adequate surveillance for sexually transmitted infections on a Region by Region basis.
- An updated guidance document on *Strategies and laboratory methods for strengthening surveillance of sexually transmitted infections* was finalized and will be published in 2012.
 - *Implication of research findings for policy and programmes*: Surveillance for antimicrobial resistance in *Neisseria gonorrhoeae* should be standardized across regions and quality assured by running local results against the WHO *Neisseria gonorrhoeae* reference strain panel.
- Consultations were held to elaborate the *Global action plan to control the spread and impact of antimicrobial resistance in Neisseria gonorrhoeae*.
 - *Implication of research findings for policy and programmes*: Treatment of proven cephalosporin-resistant *Neisseria gonorrhoeae* should be guided by antimicrobial susceptibility tests in collaboration with an expert in infectious diseases and the laboratory results.
- Publication of estimates of syphilis in pregnancy for 2008 indicating that 1.9 million pregnant women had active syphilis with 820 000 associated adverse outcomes of pregnancy.
 - *Implication of research findings for policy and programmes*: Accurate identification of causes of stillbirths in a standardized manner is recommended for planning interventions to reduce preventable infant deaths caused by maternal syphilis during pregnancy.
- Publication of WHO guidelines on the *Use of cryotherapy for cervical intraepithelial neoplasia*.
- Consultations and discussions were held on the effectiveness and safety of a 1% vaginal gel formulation of tenofovir in reducing HIV infection in women and to agree on key priority steps to confirm its safety and effectiveness.

- Technical support was provided to Rwanda, United Republic of Tanzania, and Zambia to strengthen the national programmes for cervical cancer prevention, including the introduction of HPV vaccine.
 - *Implication of research findings for policy and programmes:* Determination of, and information on, the prevalent types of human papillomavirus infections should guide the choice of HPV vaccine to implement.
- Production of a tool for countries on *Methods for surveillance and monitoring congenital syphilis elimination within existing systems*.

1. Introduction

The Department works on controlling sexually transmitted infections (STIs) and other reproductive tract infections (RTIs) to respond to the recommendations made in WHO's first Global Strategy on Reproductive Health, adopted by the 57th World Health Assembly in May 2004 (WHA57.12), and follows the recommendations made in the Global Strategy for the Prevention and Control of Sexually Transmitted Infections: 2006–2015, approved by the World Health Assembly in May 2006 (WHA59.19).

Although progress has been made in the control of STIs, recent data indicate that some infections are on the rise in various population groups and sexually transmitted pathogens such as *Neisseria gonorrhoeae* have developed resistance to most standard antimicrobial agents. In addition, there is an urgent need to detect asymptomatic infection to have a greater impact on STI control.

Based on information collected over the years, and using the WHO guides and guidelines recently published, the RHR STI Team has focused its strategy on an integrated and comprehensive programme of work within the Family, Women's and Children's Health (FWC) Cluster, and across other relevant clusters and departments within WHO, as well as international partners, to improve technologies and interventions to control STIs and RTIs, to translate the available research evidence into norms, tools and guidelines and to assist countries in the development of programmes and policies that control STI/RTI burden. This work forms an integral part of WHO's efforts to improve sexual and reproductive health and to reduce maternal and perinatal morbidity and mortality.

2. Mapping and generating the evidence

2.1 Progress

2.1.1 Global STI estimates

In order to address existing gaps in strategic information on STIs namely, *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, syphilis and *Trichomonas vaginalis*, in adults between 15 and 49 years of age. In 2011 the 2005 estimates were published, and work has continued to generate updated estimates for 2008. Based on ongoing analysis, it is estimated that in 2008 there were over 498 million incident cases of treatable STIs (syphilis, gonorrhoea, chlamydia, and trichomoniasis).

The WHO guidelines, *Strategies and laboratory methods for strengthening surveillance of sexually transmitted infections* were finalized and submitted for publication in 2011.

2.1.2 Global Action Plan to Control the Spread and Impact of Antimicrobial Resistance in *Neisseria gonorrhoeae*

World Health Day 2011 and global scientific experts highlighted the global threat of antimicrobial resistance (AMR). With an estimated 88 million incident gonococcal infections globally, AMR in *Neisseria gonorrhoeae*, an issue which was also featured by the international media, is a public health problem in need of urgent attention. A Global Action Plan is being finalized to alert relevant stakeholders to the threat of untreatable gonorrhoea and to minimize the impact of AMR in *Neisseria gonorrhoeae*. In addition, regional reference laboratories have been established to provide technical support and guidance to countries. Information on the importance of this area was widely disseminated, including through a policy brief, peer-reviewed publications and at international conferences.

2.1.3 Towards eliminating congenital syphilis

In 2008 approximately 1.9 million pregnant women were infected with active syphilis, and it is estimated that there were 300 000 stillbirths or early fetal losses, 140 000 neonatal deaths, and 380 000 infants that were preterm, of low birth weight, or had congenital disease associated with syphilis. These data were published in the *WHO, UNAIDS, UNICEF. Global HIV/AIDS Response: Epidemic update and health sector progress towards Universal Access – Progress Report 2011*.

In 2011, RHR finalized a tool for countries and regions entitled *Methods for surveillance and monitoring congenital syphilis elimination within existing systems* to assist with improving quality and interregional consistency of data collection. This tool was used in Addis Ababa in November 2011 in a workshop for Ethiopia, Ghana, Kenya, Mozambique, Swaziland, United Republic of Tanzania, and Zambia.

In addition, RHR provided technical support to the launch of the initiative for Elimination of New Paediatric HIV Infections and Congenital Syphilis in Asia–Pacific, and held a workshop in Dar es Salaam to assist six countries (Central African Republic, Ghana, Madagascar, Mozambique, United Republic of Tanzania, and Zambia) to develop action plans to eliminate mother-to-child transmission of HIV and syphilis.

In collaboration with the WHO HIV Department, data were collected and analysed from 80 countries on syphilis testing coverage and positivity in antenatal care attendees (see map overleaf).

2.1.4 Visual inspection with acetic acid (VIA) and cryotherapy

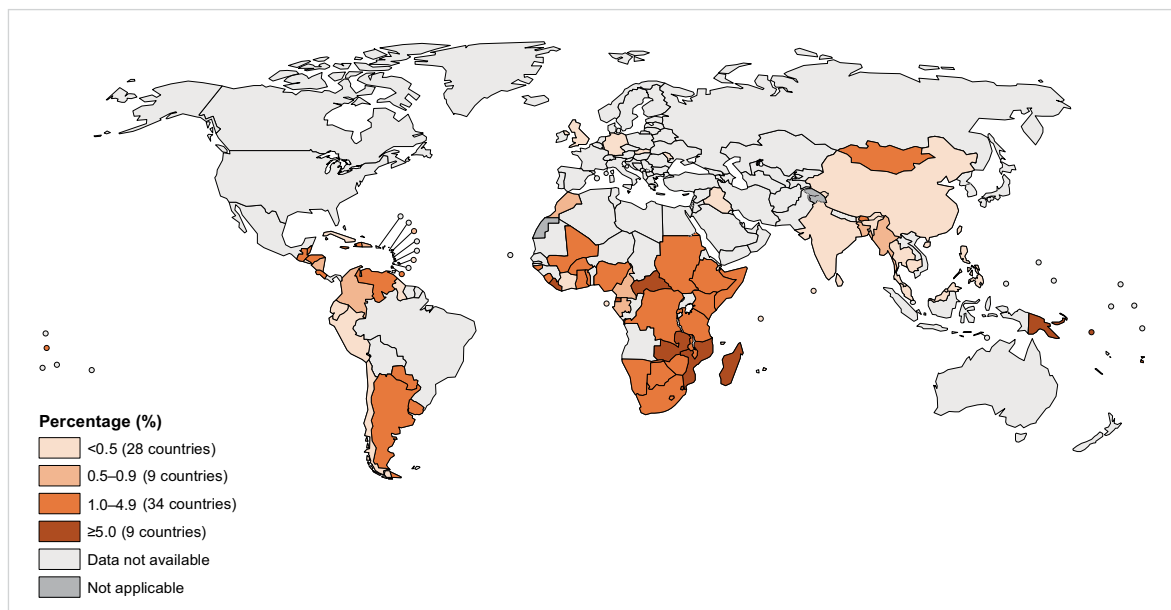
The report of a demonstration project in six African countries reaching a total 19 500 women was finalized. The report summarizes experiences and obstacles encountered in the introduction of cervical cancer prevention and control programmes based on VIA followed by cryotherapy.

The WHO guideline on the use of cryotherapy to prevent cervical cancer was finalized and published.

2.1.5 Antiretroviral based microbicide products

In 2010, the Centre for the AIDS Program of Research in South Africa (Caprisa) 004 trial demonstrated the effectiveness and safety of a 1% vaginal gel formulation of tenofovir, an antiretroviral agent, in reducing HIV infection in women by about 39% compared to a placebo gel. Following the publication of the results, RHR convened

**Syphilis seropositivity of antenatal care attendees reported by countries in 2010
(n=80 reporting countries).**



Source: WHO, UNAIDS, UNICEF. Global HIV/AIDS Response: Epidemic update and health sector progress towards Universal Access – Progress Report 2011. 2011

a meeting in August 2010 to agree on key priority steps to confirm the safety and effectiveness of 1% tenofovir gel in different populations and settings. In June 2011, in partnership with UNAIDS, RHR convened a Tenofovir Gel Implementation Meeting in South Africa to identify priority actions for rapid availability of 1% tenofovir gel following licensure, and to inform normative guidance on use of the gel in high HIV incidence countries and settings. A Tenofovir Gel Steering Committee has been established and met in November 2011. This Committee will provide a single governance body that will shape, coordinate and steer the critical processes related to the complex regulatory review and approval process, planning for manufacturing, and supply and delivery.

The preliminary data of the tenofovir gel arm of the Vaginal and Oral Interventions to Control the Epidemic (VOICE) study conducted by the National Institute of Health is currently being discussed with the Steering Committee and relevant partners to best assess the next steps as more information becomes available.

2.2 Planned activities

2.2.1 Enhance interventions to control STIs

In the WHO European Region, the STI Team will provide technical support for the STI component of the multicentre survey of syphilis and HIV infection among men who have sex with men to be carried out in 2012 in 12 European Union countries and some Eastern and Central Asian countries.

Working with international and regional partners and stakeholders, through the global gonococcal antimicrobial surveillance programme (GASP), within the context of the WHO Strategy to Combat Antimicrobial Resistance, the STIM Team will support countries to strengthen laboratory capacities and disseminate

standards for performing *Neisseria gonorrhoeae* culture and antimicrobial susceptibility testing, as well as work with WHO collaborating and reference centres, and other international and national reference centres, to maintain and distribute standardized and up-to-date WHO reference strains of *Neisseria gonorrhoeae* to ensure comparability and validity of antimicrobial resistance data.

A Regional *Tenofovir Gel Policy* Workshop will be held in mid-2012 in the African Region to discuss the ethical, regulatory and programmatic challenges of integrating tenofovir gel within national HIV-prevention programmes in the context of other ARV-based prevention methods and the rapidly evolving HIV-prevention landscape.

Chlamydial infections have been recognized as an increasing public health problem in adolescents in many countries. In some countries of the South Pacific in the WHO Western Pacific Region, prevalence rates of chlamydial infection of up to 30% among adolescents have been reported. The STI Team will provide technical support to estimate the burden of chlamydial infections in some of these countries, as well as in the development of interventions to control the infections.

2.2.2 Towards elimination of congenital syphilis

A study will be conducted in Mozambique to evaluate the effectiveness of syphilis treatment administered at different times during pregnancy, identify characteristics of women not screened for syphilis in pregnancy, and quantify the burden of stillbirth, preterm delivery, and low birth weight related to syphilis as well as rates of congenital syphilis among women in central Mozambique.

A study will be conducted in China in collaboration with the National Centre for STD Control in China and the University College London to evaluate how to scale up their policy of integrated control of mother-to-child transmission of HIV, syphilis, and hepatitis B.

2.2.3 Improving technologies, tools and interventions

A review of the current status of dual rapid testing technology for both syphilis and HIV will be made and a protocol for field-testing of promising candidates will be elaborated for implementation.

WHO headquarters will provide technical support to regional activities for the elimination of MTCT of HIV and syphilis to ensure that criteria and processes for elimination are credible, sustainable and harmonized between regions and with other global initiatives.

In the context of the introduction of interventions to control HPV infections, operations research is planned to evaluate how introduction of new rapid HPV tests and introduction of HPV vaccines to adolescent girls can improve national programmes in terms of coverage, treatment compliance rates and impact on diseases.

Within the different categories of STI control, the STI Team will embark on:

- Updating the guidance, *Comprehensive cervical cancer control – a guide to essential practice* (C4-GEP) to take into consideration new technologies in cervical cancer prevention and treatment.
- Convening a workshop of policy-makers, civil society advocates, clinicians and programme managers on tenofovir gel policy in the African Region to discuss ethical and programmatic issues as well as constraints in integrating

tenofovir gel and any other new microbicides within national HIV-prevention programmes.

- Providing technical support to countries to strengthen STI surveillance, including gonococcal antimicrobial resistance surveillance.
- Collaborating with the WHO HIV Department to strengthen the work on condoms and condom programming.
- Collaborating with other internal partners, such as the WHO Department for Immunization, Vaccines and Biological (IVB) to review progress towards development of vaccines against STIs, and define the role that WHO should play.
- Collaborating with WHO regional counterparts and other partners to hold a global consultation to discuss processes, criteria and monitoring systems to validate elimination of congenital syphilis.
- Supporting expanded use of STI rapid diagnostic tests to detect asymptomatic infections in men and women.
- Working with the Tenofovir Steering Committee to understand the lack of effect of the gel in the VOICE study and map out future directions in microbicide research.
- Working with, and coordinating, the Tenofovir Steering Committee to shape and steer critical processes related to regulatory and approval processes and manufacturing, supply and delivery of microbicides.

Gender, reproductive rights, sexual health and adolescence

Summary

Key objectives

The Sexual Health, Gender, Reproductive Rights and Adolescence area of work (GRR) aims to ensure that research, policies and programmes in sexual and reproductive health protect and promote human rights and equality between women and men, including adolescents. GRR supports policy- and programme-relevant research on gender-based violence, female genital mutilation (FGM), adolescent sexual and reproductive health, and actions to promote sexual health and healthy sexuality. It also develops norms, guidelines and tools in these areas, including on research strengthening.



Major achievements

- The Working Group on the Classification of Sexual Disorders and Sexual Health for the Revision of ICD-10 was established jointly with the WHO Department of Mental Health and held its first meeting.
- Global and regional estimates of prevalence of intimate partner violence, child sexual abuse and non-partner sexual abuse, and systematic reviews and meta-analysis of different health outcomes including abortion and low-birth weight were completed for the Global Burden of Disease Study.
- Nine systematic reviews for clinical and policy guidelines for health-sector response to violence against women were completed, and draft guidelines were made available for comments during a guidelines development group meeting.
- An interagency statement on preventing sex-selection was released in 2011 in partnership with OHCHR, UN Women, UNICEF and UNFPA.
- Four regional workshops were held, with the WHO Department of Injuries and Violence Prevention and other partners, on primary prevention of intimate partner and sexual violence against women.
- A regional workshop on research methods for violence against women was held by the Mahidol University in Thailand.
- An indicator on prevalence of recent intimate partner violence as a marker of gender inequality was included as one of the 30 core indicators for monitoring global progress on HIV/AIDS; and a compendium (forthcoming) of a complementary set of programmatic indicators on gender equality and HIV for country use was developed.
- The global strategy to stop health care providers from performing FGM strongly influenced a Kenyan criminal law against FGM, which was passed in October 2011.
- The first triennial progress report by the Secretariat to the World Health Assembly on Resolution 61.16 on preventing FGM, highlighted progress in some countries.
- An international conference on FGM with a special focus on health research and capacity building for research and interventions was held in October at the University of Nairobi, Kenya.

- The OHCHR (The Office of the High Commissioner for Human Rights) report on preventable maternal mortality and morbidity and human rights, to which RHR contributed, was endorsed by the Human Rights Council and is leading to important follow-up activities in this area.
- Expert technical opinions in connection with international, regional and national human rights, legislative and judiciary processes have been provided on request.

1. Introduction

Work in the area of Sexual Health, Gender, Reproductive Rights, and Adolescence (GRR) aims to promote the integration of gender equality and health equity, reproductive rights, sexual health and adolescent sexual and reproductive health in sexual and reproductive health policies and programmes and across the technical work of the Department. Specifically it works to provide evidence to guide health policies, programmes and systems, through, for example, research to assess ways in which sexual and reproductive health services can address violence against women and female genital mutilation (FGM); developing guidance for the promotion of sexual health and healthy sexuality; generating evidence on ways to accelerate the abandonment of female genital mutilation and to prevent intimate partner and sexual violence against women; identifying factors that can improve young adolescents' transition to healthy sexual and reproductive lives; and helping governments and their partners to ensure that sexual and reproductive health policies and laws are grounded in human rights. GRR works with WHO regional and country offices, and other partners, to provide technical support; disseminate tools and increase capacity of health providers to address violence against women, FGM and integrate gender and human rights into SRH policies and programmes. The GRR team also participates in various partnerships, interagency processes and with the international human rights machinery for the promotion of gender equality, reproductive rights and SRH.

2. Sexual health

2.1 Progress

2.1.1 Sexual health framework

RHR published *Developing sexual health programmes: a framework for action*. However, the need for further work to conceptualize sexual health and clarify its relationship to reproductive health was identified and work has been commissioned to address this.

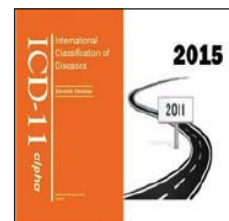
The purpose of the document *Conceptual framework for sexual health* is to help policy/decision makers as well as programme developers and implementers to understand better what are the specific and critical elements of sexual health that need to be reflected in the national public health policies and/or interventions. A first draft of this document is currently under review in RHR.

2.1.2 Sexual health indicators

- In parallel with the work on conceptualization of sexual health, GRR has been continuing its work on standards to improve the measurement of sexual health outcomes. An International Advisory Group has been established to advise RHR on work related to the sexual health indicators. The ultimate goal is to identify and recommend to countries a core set of 5–10 sexual health indicators, for integration into existing national and sub-national monitoring and evaluation mechanisms for its routine use.

2.1.3 Sexual health in International Classification of Diseases 11 (ICD 11)

- The International Classification of Diseases and Related Health Problems (ICD) is a key public health tool extensively used by countries, including for diagnosis, health monitoring and statistics. Since the last ICD revision in 1990, there have been substantial advances in health related knowledge as well as social understanding of sexual disorders and sexual health.
- A working group on the Classification of Sexual Disorders and Sexual Health was established jointly with the WHO Department of Mental Health in 2011, for the revision of relevant categories in ICD-10. The proposals of the working group will be field tested and assessed with stakeholders as per the overall ICD procedures.
- A database of existing publications and information relevant to the scope of the work of the working group has been developed. This work is envisaged to continue through the ICD revision process ending in 2015.



2.1.4 Sexuality counselling guidelines for health-care providers

- The ultimate goal of this work is to ensure the integration of sexuality counselling into all sexual and reproductive health programmes, in order to support the promotion of sexual health and not just treatment of sexually transmitted diseases. The WHO Steering Group, comprising individuals from several departments/areas, including adolescent health, mental health and sexual and reproductive health, was established in 2011.

2.2 Planned activities

- Finalization of a list of sexual health indicators and identification of opportunities for field testing.
- Development of sexuality counselling guidelines.
- Continuation of work on revision of ICD sexual disorders and sexual health categories.

3. Addressing violence against women

RHR's work in this area has continued to expand. The GRR team addresses the links between gender equality, violence against women (VAW) and sexual and reproductive health and HIV through: (a) research for policy and programmes; (b) developing policy and programmatic guidance and tools; (c) capacity-building, and (d) technical support to regions and countries and other partners/agencies; and (e) advocacy. The work covers many aspects of violence against women, including primary prevention and health-sector response to intimate partner violence (IPV) and sexual violence, sexual violence and conflict, data collection and research methodologies, and the intersections of VAW and HIV.

An increasing body of research demonstrates the links between VAW and HIV/AIDS and also on strategies to address them. Despite a number of global and institutional commitments, HIV/AIDS programmes and services have not addressed this issue systematically. There are significant gaps in our understanding of how violence affects the HIV vulnerability of most-at-risk populations (e.g. sex workers and injecting drug users). Stronger policies and programmes are needed to prevent and respond to violence against women in the context of HIV/AIDS.

3.1 Progress and planned activities

3.1.1 Research for policy and programmes

Progress

- Analyses of data from the WHO multicountry study on women's health and violence continues; papers have been submitted or are in preparation on adolescents, pregnancy and abortion, child sexual abuse, and alcohol abuse and IPV. Work for the Global Burden of Disease Study (GBD) is being finalized.
- Nine systematic reviews were completed to inform the development of clinical and policy guidelines for the health-sector response to violence against women.
- Technical support is being provided to several research initiatives, which include: the gender-based violence prevention and masculinities collaborative research project for Asia and the Pacific (Change Project – Partners for Prevention (P4P)), the sexual violence in conflict and crisis systematic research project; and the Sexual Violence Research Initiative (SVRI).
- Development of two survey tools for measuring conflict-related sexual violence experience and perpetration (for UN Action) was completed.
- *Addressing VAW in the context of the HIV response* – systematic reviews were commissioned to: (a) examine the links between violence against sex workers and HIV outcomes; and (b) identify effective interventions to address violence against sex workers.
- A research agenda for conflict-related sexual violence was finalized (in collaboration with the SVRI).

Planned activities

- To publish at least four peer-reviewed papers based on the GBD and WHO multicountry study work.
- Implementation of an antenatal care study in South Africa and preparations for formative research in Mozambique.

- To field test survey tools for conflict-related sexual violence in one country, and to disseminate the research agenda for conflict-related sexual violence.
- To continue implementing research capacity-building activities for VAW and sexual and reproductive health, and to develop a training module on outcome evaluation research.
- Two systematic reviews and a report on "Addressing violence against sex workers in the context of HIV/AIDS: what works?" will be published by June 2012.
- To address gaps identified by the systematic reviews, a technical consultation will be held (January 2012) to document good practices in reducing violence against sex workers. The systematic reviews and good practices will feed into recommendations in the forthcoming WHO guidelines on HIV prevention among sex workers in low- and middle-income countries.
- Implementation research will be initiated in one or two countries to integrate violence against women interventions into national AIDS strategies/plans to inform scaling up of gender equality and violence against women in national AIDS responses.

3.1.2 Policy and programmatic guidance

Progress

- The interagency statement on preventing sex-selection was released in 2011 in partnership with OHCHR, UN Women, UNICEF and UNFPA. The statement reaffirms the commitment of United Nations agencies to encourage and support efforts by States, international and national organizations, civil society and communities to uphold the rights of girls and women and to address the multiple manifestations of gender discrimination including the problem of imbalanced sex ratios caused by sex selection. It thus seeks to highlight the public health and human rights dimensions and implications of the problem and to provide recommendations on how best to take effective action. There was extensive media coverage of the release of the statement. Follow-up activities included a regional consultation in Viet Nam organized by UNFPA in which RHR presented the statement on behalf of the interagency partners.
- Draft clinical and policy guidelines for the health-sector response to violence against women were prepared based on systematic reviews, with input from the guidelines development group meeting in September 2011 and peer reviewers.
- Based on the manual developed jointly with the WHO Department of Injuries and Violence Prevention (VIP), three regional workshops on primary prevention of intimate partner in sexual violence were held in collaboration with the WHO Regional Offices for Africa, the Western Pacific and the Americas, and a fourth workshop for Asia and Pacific was co-organized with Partners for Prevention and the Medical Research Council South Africa.
- Violence against women: the evidence, a pack of information sheets on different aspects of violence against women, has been developed with PAHO.
- Systematic reviews were conducted and a technical meeting held (November) on the response to the psychosocial and mental health needs of survivors of sexual violence (for UN Action). A report and recommendations are being elaborated.

- The GRR team has developed a framework for measuring, monitoring and analysing gender-based inequities in the HIV response. The GRR team also provided technical support for an interagency effort involving the UN, PEPFAR (The United States President's Emergency Plan for AIDS Relief), GIZ (German Society for International Cooperation), The Global Fund to Fight, AIDS, Tuberculosis and Malaria, and civil society to identify indicators for monitoring progress in addressing gender equality dimensions of the HIV/AIDS epidemic.

Planned activities

- Finalize and disseminate an information pack on violence against women that contains information sheets summarizing the evidence on different forms of VAW (sexual violence, IPV, trafficking, FGM, sexual violence in conflict) and different issues (costs of VAW, health consequences, promising practices, etc.)
- Disseminate and provide technical support to the implementation of the clinical and policy guidelines on VAW, in collaboration with UNFPA and WHO regional offices.
- Develop policy briefs on mental health and psychosocial responses for survivors of sexual violence.
- Publish the programming guide on addressing violence against women and HIV/AIDS and develop a programming brief on addressing violence against women in the context of HIV testing and counselling (including couple testing).
- Develop a tool to help countries in measuring, monitoring and analysing gender-based inequities in HIV response.

3.1.3 Capacity-building, technical support to countries and regions and advocacy

In 2011 technical support was provided in the context of the following activities.

- The WHO Eastern Mediterranean Region for a workshop to build capacity of the HIV knowledge hubs in Croatia, Iran, Lebanon, and Ukraine on integrating gender into HIV surveillance for most-at-risk populations.
- A UNAIDS interagency workshop on integrating gender-based violence and engaging men and boys for gender equality in national AIDS plans that brought together teams from 16 countries comprising national AIDS authorities, civil society, ministries of health or gender.
- Research initiatives on gender-based violence, particularly the Sexual Violence Research Initiative (SVRI).
- Countries interested in replicating the WHO Multicountry Study, e.g. Indonesia, Mongolia and Viet Nam.
- A one-week training course for research and action on violence against women was implemented with Mahidol University, Thailand.

Planned activities

- Continue to respond to requests from and work with Regional and Country Offices to provide technical support and strengthen response to violence against women, including on gender equality, VAW and HIV links.
- Continue to participate in UNAIDS and other interagency mechanisms to provide technical support and conduct advocacy on gender equality, violence against women and HIV/AIDS.

4. Female genital mutilation

4.1. Progress

RHR contributed to a UNICEF publication on an in-depth analysis of key statistical data on FGM (DHS – Demographic and Health Surveys – and MICS – Multiple Indicator Cluster Survey), to be published in early 2012 as a joint publication. Decline is observed in most countries, but varies from substantial in some countries (e.g. Kenya) to no decline in eight countries (e.g. Gambia).

Financial constraints did not allow us to initiate a new study on psychological consequences on FGM. Instead the focus has been on doing desk research analysing, summarizing and disseminating knowledge and providing technical support. In response to STAG's request from last year, a desk review was carried out on the potential risks of conflation/confusion of messages between promotion of male circumcision and the work against medicalization of FGM.

4.1.1 Advocacy for the elimination of FGM

- RHR collaborated with key agencies to ensure systematic dissemination of the *Global strategy against medicalization of female genital mutilation* published in 2010. This was key to passing of a criminal law in Kenya (October 2011) strongly emphasizing that no category of health worker should perform any type of FGM.
- The first triennial Progress Report on the World Health Assembly resolution on FGM (WHA61.16) was collated and presented to the Executive Board meeting in January 2011, and the World Health Assembly in May 2011 (WHA64/26G). Countries expressed strong support for the resolution, and many reported on progress and activities, including legislation and integration of FGM into national reproductive health plans. The importance of addressing FGM to achieve MDGs 3, 4 and 5 was emphasized. Countries expressed unequivocal support to the work against the "medicalization" of FGM, and on community-based interventions to spur the abandonment of the practice. Many countries also pointed out the need for more research and for increased financial support to this area of work.

4.1.2 Guidance for health systems

- In October, the University of Nairobi held an international conference on FGM with a special focus on health consequences and their management, as well as updates on intervention research and legal and human-rights aspect of the practice. RHR provided significant technical and financial support for the conference, including to the development of plans to establish a centre for excellence on FGM research and leadership.
- RHR agreed with the Norwegian Centre for health-care research to initiate a systematic review on the health consequences of FGM for young girls and mothers, to be published in 2012.

4.1.3 Research to support the abandonment of FGM

- No progress was made in the planned multicountry mixed methods study on the psychological consequences of FGM due to lack of funding. However, progress has been made in identifying local partners in Nigeria, who can carry out the formative research once funding is available. The study on linkages between FGM and obstetric fistula in Sierra Leone, started in 2009, has continued with minimal funding.

4.2 Planned activities

- RHR will continue its work to support implementation of the global strategy medicalization of FGM.
- The outcome of the systematic review on health consequences of FGM will be disseminated, and follow-up activities developed based on its findings. Similarly with the study on obstetric fistula and FGM.
- A survey of WHO country and regional offices will be conducted in 2012 to strengthen collaboration across the organization. RHR will also continue its technical support to the establishment of a centre of competency for research training on FGM in Nairobi to support regional capacity-building and networking.
- The study on the psychological consequences of FGM will be implemented in at least one country.
- If funding is available the following activities will be implemented: (1) producing and pilot-testing a tool/manual to measure effectiveness of interventions against FGM; (2) developing and testing a guide for inclusion of a health-care component in other non-health interventions against FGM; and (3) a systematic review on management of FGM consequences.

5. Human rights and sexual and reproductive health

The objective of this area of work is to contribute to the development and promotion of human-rights standards and their integration into laws, policies and programmes related to sexual and reproductive health.

5.1 Contributing to the development of human-rights standards

5.1.1 Progress

- RHR contributed to the Office of the United Nations High Commissioner for Human Rights (OHCHR) report on preventable maternal mortality and morbidity and human rights, and supported and participated in various events related to this, including at the UN Human Rights Council (HRC).
- RHR organized and contributed to briefings for the treaty monitoring bodies. RHR has been contributing to the elaboration of a General Comment on the Right to Sexual and Reproductive Health developed by the Committee on Economic, Social and Cultural Rights (CESC) and to the report on Criminalization of Sexual and reproductive health services of the Special Rapporteur on the Right to Health.
- Expert technical opinions were provided in connection with national legislative processes on various sexual and reproductive health issues.

5.1.2 Planned activities

- Coordinate UN-agency input to the follow-up of the HRC resolution 2011 on preventable maternal mortality and morbidity and human rights, in particular contribute to development of OHCHR technical guidance on the application of a human-rights-based approach to reducing preventable maternal mortality and morbidity.

- Continue briefings for various UN human-rights treaty-monitoring bodies, the UN Human Rights Council and UN Special Rapporteurs.
- Provide technical opinions on request.

5.2 Development of human-rights tools

5.2.1 Progress

- The Tool on sexual and reproductive health and human rights is being published and a dissemination plan has been developed.
- An outline for an implementation tool on human rights and family planning has been developed and partners for its development and field testing have been identified
- The international and regional research papers have been made available on the web site of the International Council for Human Rights Policy. A WHO report on sexual health and human rights summarizing the key aspects of this research for public health is being developed.

5.2.2 Planned activities

- The Tool on sexual and reproductive health and human rights will be disseminated.
- The WHO Strategic Assessment on abortion will be implemented in at least one country together with the Tool on sexual and reproductive health and human rights.
- A human rights tool on family planning will be developed and field tested.
- A WHO report on sexual health and human rights will be published and dissemination activities will begin; two peer-reviewed articles covering different aspects of the sexual health and human-rights research will be published.

5.3 Providing support to the integration of human-rights standards into RHR's, and contributing to international advocacy on SRH rights

5.3.1 Progress

- Support provided included elaboration of the guidelines Safe abortion technical and policy guidance for health systems; to the ICD revision process in relation to sexuality issues, and to the development of sexual health indicators

5.3.2 Planned activities

- Systematic reviews will be conducted to strengthen the evidence base for the impact of the application of human rights in relation to sexual and reproductive health issues, including on various aspects of the regulation of abortion.
- The Department will continue to contribute to international, regional and national advocacy dialogues related to human rights and sexual and reproductive health, as well as ICPD 20 processes.

6. Adolescent sexual and reproductive health

There is ample recognition that addressing the sexual and reproductive health needs of adolescents in low- and middle-income countries is a priority. Gaps remain in our knowledge on the level of sexual and reproductive health problems in adolescents, behaviours that contribute to or prevent health problems, determinants of these behaviours, and how to deliver effective interventions.

6.1 Global research priorities for adolescent sexual and reproductive health

6.1.1 Progress and planned activities

There is a pressing need for a globally agreed upon list of research priorities on adolescent sexual and reproductive health (ASRH) and advocacy among organizations which support or carry out research work to address these priorities. To address this, RHR in conjunction with the WHO Department of Maternal, Newborn, Child and Adolescent Health (MCA), has been working to develop a prioritized research agenda for ASRH.

- In 2012, RHR will finalize the research-priority-setting exercise, disseminate the outputs of this exercise using a variety of means, and advocate for their use in decision-making. Specific outputs include: a set of research priorities on ASRH in low- and middle-income countries, developed through a consultative and transparent methodology and used in decision-making both by funders and by researchers.

6.2 Building our knowledge and understanding about factors that affect the health and development of young adolescents (10–14 years)

Physical, psychological and social development occurs through adolescence (10–19 years) and into young adulthood. Within this period, there is growing recognition that early adolescence (10–14 years) is an especially crucial phase. For example, attitudes on gender roles formed in young boys because of what they experience in their families and communities affect how they behave with girls and women in their adult lives. There is also widespread recognition that early adolescence has been and is being neglected both in research and in programmes.

There is a pressing need to build our knowledge and understanding in this area through strategic research and to support governments and other players in addressing this group more meaningfully in projects and programmes.

6.2.1 Progress

In 2010 RHR supported the preparation of a review document titled: The sexual and reproductive health of younger adolescents: Research issues in developing countries. This provided the basis for a meeting held towards the end of 2010 which identified, areas in which research and action were needed. Building on this, in 2011, RHR participated in discussions with various partners on moving this agenda forwards.

6.2.2 Planned activities

- RHR will stimulate and support multicountry research to identify risk and protective factors that could help or hinder the health and development of young adolescents at the individual, family, community and societal levels.
- RHR will identify effective interventions to strengthen protective factors and overcome risk factors, through multicountry intervention research.
- RHR will develop WHO guidelines on building individual and social assets in young adolescents.

6.3 Integrating attention to adolescents in the work of RHR

There is widespread recognition that addressing adolescents needs to be an important and integral part of overall efforts to promote the sexual and reproductive health of populations. The Millennium development report 2011 clearly identifies that : “Reaching adolescents is critical to improving maternal health and achieving other Millennium Development Goals.” Within RHR there is recognition that much more could be done to address adolescents within the context of overall efforts to promote sexual and reproductive health.

6.3.1 Progress

RHR has contributed to the work of MCA in this area. One case in point is the development of guidelines on preventing early pregnancy and poor reproductive outcomes in adolescents in developing countries. Another is in moving from small-scale, time-limited projects to large-scale, sustained programmes. These efforts will be built upon.

6.3.2 Planned activities

In 2012, we intend to use available entry points, e.g. ensuring that adolescents are addressed in the context of the Canadian and French support country-level initiatives, to reduce maternal, newborn and childhood mortality and ensuring that the recently announced Global Alliance of Vaccines and Immunizations decision to open a window for eligible countries to apply for funds to deliver the Human papillomavirus vaccine is used to strengthen ASRH programmes. We also intend to search for and use new opportunities for addressing adolescents. Anticipated outputs include adolescents being more firmly placed and more meaningfully addressed in the research, development, advocacy, capacity-building and country support of RHR in various thematic areas including contraception, unsafe abortion, STIs and violence.

Research capacity strengthening and programme development – regional activities

Summary

Key objectives

The Department's work in the area of research capacity strengthening and programme development aims to strengthen countries' research capacity to accelerate progress on sexual and reproductive health research relevant to national and regional needs, facilitate participation of local institutions in global research, and support development and implementation of evidence-based policies and programmes.



Major achievements

In 2011, 13 institutions were awarded long-term institutional development (LID) grants. Seven institutions received service guidance centre grants, 7 received competitive intraregional research grants, 10 received resource maintenance and capital grants and 1 institution received a pre-LID grant.

- Research training grants in the form of courses, workshops, and seminars were awarded to three institutions in Africa. In the Region of the Americas, 16 fellows received awards for courses or practical training.
- In collaboration with the Implementation Research Platform (IRP), capacity-building and priority-setting workshops in implementation research were conducted in six countries in Africa. Three out of seven projects coordinated by the Department in the Region of the Americas, the Eastern Mediterranean Region and the African Region were granted funding from the IRP.
- Support for reproductive health programmes was achieved through providing technical assistance for adaptation and/or implementation of guidelines and tools in family planning and sexually transmitted infections and reproductive tract infections (STIs/RTIs). The guidelines were implemented by the respective reproductive health programmes in two countries each in the South-East Asia and Western Pacific regions.
- Following the ending of the *Reproductive health strategy for the African Region, 1998–2007*, in collaboration with the WHO Regional Office for Africa, the Department initiated the development of an "African Regional Agenda for Reproductive Health".
- RHR, together with other WHO departments and other United Nations agencies secured a grant from the French Government to support reproductive, maternal newborn and child health and is coordinating the implementation of the family planning element of the grant in French-speaking countries in Africa.
- RHR, along with seven other partners, has received a new grant from the European Commission to promote health research, education and health-care practice in Africa. The grant will be used to create centres of excellence in Africa and the initial focus will be on the area of HIV/AIDS and sexual and reproductive health. A new feature of this project is that it will use information technology to deliver e-learning courses and enable knowledge-sharing through web-based virtual communities. Entitled "AFRICA BUILD", the longer-term aim of the project is to create sustainable South-to-South knowledge-sharing groups of African researchers.

1. Introduction

Research capacity strengthening and programme development work of the Department is undertaken based on the needs of each WHO region, that is: the African Region, the Region of the Americas, the European Region, the Eastern Mediterranean Region, the South-East Asia Region and the Western Pacific Region. Overall, this work has four main objectives:

- to strengthen the research capacity of institutions and investigators in low-resource settings;
- to support researchers to conduct studies based on national priorities in reproductive health and to facilitate their participation in regional and global research;
- to promote dissemination and utilization of research results and evidence-based guidelines in sexual and reproductive health programmes and services;
- to assist WHO Member States in developing and implementing evidence-based policy and programmes that can help achieve universal access to sexual and reproductive health.

Area managers responsible for implementing the work on research and technical capacity strengthening in respective regions focus on identifying and supporting institutions and individual researchers to enable them to conduct high-quality research in sexual and reproductive health relevant to the needs and priorities of their countries and regions. Institutional capacity strengthening uses various structured capacity-strengthening grant schemes, including: the long-term institutional development grant (LID), small supplies grant (SSG), service guidance centre grant (SGG) and resource maintenance and capital grant (RMG); programme capacity-strengthening (PCS) grant; competitive intraregional grant (CIR); and research mentoring grant. Individual capacity-strengthening activities support workshops, seminars and fellowships in key aspects of sexual and reproductive health.

The Department aims to position the collaborating institutions supported through the above grants to serve as a resource for the respective ministries of health. Thus, governments can draw upon centres of scientific excellence in developing evidence-based policies and programmes and in implementing research findings and WHO guidelines and tools. The following sections summarize research capacity and programme-strengthening activities undertaken by the Department in 2011 in the various regions.

2. Research capacity strengthening and programme development in the WHO African Region

2.1 Research capacity strengthening – progress

2.1.1 Institutional capacity strengthening

During 2011, research capacity-strengthening grants were awarded to 10 institutions. LID grants were continued in Burkina Faso, Cote d'Ivoire, Ethiopia, Kenya, Malawi, Nigeria, South Africa, and the United Republic of Tanzania. A pre-LID grant was awarded to a centre in the Democratic Republic of the Congo. A centre in Kenya received an SGG.

2.1.2 Research training grants

Individual research training was also supported in 2011. Grants were awarded to three centres (one in Nigeria and two in South Africa) to organize research courses, workshops and seminars. These included, for instance, the Effective Care Research Unit in East London in South Africa, which organized an international research-training course on research methods, attended by participants from several countries in the region. Another example was a scientific writing course conducted at Ibadan University, in Ibadan, Nigeria, which was attended by 50 participants.

A subregional training course in operations research, in Portuguese, was conducted in Mozambique and was attended by 20 participants from both Mozambique and Angola. The aim was to orient policy-makers and researchers in these two Portuguese-speaking countries in operations research, and bridge the perceived gap in research capacity in these countries.

2.1.3 Implementation research

Figure 1. Capacity strengthening and priority-setting workshop on implementation research in Zambia.



In collaboration with the Implementation Research Platform (IRP) – a joint initiative with the Alliance for Health Policy and Systems Research and other WHO departments – capacity-building and priority-setting workshops in implementation research were convened in six countries (Democratic Republic of the Congo, Ethiopia, Guinea, Mozambique, Nigeria and Zambia) (see figure 1). The workshops were aimed at orienting policy-makers, programme managers, and researchers in implementation science and identifying priority implementation research questions. Subsequently, research centres will submit letters of intent outlining research concepts on implementation research areas. Those selected will be supported to develop full research proposals and submit them for funding.

2.1.4 Other capacity-strengthening activities

Africa Build

The Department, along with seven other partners, has received a new grant from the European Commission to promote health research, education, and health-care practice in Africa. The grant will be used to create centres of excellence in Africa and the initial focus will be on the area of sexual and reproductive health and HIV/AIDS. The project will use information technology to deliver e-learning courses and enable knowledge sharing through web-based virtual communities. The longer-term aim of the project is to create sustainable South–South knowledge-sharing groups of African researchers.

Support to French-speaking African countries in using ultrasound for infertility diagnosis and management

In 2011, an innovative technological approach was used by the Department in collaboration with the Groupe Interafricain d'Etudes de Recherche et d'Applications sur l'Infertilité (GIERAF) and the Antoine Beclere Hospital in Paris, to use videoconference facilities to provide live teaching on the use of gynaecological ultrasound techniques. Two sessions were followed by over 300 participants from seven French-speaking African countries: Benin, Cameroon, Cote d'Ivoire, Democratic Republic of the Congo, Mali, Senegal and Togo.

2.2 Support to programme development – progress

2.2.1 African Regional Agenda for Reproductive Health

Following the end of the "Reproductive Health Strategy for the African Region, 1998–2007", in collaboration with WHO Regional Office for Africa, the Department initiated the development of an "African Regional Agenda for Reproductive Health". The regional agenda, finalized at a regional consultation of sexual and reproductive health experts, government health officials and other Africa-based stakeholders, took place in Nairobi, Kenya, in July 2011. The agenda focuses on four thematic areas: (i) maternal and newborn health; (ii) family planning; (iii) harmful practices, including female genital mutilation and prevention of unsafe abortion; and (iv) sexually transmitted infections (STIs), HIV/AIDS and cervical cancer. The areas of action identified for acceleration of universal access to sexual and reproductive health include: health information; human resources; financial resources; health service delivery; and advocacy. The regional agenda will be published following its adoption by the Member States of the WHO African Region.

2.2.2 Support to French-speaking countries in improving family planning

At the G8 summit in Muskoka in June 2010, the Government of France announced an additional commitment of 500 million Euros (to be spent between 2011 and 2015), towards the achievement of Millennium Development Goals (MDGs) 4 and 5. WHO, the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA) and UNWomen jointly submitted a proposal and received funding for a project involving a common framework for the work of the four agencies. The framework follows the six building blocks of health-systems strengthening, and includes one component for overall coordination monitoring and evaluation. The Department will be responsible for implementing the family-planning part of the grant allocated to WHO. The planned activities in Burkina Faso, Côte d'Ivoire, Democratic Republic of the Congo, Guinea, Haiti, Mali, Senegal and Togo will involve normative work to support implementation leading to greater demand for services, better access to services, and meeting unmet needs. An interagency team mission was undertaken in December 2011 in Mali and Togo, to assist in finalizing the country implementations plans.

2.3 Planned activities

Activities planned for 2012–2013 in the African Region are within the following main lines of work:

- promote and further strengthen regional reproductive health research and training networks

- increase efforts to institutionalize strengthening of implementation research capacity in the region
- support and maintain institutions currently collaborating with the Department to enable them to undertake research projects relevant to the reproductive health needs and priorities of their respective countries and the region
- support the finalization and implementation of the regional agenda for sexual and reproductive health
- introduce and support the adaptation of WHO guidelines in sexual and reproductive health, especially in the area of family planning in countries with high unmet need.

3. Research capacity strengthening and programme development in the WHO Region of the Americas

3.1 Research capacity strengthening – progress

As part of research and technical capacity-strengthening activities and strengthening sexual and reproductive health programmes through the introduction of research findings and evidence-based guidelines, collaboration continued with 20 groups/institutions involved in research, academic and/or programmatic activities in different areas of sexual and reproductive health in 14 countries in the Region of the Americas.

3.1.1 Institutional capacity strengthening

In 2011, two institutions receiving LID grants initiated research projects on adolescent pregnancy and violence against women, following approval by the WHO scientific and ethical review panels. A third institution was able to disseminate to academic and government stakeholders the results of its recent study on haemoglobin and altitude and adverse maternal-perinatal outcomes. A fourth institution continued to conduct highly specialized research in fertility mechanisms in the context of institutional strengthening activities. Their specific descriptions are detailed below.

The Centre for Population Studies (CEPEP), in Asunción, Paraguay, designed a descriptive study on violence against women. This project is a follow-up to a study conducted in 2010 which used data from two nationally representative surveys to identify risk factors for sexual violence and physical and verbal abuse, prevalent in 6%, 18% and 35% respectively of women of reproductive age in the country. The risk factors identified included: witnessing violence as a child, residing in an urban area and working outside the home. The current project aims to describe individual and societal mechanisms and circumstances around the existence of intimate partner violence in women.

The Centre for Research in Development Sciences (CIDES) of the San Andrés University, in La Paz, Bolivia, designed a study on adolescents' access to sexual and reproductive health services in a public facility in El Alto, the most populous periurban area of La Paz. This is the third year of the LID grant for CIDES and their second research project. The study will investigate the quality of care at public health facilities and social and cultural factors behind the decision to seek care and prevention services.

A third project was carried out through a competitive intraregional research (CIR) grant by the Institute for Altitude Research from the Cayetano Heredia University in Peru. The study used the Perinatal Information System (SIP) and analysed data from more than 360 000 births in the country. It found significant associations between haemoglobin levels and altitude, and perinatal outcomes such as stillbirth and preterm birth. The study was presented to the Ministry of Health, which suggested a follow-up prospective longitudinal study to ascertain the effects of altitude and haemoglobin on the mother and her pregnancy. Presenting the results at an international scientific meeting in January, the study's principal investigator was given an award as one of the most prolific scientists of Peru.

The fourth institution receiving a capacity-strengthening grant is the Instituto de Biología y Medicina Experimental (IBYME), from Buenos Aires, Argentina. The centre investigated the mechanisms involved in the association of a cysteine-rich secretory protein (encoded by the *CRISP1* gene) with the sperm surface during epididymal maturation, its interaction with the zona pellucida and the subsequent gamete fusion and fertilization of the egg. The researchers developed the first knockout (KO) mice for the protein coded by the *CRISP1* family. They found that eggs surrounded by the cumulus cells recovered from *CRISP1* KO females have significantly lower fertilization rates than those from wild-type mice. The research is ongoing and its ultimate aim is to develop new and safer methods of fertility regulation for men.

3.1.2 Research training grants

Research training grants were provided to the Latin American Programme for Research and Research Training in Human Reproduction (PLISSER) hosted by the IBYME in Argentina. This institute coordinates individual research-training activities of the Region of the Americas. During 2011, a total of 16 fellows were awarded grants for courses or practical training. Of all fellows, 63% were women, similar to previous years, and all training was carried out in centres located in Latin America (including in Mexico). Sixty-three per cent of the training covered basic science (biomedical), while 25% was in the social sciences and nearly 13% in clinical research. It is important to stress that in the Region of the Americas, there is a long tradition of research on new contraceptive and fertility-related technology, which is gradually giving way to investigations in the social and behavioural sciences as well as clinical and epidemiological research.

3.1.3 Implementation research

In the context of the IRP, a joint initiative with the Alliance for Health Policy and Systems Research and other WHO departments, a proposal from Guatemala won an award to carry out a 2-year cluster-randomized study in poorer districts of Guatemala. The study, which aims to reduce perinatal mortality, will test the effectiveness of an intervention package, including training in emergency obstetric care, through a standardized simulation regime ("PRONTO") and by linking traditional births attendants with the first-level facilities. Support was provided in developing the research protocol, obtaining the WHO RP2 and ethics committee approvals, and launching the study in November 2011.

3.1.4 Dissemination of research findings

In October 2011, the biannual meeting of the Association of Latin American Researchers in Human Reproduction (ALIRH) was held in Panama, with support

from the Department. The meeting aimed to share research results and their application to sexual and reproductive health programmes in the region. In conjunction with this event, a meeting was organized with 13 of the 16 directors of centres that collaborate with the Department, to discuss current trends in research methodologies and institutional needs for the Region of the Americas (see Figure 2).

The ALIRH meeting was able to convene more than 200 participants, including from Europe and North America. There were 53 panel discussions and 89 original presentations, as well as 35 posters presentations involving recent studies. The next meeting will be held in 2013 in Cancun, México.

Figure 2. A session at the ALIRH meeting in Panama.



3.2 Support to programme development – progress

3.2.1 Introduction, adaptation and implementation of WHO evidence-based guidelines and tools at country level

The Spanish-language version of the *Decision-making tool for family planning clients and providers* (DMT) and of the *Global handbook for family planning providers* continues to be highly regarded in the Region of the Americas. These materials, as well as others of importance, such as The Reproductive Health Library CD-ROM, have been distributed on different occasions during staff travel to the region, such as to Bolivia, Brazil, Costa Rica, Guatemala and Panama.

3.2.2 Support and representation in regional key initiatives and events

In 2011, the Department staff attended a number of key regional events and made presentations and interacted with regional scientists. This section summarizes selected examples.

The most pressing needs and gaps in sexual and reproductive health for the Region of the Americas were highlighted at the launch in April 2011 of the “Cegonha” initiative by President Ms Dilma Rousseff of Brazil. The initiative aims to increase access of all women of reproductive age, especially those in the more remote areas of the country, to high-quality maternal and neonatal health services.

Ethical and maternal and child health issues associated with access to infertility services as a component of universal access to reproductive health care were presented at a symposium on Ethical, Legal and Clinical Aspects of In-vitro Fertilization in July 2011 in Costa Rica. The meeting was convened in the context of the introduced restrictions on the procedures related to in vitro fertilization (IVF) in Costa Rica, which has been challenged by the Inter-American Commission on

Human Rights (IACHR). The meeting reviewed and discussed the latest procedures, including their impact on human rights in light of the input from the Department. Collaboration continued with the ministry of health, which is currently developing a national policy on sexuality. The new policy is expected to help address the needs of couples in all aspects of reproductive health, based on scientific evidence.

Contribution was also made to the Second Latin American Judicial Congress on Reproductive Rights, held in Costa Rica in November 2011. The congress aimed to review the judicial status of sexual and reproductive health of women and of adolescents, in the region. A presentation was given on the public health and regulation aspects that either facilitate or hinder reproductive rights. This created an opportunity to review barriers of access to services, thus to progress towards achievement of the MDG5b of universal access to reproductive health.

3.3 Planned activities

In terms of research capacity strengthening, in addition to ongoing capacity-strengthening activities, it is planned to identify an institution in the Central American region for the provision of an institutional development grant. The two institutions identified in 2011 in Nicaragua for this aim were not able to submit the required documentation. Follow-up on these and other candidate institutions will continue. Support to individual researchers for research capacity strengthening will also continue through the PLISSER programme.

Policy and programme support in the Region of the Americas will include further distribution and adaptation of WHO guidelines and tools and country-level support and monitoring of the country implementation of the Global Reproductive Health Strategy, as well as activities to achieve universal access to reproductive health. All these activities will be implemented by synergizing the work with regional and country-level initiatives and collaboration with partners such as the Mesoamerican initiative and UNFPA and UNICEF.

4. Research capacity strengthening and programme development in the WHO Eastern Mediterranean Region and European Region

4.1 Research capacity strengthening – progress

4.1.1 Institutional capacity strengthening

Collaborative activities continued in three institutions in three countries – Afghanistan, Lebanon and Lithuania – in the Eastern Mediterranean Region. In Europe and the Central Asian republics, the plans for research capacity-strengthening collaboration with an institute in Tajikistan could not start due to the financial constraints.

4.1.2 Research training grants and workshops

No individual training grants were awarded, but support was provided to a range of group training activities. These include those listed next.

Training on the impact of environmental pollutants on reproductive health

During 2008–2010, the Department supported a multidisciplinary training course in Alexandria University, Egypt, designed to provide participants with both theoretical bases and practical skills in the methodology of evaluating potential reproductive health risks associated with environmental exposures. In 2011, data collected during the field-training components of the previous courses were used to develop a research proposal assessing the association between women's exposure to organic persistent compounds and polycystic ovarian syndrome (PCOS).

Webcasting lectures on reproductive health topics

The Department continued to disseminate information to health professionals on reproductive health issues, via the Internet, through the telemedicine network "Réseau d'Afrique francophone en telemedicine" (RAFT), created and operated by the Geneva University Hospital in Switzerland (raft.hcuge.ch). The core activity of RAFT is the webcasting of interactive courses. These sessions place emphasis on knowledge sharing across health-care professionals, usually in the form of presentations and dialogues between experts in different countries. In 2011, four series of modules were developed and webcast: one on adolescent reproductive health (in French); one on gender (in English); one on family planning (in English); and one on psychosexual problems.

Training course of the Geneva Foundation for Medical Education and Research

The Geneva Foundation for Medical Education and Research (GFMER – a WHO collaborating centre), in partnership with WHO and other partner institutions, ran a postgraduate training course from 2003 to 2009 at WHO headquarters in Geneva, with the participation of professionals from different countries. Later, this course was converted into an online course (<http://www.gfmer.ch/SRH-Course-2011/index.htm>), with the aim of providing health practitioners with knowledge, skills and competencies in sexual and reproductive health and research, especially targeting those with limited access to information. The 2011 online course has 156 students from 40 countries and consists of five modules comprising: maternal and perinatal health; STIs and HIV/AIDS; family planning; sexual health, with a special focus on adolescent sexual and reproductive health; and community genetics, each given over 6 weeks.

Regional training workshop on perinatal surveillance techniques

The third regional training workshop supported by the Department and organized by the Lebanese National Collaborative Perinatal Neonatal Network (NCPNN) was held in April 2011 at the American University of Beirut Medical Centre (Beirut, Lebanon), and was attended by eight health-care professionals, including a neonatologist, paediatrician, obstetrician, nurses and midwives and research fellows from Kuwait, Palestine, Qatar and Syria. The objective of the workshop was to train the participants on surveillance techniques, based on the NCPNN database as a model, and introduce them to epidemiology through a general overview.

4.1.3 Implementation research

Four-country (Egypt, Lebanon, Palestine, and Syria) implementation research project on quality of care in maternity hospitals

In collaboration with the Alliance for Health Policy and Systems Research, an implementation research proposal was accepted for funding in the context of the IRP and is being coordinated by the Department. The project aims to test the feasibility of implementing surveillance of maternal near-miss as a continuous assessment of quality of care in maternity hospitals in four countries (Egypt, Lebanon, Palestine and Syria) in the region.

4.2 Support to programme development – progress

4.2.1 Policy and programme support to Afghanistan

Despite the considerable progress made in Afghanistan in health care since 2001, the gains are still modest. In addition to ongoing support in the context of the research capacity strengthening grants (see Figure 3), and following up on the joint statement of the heads of WHO, UNFPA, UNICEF, and the World Bank (known as H4), and subsequent mapping of the reproductive, maternal, and newborn health in 2009 in priority countries, RHR contributed significantly to the work of H4 partners with the Government of Afghanistan to develop a plan to accelerate progress towards the achievement of MDG4 and MDG5. This plan was further supported by the H4 technical group, including RHR staff representing WHO, for detailing and preparation for implementation.

Figure 3. Training session on the use of partograph in Afghanistan



4.2.2 Follow-up to the Regional Office for the Eastern Mediterranean regional meeting on research on adolescent reproductive health

As a follow-up to the regional workshop carried out in 2010 on “Adolescent sexual and reproductive health research: translating research findings into action”, the Department facilitated further development of country workplans, including research projects for addressing adolescent sexual and reproductive health research priorities and incorporating research findings into action.

4.2.3 Countries of Strategic Focus in the Eastern Mediterranean Region

As a follow-up to the Countries of Strategic Focus, as agreed by STAG and PCC in 2011, consultations were held with the Eastern Mediterranean Regional Office (EMRO) on potential joint activities in Afghanistan, Pakistan, and Yemen – the three Countries of Strategic Focus in the region. Four issues were highlighted for potential joint activities:

- implementing monitoring and evaluation frameworks in countries
- improving surveillance for maternal mortality (especially verbal autopsies)
- addressing issues relating to low contraceptive use: sociocultural barriers, insufficient counselling, poor access to services and unmet need for family planning
- developing reproductive health counselling tools and related training modules.

4.3 Planned activities

4.3.1 Eastern Mediterranean Region – research capacity strengthening

Two research projects supported in the context of the research capacity-strengthening activities are expected to complete technical and ethical reviews and initiate fieldwork in 2012. These relate to (i) adolescent sexual and reproductive health (see Section 4.2.2 in Tunisia, and (ii) reproductive health effects of environmental factors (see Section 4.1.2) in Egypt. In addition, Countries of Strategic Focus will continue to be a high priority in 2012, and the Department will respond jointly with the regional offices to requests from the ministries of health.

4.3.2 European region

The focused activities on research capacity strengthening and programme development were started in 2010, when the PCC decided to allocate funds specific to this region. In 2011, the Regional Advisory Panel for Research and Training in the European Region met in Copenhagen, together with observers, partners and representatives from the Department, to discuss and decide on further implementation of the WHO Global Reproductive Health Strategy (2004) and the WHO European Regional Strategy on Reproductive and Sexual Health (2001). The main issues for attention during 2012–2013 were recommended as:

- policies and strategies for improving maternal health and achieving universal access to reproductive health
- progress in implementing evidence-based, gender-responsive policies, tools and guidelines to improve sexual and reproductive health
- collaboration with international partner organizations working in the area of sexual and reproductive health and rights and strengthening partnerships
- research gaps and capacity strengthening in the European Region
- *ENTRE NOUS* – the WHO/UNFPA European magazine on sexual and reproductive health.

5. Research capacity strengthening and programme development in the South-East Asia Region and Western Pacific Region

5.1. Progress

Strengthening the research capacity of investigators from low- and middle-income countries remains a priority for the Department. At the institutional level, the focus is on upgrading infrastructural support mechanisms, while at the individual level, the emphasis is on building a critical mass of competent individuals to be able to conduct research in accordance with the highest scientific and ethical standards.

5.1.1 Strengthening institutions for research

The thrust of support is on institutions in least-developed countries, particularly those that have not yet received grants from the Department. LID grants were awarded to institutions in Bhutan, Cambodia and Myanmar. Institutions in China, Lao People's Democratic Republic, Mongolia, Sri Lanka, and Viet Nam received RMGs or SGGs. In 2011, the number of recipient institutions awarded RMGs was reduced, due to financial constraints. However, despite this reduction in funding, institutions continued to hold training workshops and publish scientific articles.

5.1.2 Strengthening human resources for research

Research training grants were awarded to mid-level researchers from both Cambodia and Lao People's Democratic Republic and also two from Myanmar. Three of the four researchers were women. One of the training grant recipients from Myanmar received the best student award for the Masters Degree Course in Population and Reproductive Health at the Institute for Population and Social Research (IPSR), Mahidol University, Bangkok, Thailand. As many women are reluctant to study abroad for prolonged periods, the training grant awarded to the staff member of the reproductive health programme in Cambodia enabled her to follow the Masters in Public Health course in her own country. A further grant was awarded to a Bhutanese researcher for a one-week training course on advance quantitative methods training at the National University of Singapore.

5.2 Programme support – progress

5.2.1 Systematic introduction, adaptation and implementation of WHO evidence-based guidelines and tools at country level

As a follow-up to the WHO-UNFPA Strategic Partnership Programme (SPP) for implementation of guidelines and tools on family planning and reproductive tract infections (RTIs) and STIs, an evaluation study was designed to assess the extent to which selected guideline recommendations have affected practice in regions of SPP focus. The evaluation project will focus on the introduction and scaling-up of the *Decision-making tool for family planning clients and providers* in Cambodia and Myanmar. The findings of the evaluation study will help to assess the long-term effects of SPP.

5.3 Planned activities

5.3.1 Research capacity strengthening

Institutional development and research training grants will be awarded to countries that are in the early phases of strengthening research capacity in the health sector, e.g. Bhutan, Cambodia and Lao People's Democratic Republic. Continuing support will be provided for ongoing studies as a means to enhance research capacity. The programme will collaborate with and complement the efforts of other partners who are undertaking capacity building in countries in the South-East Asia and Western Pacific regions.

For institutions that are receiving resource maintenance grants, the emphasis will be on conducting research that will improve reproductive health programmes and on participation in regional research initiatives. WHO collaborating centres in China, India, Singapore and Thailand will continue to be engaged in their contribution to the global research effort and will be supported to continue their role as mentors to encourage South–South collaboration.

Despite the reduction in funds from HRP, the collaborating centres/institutions continued to attract funding from both national and international sources, and as a result were able to hold seminars and training workshops and expand on publications. It is to be understood that the financial support by HRP of the centres is mandatory to ensure continuity and institutional capacity building of the least-developed countries.

5.3.2 Countries of strategic focus

Specific focus will be on improving the research and technical capacity in reproductive health in Countries of Strategic Focus in South-East Asia Region (Bangladesh, Myanmar, Nepal) and the Western Pacific Regions (Cambodia, Lao People's Democratic Republic, Viet Nam). Support will be through the provision of focused training workshops responding to country-specific needs and by identifying institutes that may benefit from LID grants for national capacity building and strengthening.

5.3.3 WHO guidelines and tools

Technical support will continue to be provided to update, adapt and implement WHO evidence-based guidelines on family planning, STIs and RTIs, maternal health and other elements of reproductive health. With respect to national-level monitoring of universal access to sexual and reproductive health, technical assistance will be extended to review and update indicators and to strengthen existing monitoring systems. The Department will continue technical collaboration with WHO regional and country offices and other partners for sexual and reproductive health programmes, but will need to leverage funds to be able to carry out activities in 2012.

Knowledge exchange and transfer (KET)

Summary

Key objectives

The Knowledge Exchange and Transfer area of work of the Department harnesses and synthesizes evidence, knowledge tools and derivatives and supports their dissemination, with *The WHO Reproductive Health Library* (RHL) being the core tool. It is also linked closely to the Department's cross-cutting working group on Knowledge Synthesis, Exchange and Implementation Research.

Major achievements



- Systematic reviews to support guideline development have been conducted and updated. WHO guidelines on postpartum haemorrhage and labour induction were published in RHL with a critical appraisal of their quality and relevance to low- and middle-income settings. In addition to the reviews supporting guidelines, Cochrane reviews on management of trichomoniasis in pregnancy and types of progestogens in combined oral contraception were updated. A non-Cochrane systematic review on caesarean section classification systems was published.
- RHL continued to be published in six languages despite severe financial constraints. RHL has become the seventh most visited WHO web site with approximately 250 000 hits per month in 2011.

1. Introduction

The Knowledge Exchange and Transfer (KET) area of work is the new name of the Mapping Best Practices group's work following STAG recommendation in 2011. The area of work covers a range of core knowledge synthesis and dissemination activities of the Department. The objectives of this area of work are: (i) to synthesize existing research findings in sexual and reproductive health in order to strengthen the evidence base for guideline development; (ii) to disseminate research summaries in a user-friendly, relevant and accessible format; (iii) to strengthen the capacity of reproductive health-care providers to practise evidence-based medicine using *The WHO Reproductive Health Library*.

2. *The WHO Reproductive Health Library* (RHL)

2.1 RHL 2011

The RHL CD-ROM was published in April 2011 with 193 Cochrane reviews. Since then the online version has been expanded with two to three new and updated titles per month. RHL continued to rise in rank within the family of WHO web sites: of the 211 WHO unique web addresses, RHL moved from rank 15th in terms



of number of sessions per month in 2010 to 7th in November 2011. In the month between 15 November and 15 December there were 242 000 visits and 795 000 page views of RHL. The most downloaded document in 2011 was the SUPPORT project summary on the effectiveness of task-shifting programmes on maternal and child health outcomes with 7800 downloads. RHL Facebook social networking site was launched in late 2011 to increase

exposure to a younger generation of sexual and reproductive health workers. RHL was presented at the Society of Obstetricians and Gynaecologists of Nigeria (SOGON) conference via Skype in November 2011.

RHL content in 2011 highlighted both emerging best practices and areas where no satisfactory intervention exists. A notable significant update was the publication of the Kangaroo mother care (KMC) review update which showed strong effect of KMC on reducing mortality. RHL includes the review with a video on setting up and implementing a KMC service. The review on the effects of lay health workers on improving maternal and infant outcomes and the SUPPORT summary received the highest number of hits and downloads in 2011.

Nine new reviews and commentaries on newborn care, three on health systems, one each on female genital mutilation and HIV/AIDS showed the broad sexual and reproductive health content of RHL in 2011.

2.1.1 RHL translations

- RHL continues to be translated into Chinese, French, Russian, Spanish and Vietnamese. Due to financial constraints in 2011 the translations have been delayed and the Arabic translation has been stopped. The time lag between the English and other language versions is currently approximately one year but in 2012 it is planned to reduce the gap.

2.2 Research synthesis

Systematic reviews on high-priority topics in maternal/perinatal health and fertility regulation were conducted and updated by RHR staff and collaborating institutions. The Department probably holds a leadership position within WHO in terms of the number of systematic reviews conducted, maintained and that feed into its normative work.

2.3 Capacity-building

2.3.1 Workshops on evidence-based decision-making in reproductive health and scientific writing

Owing to funding shortages, only one scientific writing workshop could be conducted in 2011. That too was made possible because the Khon Kaen University, which requested and covered all costs of the workshop. The workshop was conducted as part of Khon Kaen University's International Short Course on Training in Research Methodology and Biostatistics on 21–23 November 2011.

2.4 Research

2.4.1 The RHL evidence-based medicine clinically integrated e-learning project

Led by HRP, the University of Birmingham, Birmingham, United Kingdom, and seven developing country partners (Argentina, Brazil, Democratic Republic of Congo, India, Philippines, South Africa and Thailand) the cluster randomized trial to evaluate the impact of a clinically integrated e-course on knowledge gain, attitude and competency in practising evidence-based medicine at postgraduate teaching institutions has been completed. Preliminary results indicate that the facilitator-assisted learning at the clinic combined with e-learning is associated with significant increases in knowledge and skills to use evidence-based medicine. The results will be published in 2012.

3. Plans for 2012

- In 2012, a formal Facebook strategy for RHL will be developed and implemented. Facebook is increasingly used by organizations to raise awareness and increase publicity. RHL Facebook page can be found at www.facebook.com/reproductivehealthlibrary.
- In order to reduce CD-ROM dissemination costs and provide access to Internet updates in settings with limited and unreliable Internet access RHL 'apps' are being developed. This feature will be implemented in 2012 and enable automated downloads of RHL content as new content is published on personal and tablet computers.
- RHL translations will be moved to a Google Translate Toolkit platform in an effort to reduce costs of annual export and imports and more timely publishing.
- The RHL-EBM course material will be disseminated on a open-access platform as a stand-alone course with the option of facilitator-assisted learning.
- A scientific writing workshop is planned for February 2012 at the Institute of Tropical Medicine in Antwerp, Belgium, as part of the Africa Build project in which RHR is participating along with several partners.

Policy and programmatic issues

Summary

Key objectives

The key objective of the Policy and Programmatic Issues area of work is to strengthen countries' capacity for strategic planning, development, and implementation of interventions to improve the universal coverage, equitable access and the quality of reproductive health services.



Major achievements

- The Ukraine Ministry of Health and its nongovernmental partner Women's Health and Family Planning completed the first phase of the project "Comprehensive care for unwanted pregnancies", including infrastructure upgrades and training in comprehensive abortion care conducted in two provinces and one clinic in Kiev.
- The Moldova Ministry of Health and partners completed the first phase of scaling-up the pilot model of outpatient abortion care (including post-abortion contraception), extending services to 3 of the country's 12 perinatal consultation centres and 1 district-level hospital.
- A new ExpandNet/RHR guidance document entitled *Beginning with the end in mind: planning pilot projects and other programmatic research for successful scaling up* was field-tested through technical assistance to a project introducing Medabon (a combination of mifepristone and misoprostol for medical abortion) in Thailand and to a new mobile Health project in Karnataka, India.
- A Knowledge for Health (K4H) e-toolkit was developed as an additional resource to disseminate the ExpandNet/RHR guidance tools for scaling-up, targeting programme managers and others who want to ensure that scaling-up health innovations has wider impact.
- ExpandNet is a core partner with Pathfinder International, together with MSH, IntraHealth and PATH, in the new USAID "Evidence 2 Action" family planning and reproductive health project which will focus initially in 10 "Global Health Initiative" priority countries in Asia and Africa.

1. Introduction

Policy and programmatic issues work in the Department provides technical assistance and conducts research to support the delivery of sexual and reproductive health services with an emphasis on the utilization of the *WHO Strategic Approach to strengthening sexual and reproductive health policies and programmes* and the related work with ExpandNet on scaling up of health innovations. Work is carried out in collaboration with staff from other units as well as with other WHO departments and external partners.

2. The Strategic Approach

The Strategic Approach is a three-stage process to assist countries to assess their reproductive health needs and priorities, demonstrate or test the feasibility, acceptability and effectiveness of interventions responding to recommendations of the assessment and then scale up successful innovations. The focus on scaling up in the third stage led to the formation of ExpandNet, a global network of public health professionals dedicated to promoting the science and practice of scaling up.

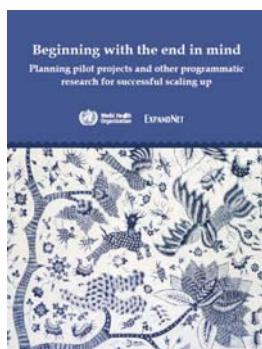
2.1 Progress and planned activities

During 2011 activities focused on supporting countries to use the Strategic Approach to address unwanted pregnancy and the prevention of unsafe abortion. The progress of activities and future plans for activities related to this area are described in detail in the report on Preventing unsafe abortion.

3. ExpandNet: supporting scaling up

3.1 Progress

ExpandNet activities initiated in 2011 are ongoing. A staff person of the Programme continues to serve as a member of the ExpandNet Secretariat. Activities of the Secretariat focus on development and dissemination of resource materials to support effective scale-up of health innovations; assisting country teams to develop scaling-up strategies and to manage the process; and dissemination and building capacity of partners to use the ExpandNet/RHR tools.



In 2011 the ExpandNet Secretariat field-tested and finalized a new ExpandNet/RHR guidance document entitled *Beginning with the end in mind: planning pilot projects and other programmatic research for successful scaling up*. The guidance was field-tested through technical assistance to a Concept Foundation project introducing Medabon for medical abortion in Thailand, as well as through support to investigators developing interventions as part of a new Wellcome Trust funded mobile health (mHealth) project in Karnataka, India. In addition an electronic toolkit on scaling up, utilizing

the full set of ExpandNet/RHR guidance documents/tools, was published on the USAID-supported K4Health web site.

ExpandNet/RHR has developed a method to assist countries to develop scaling up strategies using the “Nine Steps” guide and accompanying worksheets in a facilitated process. The WHO Department of Immunization, Vaccines and Biologicals (IVB) requested support to assist the Senegal Ministry of Health to develop a scaling-up strategy for the Optimize Project, a BMGF/WHO/PATH supported activity that is strengthening cold chain and logistics for vaccines and drugs in one province. Activities began with a two-day workshop on scaling up for representatives from multiple programmes in the Senegal Ministry of Health. This workshop was followed by a second, two-day strategy-development exercise for key project stakeholders.

A variety of other activities to build the capacity of country teams and technical support agencies have also taken place. At the request of the MacArthur Foundation in India, the Secretariat also facilitated a two-day workshop on scaling up for representatives from six nongovernmental organizations (NGOs) in India that are receiving support to implement pilot projects addressing gender, adolescent reproductive health and child health issues. Follow-up technical support to the NGOs is planned in one year’s time. A mini-workshop introducing participants to the ExpandNet/RHR tools and methods was also conducted at the Second International Family Planning Conference in Dakar.

The ExpandNet Secretariat continued to provide support to the Institute for Reproductive Health, Georgetown University, USA, for the USAID-supported Fertility Awareness Contraceptive Methods (FAM) Project. One outcome of this support was the development and submission of a paper analysing the process of scaling up the introduction of the Standard Days Method (SDM) in five countries in Africa, Asia and Latin America.

The ExpandNet Secretariat has been requested to provide technical assistance on scaling up to the Lake Victoria Basin Population, Health and Environment (PHE) project jointly funded by USAID and the MacArthur and Packard Foundations. The project will be initially implemented in Uganda and Kenya. The first project activity was a workshop for country teams on PHE programming, which included a half-day module on designing projects for scaling up success, facilitated by the Secretariat.

ExpandNet/RHR was also selected to be a core partner of Pathfinder International, together with MSH, IntraHealth and PATH, in the new USAID-supported “Evidence 2 Action” (E2A) family planning and reproductive health project which will focus initially in 10 priority countries in Asia and Africa. Following initial partner consultations, the formal project kick-off was at the end of November.

Presentations on the ExpandNet/RHR framework and tools were made to a variety of international forums including the Diffusion and Dissemination Task Force of the Bill and Melinda Gates Foundation, the First Global Implementation Conference, the Asia regional meeting on pre-exposure prophylaxis convened by UNAIDS, the Swiss Agency for Development and Cooperation, and the WHO Department of HIV/AIDS and the WHO/IVB noon seminar series.

4. Plans for 2012

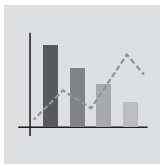
- ExpandNet/RHR will continue to support the next steps in the scaling-up process in Senegal and will offer technical assistance to another Optimize focus country – Tunisia – to identify key strategies for supporting their demonstration sites and plan for scale-up.
- Collaboration with the Implementing Best Practices Initiative (IBP) under the E2A project will continue to identify and scale up effective reproductive health practices in IBP focus countries (tentatively India, Senegal, and Zambia).

Monitoring and evaluation

Summary

Key objectives

The Department's monitoring and evaluation work aims to support monitoring progress in the achievement of global goals and targets related to sexual and reproductive health and in the implementation of the WHO *Global Reproductive Health Strategy*, through leading, carrying out and contributing to analytical work, as well as developing relevant standards and tools and strengthening capacity in their use.



Major achievements

- Analysis and publication of a systematic review reporting the first-ever estimates of global, regional and national levels and trends of stillbirths between 1995 and 2009. The review showed that there were an estimated 2.6 million (uncertainty range 2.1–3.8 million) stillbirths in 2009 worldwide and the stillbirth rate has declined by 14%, from 22.1 stillbirths per 1000 births in 1995 to 18.9 stillbirths per 1000 births in 2009.
 - Policy and programmatic implications: Antenatal care programmes should include essential elements to prevent stillbirths including screening and treatment for syphilis.
- A system for continuous updating of the maternal mortality estimation input database and schedules for biannual updates of maternal mortality levels and trends were put in place.
- A classification system for causes of maternal mortality that standardizes the attribution of cause of deaths as part of the *International Classification of Diseases and Related Health Problems* (ICD)– ICD-MM was developed.
 - *Implication of research findings for policy and programmes:*
Accurate identification of causes of maternal deaths in a standard manner is recommended for planning interventions to reduce maternal deaths.
- Opening of chapters of the ICD-11 relating to sexual and reproductive health to stakeholders, for alpha testing and review.

1. Introduction

The monitoring and evaluation area of work of the Department contributes to monitoring global progress in the achievement of internationally agreed goals and targets related to sexual and reproductive health, including the related Millennium Development Goals (MDGs), and those set at the International Conference on Population and Development (ICPD). It also monitors progress in the implementation of the WHO Global Reproductive Health Strategy. In addition, support in the measurement of sexual and reproductive health indicators is provided to regions and countries, via development of relevant standards and tools and capacity strengthening in their use.

2. Monitoring of indicators relating to sexual and reproductive health

2.1 Progress

2.1.1 Maternal mortality estimates

The Department leads a collaborative effort with the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), and The World Bank to provide up-to-date estimates of global maternal mortality levels and trends as part of monitoring progress towards MDG 5A (reducing the maternal mortality ratio by 75%, between 1990 and 2015).

In 2011, the Department carried out activities towards analysis and publication



of new maternal mortality estimates in 2012. Two meetings of the Maternal Mortality Estimation Interagency Group (MMEIG), one of which was together with its external technical advisory group (TAG), were convened and the mechanism by which future updates of estimates are processed was formalized. There was a particular focus on improving dissemination of data and methods. The estimates, methodology, input database and all statistical codes were placed online (<http://www.who.int/reproductivehealth/publications/monitoring/9789241500265/en/index.html>) and also linked to the WHO Global Health Observatory (<http://www.who.int/global-health-observatory/>).

who.int/gho/maternal_health/mortality/maternal/en/index.html). Additionally, a special web portal (Maternal Mortality Estimates Information – MME Info; <http://www.maternalmortalitydata.org>) was created to support capacity in measuring and estimating maternal mortality and dissemination of MMEIG estimates.

2.1.2 Updates of global databases of indicators of maternal and perinatal health-care coverage

Annual updates of global databases for main maternal and perinatal health indicators and their publication in the World Health Statistics (WHS) annual issues continued. These include: births attended to by a skilled health professional (MDG 5.2), antenatal care coverage (MDG 5.5), caesarean section rates, and deliveries occurring in health-care facilities.

2.1.3 Systematic reviews of epidemiological data on reproductive health conditions

To further understand the epidemiology of priority reproductive and maternal health conditions, the Department conducts epidemiological systematic reviews. In 2011, the following systematic reviews and analyses were carried out:



Worldwide prevalence of stillbirth

A systematic review and an analysis of national, regional and worldwide stillbirth rates were made for 193 WHO Member States for 2009 and trends since 1995, in collaboration with Save the Children and London School of Hygiene and Tropical Medicine (LSHTM). The finalized estimates were published in the WHS 2011, as a peer-reviewed article in *The Lancet*, and in the form of a WHO policy brief. The review showed that there were an estimated 2.6 million (uncertainty range 2.1–3.8 million) stillbirths in 2009 worldwide and the stillbirth rate has declined by 14%, from 22.1 stillbirths per 1000 births in 1995 to 18.9 stillbirths per 1000 births in 2009.

Causes of maternal deaths

A systematic review and analysis of the global cause-distribution of maternal deaths from 2003 to 2009 was undertaken. The prepared manuscript was submitted for publication in a peer-review journal.

Maternal near miss

A systematic review on the prevalence of maternal near miss was also completed. Findings were summarized in a journal article, which is currently in press in the *British Journal of Obstetrics and Gynaecology*. Near-miss rates differed, based on the method/criteria of identification and region (see Table 1). There is variation across regions, with higher rates in low- and middle-income countries. Studies using disease-specific criteria reported a higher percentage of cases, and a wider range of estimates compared to the other criteria.

Preterm birth

Preterm birth is the single largest contributor to neonatal deaths and to neonatal morbidity but the prevalence of preterm birth at national level has not been systematically assessed. In 2010, WHO published regional and global estimates of preterm birth in *The WHO Bulletin*. This review is now being updated to include national estimates, in collaboration with Save the Children, LSHTM and the Child Health Epidemiology Reference Group (CHERG).

Maternal morbidity

A new project will be initiated, using a similar process to the one followed to develop a common definition, identification criteria and standard tools for assessment of “maternal near miss”. It will aim to improve the scientific basis for defining, estimating and monitoring the magnitude of maternal morbidity. A grant for implementing the project was applied for and awarded by the Bill and Melinda Gates Foundation.

Table 1. Near-miss rates by identification criteria and region

Identification criteria	Range of near miss (%)	Number of studies (n = 81)
Disease specific	0.6–14.98	7
Management specific		
Emergency hysterectomy	0.04–0.26	34
ICU admission	0.04–4.54 (15.8) ^a	18
Organ dysfunction	0.14–2.30	
Mantel or Modified Mantel Criteria	0.14–0.92 (17.8) ^b	8
Other	2.30	1
Mixed criteria		
Disease/organ/management	0.04–4.43	7
Disease/management	0.09–3.42	7
Region ^c		
Africa	0.05–14.98	14
Asia	0.02–5.07	31
Latin America and Caribbean	0.34–4.93	9
Europe	0.04–0.79	18
North America	0.07–1.38	10
Oceania (including Australia)	1.25	1

a Near miss rate reported separately as it is an outlier in the group.

b Near miss rate reported separately as it is an outlier in the group.

c Regions have been allocated based on UN Classifications.

2.2. Planned activities for 2012–2013

- It is planned to publish maternal mortality estimates for 2010 in the WHS 2012, with release at the time of the World Health Assembly. Routine updating of the databases throughout the year will be continued.
- A working group for maternal morbidity project activities will be convened and implementation of activities for this 4-year new initiative will be started.

3. Norms, tools and standards

3.1. Progress

3.1.1 The WHO classification of deaths in pregnancy, childbirth and the puerperium: application of the ICD to maternal mortality

In response to the ongoing need for a better understanding of the underlying causes of death, the Department initiated an activity aiming to develop, test and promote the use of a standard classification system, based upon the *International Classification of Diseases and Related Health Problems* (ICD)-10 for deaths during pregnancy, childbirth and puerperium (ICD-MM). The WHO classification of deaths in childbirth, pregnancy and the puerperium rearranges existing ICD-10 codes to simplify consistent application of ICD coding rules and guidance and improve data collection and analysis. It is intended to facilitate the consistent collection, coding, analysis and interpretation of information on maternal deaths.

3.1.2 ICD revisions

The Department serves as the Secretariat to coordinate the efforts to revise Chapters 14 (Diseases of the genitourinary system) 15 (Pregnancy, childbirth and the puerperium) and 16 (Certain conditions originating in the perinatal period) of the ICD for the 11th version. The Department coordinates inputs of the individual working groups and acts as an advocate for concepts relevant to sexual and reproductive health. A meeting of the Genitourinary Reproductive Medicine (GURM) TAG was held in February 2011 to continue the workplan in conjunction with the ICD Secretariat. As of October 2011, the GURM TAG has completed updates and definitions for 975 conditions.

3.2 Planned activities for 2012–2013

- In a collaborative project with the Norwegian Institute of Public Health, ICD-MM will be further disseminated by development of an easy-to-use e-tool; incorporated into standard ICD training, by creation of a specific maternal mortality module; and incorporated into standard tools for review of maternal death.
- Coordination of revision of the chapters relating to sexual and reproductive health for the ICD-11 will continue. Beta/field-testing of the ICD-11 will be undertaken as per the ICD Secretariat workplan.

4. Support to capacity strengthening in monitoring and evaluation of reproductive health

4.1 Progress

Due to limited availability of reliable data on maternal mortality and the variety of sources from which they are generated, the analysis of maternal mortality levels and trends relies on statistical modelling and adjustments for international comparability. Since the 2010 publication of the United Nations (UN) interagency estimates, the MMEIG, in addition to the work on updating estimates, has been working with countries and regions to improve understanding of the process for estimation of maternal mortality. In this context, the MMEIG and TAG have participated in regional workshops in Thailand, Colombia, Kenya and Mexico, to exchange information on the estimation process and to strengthen capacity to improve data acquisition and reporting on maternal mortality. Communication with country-focal persons continued and support was provided to strengthen the availability and quality of data in a number of countries such as Iran and Peru.

4.2 Planned activities for 2012–2013

The Department will continue to support capacity in improving data collection and quality, through exchange of information during the country consultation, as part of the process for analysis of the new maternal mortality estimates to be released in 2012. A regional workshop organized by the UN Economic and Social Commission for Asia and the Pacific (ESCAP) will be supported in June 2012.

Health-systems research

Summary

Key objectives

The key objective of the health-systems research area of work is to build the evidence base on how the changes in sectoral policy and programme operations are improving the universal coverage of, equitable access to and quality of reproductive health services.



Major achievements

- The final wrap-up assessment was carried out of a four-year joint project with the United Nations Population Fund (UNFPA)/WHO that produced four country case-studies and a published synthesis report that explored how the evolution of trends in aid effectiveness have changed the way that WHO and UNFPA work at country level to support sexual and reproductive health.
- A three-year study was completed that investigated the impact of the Population Services International/Myanmar Sun Quality Health franchise, producing three published papers and influencing the management of the franchise.
- Baseline results from a prospective-controlled cohort study to identify the economic impact of maternal death on rural Chinese households. Highlights of the baseline survey are scheduled for publication.
- Publication of a retrospective longitudinal controlled study design in the Philippines that compared maternal-health-programme performance and outcomes in one province, where a set of health-system reforms had a fast track implementation, with other provinces in the same region, where reforms were introduced in less systematic and intensive manner. The findings indicate the positive synergistic effects of increased investments (technical and financial) across multiple health system functions to improve maternal health.
- Fieldwork began on a joint project with the Global Fund to Fight AIDS, Tuberculosis and Malaria that investigates the magnitude and impact of sexual and reproductive health expenditures from the Global Fund's HIV/AIDS grants. The ongoing project uses a case-study methodology built around expenditure-tracking methods in Ethiopia. The final results will be published in 2012.
- Impact evaluations of civil society advocacy for reproductive health were conducted in Bangladesh, the Philippines and Uganda using innovative, realist evaluation case-study methodology. A synthesis report was released and a paper is scheduled for publication in 2012.

1. Introduction

The key objective of the health-systems research area of work is to build the evidence base on how the changes in sectoral policy and programme operations are improving the universal coverage of, equitable access to and quality of reproductive health services. HRP conducts implementation research on key issues within the different health-system building blocks and examines synergies through large-scale effectiveness evaluations. During 2011, research and technical support activities have focused primarily on the health-systems functions of “governance” and “financing”.

2. Achievements in 2011

2.1 Resource mobilization for reproductive health in the new aid environment

During 2011, substantial effort was devoted to the implementation of two related multi-regional projects that are both aimed at increasing support for reproductive health. These projects worked in the nexus of aid-effectiveness issues and reproductive health advocacy to develop United Nations (UN) agencies’ (United Nations Population Fund (UNFPA) and WHO primarily) and civil society organizations’ ability to advance sexual and reproductive health in both national and local-level public health programmes.

2.1.1 Joint UNFPA/WHO Country Office Capacity-building Project

A key achievement in 2011 was the final wrap-up assessment of the 4-year project that produced four country case-studies and a synthesis report that explored how the evolution of trends in aid effectiveness have changed the way that WHO and UNFPA work at country level to support sexual and reproductive health. The results from the 2011 case-studies marked an increasingly complex aid environment, with new stakeholders and partnerships for development, and a number of mechanisms seeking to coordinate donor contributions in sectoral and national planning processes. In addition to the sector-wide approaches and poverty-reduction strategy papers that were the focus of country office engagement in 2005, there is an increasing emphasis on Millennium Development Goal (MDG) 5 in the past 6 years. While this has raised awareness of issues around maternal and newborn health, other aspects of sexual and reproductive health have been marginalized in terms of both country priorities and donor support.

2.1.2 Civil Society Organizations’ Capacity-building Project

The Secretariat began work in 2009 on building the advocacy capacity of civil society organizations (CSOs) to more effectively interact with government in support of sexual and reproductive health. During 2011, Realist Evaluation case-studies were conducted in Bangladesh, the Philippines and Uganda, to explore the impact of the CSO actions that had been supported by the project. The final reports and synthesis of the case-studies will be available in 2012. Planning was advanced for a 2012 international consultative meeting that will critically review experience with CSO advocacy for reproductive health and methodologies for assessing impact.

2.2 Working with the private sector

The Secretariat works to develop the evidence base on private-sector provision of sexual and reproductive health as a means to better advise Member States on effective public–private partnership. A particular focus of the research is on social franchise networks and demand-side financing.

2.2.1 Impact evaluation of Sun Quality Health franchise in Myanmar

The Secretariat worked with the Population Services International in Myanmar to complete a 3-year study in 2011 that evaluates the impact of this large network of private-sector providers on the health-care market. Highlights of key results under this project include the following:

- the first visit of 76.3% of clients to the clinic was after the clinic joined the network. This and other results are highly suggestive of how the franchise is increasing utilization of health services and is not simply causing a shift in the sources of care;
- the provider survey reveals that approximately one half of the Sun Quality Health members report that their earnings have increased since joining the franchise. An ongoing prospective study of case-load will provide more information on the changes in volume and income. Full results will be available in early 2012.

2.2.2 Evaluating the impact of vouchers as a demand-side financing tool on the Marie Stopes programme in Sierra Leone

The Secretariat supported researchers from Marie Stopes International to complete a study that assesses the effectiveness of vouchers for increasing the use of long-term family planning methods among the poor. A controlled, before-and-after study design compares indicators related to out-of-pocket expenditures and changes in the volume of services provided to the poor. Findings will be available in early 2012.

2.3 Equity and poverty alleviation research

The Secretariat continued to support the Peking University, Department of Maternal and Child Health to conduct a prospective controlled cohort study to identify the economic impact of maternal death on rural Chinese households. Highlights of the baseline survey were released in 2011 and full results will be released in 2012:

- the direct costs of a maternal death were significantly higher than the costs of a childbirth without a maternal death (US\$ 4119 versus \$ 370, $P < 0.001$). Some financial relief was provided by compensation from hospitals or cash gifts from family and neighbours. The median economic burden of the direct (and non-reimbursed) costs of a maternal death was quite high – 39.6% of the household's annual income, compared with 0.0% for households without a maternal death ($P < 0.001$), and was approximately four times higher than the threshold for catastrophic expense.

2.4 Evaluating health-system-wide reforms

HRP conducted a retrospective longitudinal controlled study design to compare one province where a set of health-system reforms had a fast-track

implementation with other provinces in the same region where reforms were introduced in less systematic and intensive manner.

- Gains in the facility-based delivery rate in less-intense reform provinces were between 9 and 24 percentage points – compared to the early reform site where there was a 44-percentage-point increase. Between 2006 and 2009, the actual number of maternal deaths in the early-reform site dropped from 42 (2006) to 18 (2009); the maternal mortality ratio (per 100 000 live births) dropped from 254 to 114 during the same period. Only two other provinces reported declines in maternal deaths, but of much smaller magnitude, and the remaining three provinces reported increases in maternal deaths.

2.5 Assessing the expenditures and performance impact of Global Fund investments in sexual and reproductive health – Ethiopia country case-study

The Secretariat began collaboration with the Global Fund to investigate the magnitude and impact of sexual and reproductive health expenditures from the Global Fund's HIV/AIDS grants. The ongoing project uses a case-study methodology built around methods of expenditure tracking (National Health Accounts methodology). The study findings will be available in early 2012.

3. Plans for 2012

3.1 Resource mobilization for reproductive health in the new aid environment

- Convene an international consultation meeting on civil society advocacy for reproductive health.
- Publish findings from realist evaluations of civil society advocacy work.

3.2 Working with the private sector

- Additional evaluations of social franchise private sector networks' impact on coverage and utilization of reproductive health services will be developed in Kenya and Cambodia.

3.3 Demand-side financing – effectiveness evaluations

- An evaluation of a global programme on output-based aid, a World Bank and Marie Stopes Philippines study, will examine the effectiveness of voucher programme in the Philippines that distributes pre-paid coupons for enrolment in the national health-insurance scheme.
- A comparative effectiveness evaluation research programme in Pakistan will assess the impact of single versus multipurpose vouchers for sexual and reproductive health.

3.4 Health-systems approach to providing gestational diabetes services

- Implementation research that examines system-wide support for gestational diabetes services in China, including effectiveness evaluation of updated clinical guidelines for reproductive health, will be identified and evidence will be generated to inform future decisions.

Implementing Best Practices Initiative

Summary

Key objectives

Since 1999, the Department, in collaboration with the United States Agency for International Development (USAID) and the United Nations Population Fund (UNFPA), has supported a partnership of 35 international agencies known as the Implementing Best Practice Initiative (IBP). This partnership works at the global, regional and country level to expand and sustain an effective network of collaborating international and national organizations willing to harmonize approaches, reduce duplication and support the implementation and scaling-up of best practices to improve sexual and reproductive health.



Major achievements

- The IBP Knowledge Gateway hosted global discussion forums reaching close to 3000 people in most countries of the world. Forum topics included emergency contraception, managing health supply chains, developing an African Agenda for Reproductive Health, and issues leading up to the International Conference on Family Planning held in Senegal and a Women Deliver forum on the Millennium Development Goals.
- The IBP secretariat, in collaboration with the WHO department working on disability, facilitated a session at the regional meeting organized in collaboration with the Regional Office for South-East Asia in Hua Hin, Thailand. After the meeting, the Myanmar country team organized a national workshop to introduce the *World report on disability*.
- As a follow-up to the introduction of the *Guide for fostering change to scale up effective practices*, significant progress was made in implementing an action plan developed by the Zimbabwe team, which offers youth-friendly services to nursing students and is currently being scaled-up to other schools. Preliminary results show a dramatic decrease in unwanted pregnancies and abortions.
- IBP partners hosted six interactive “knowledge-to-action” sessions addressing major areas for action to improve demand for, access to and quality of family planning services as well as an auxiliary session to introduce participants to IBP at the International Family Planning Conference, Dakar, Senegal.
- A new strategic five-year plan for IBP was developed with input and consensus from all 35 partners.
- A peer-reviewed article was published on an evaluation of virtual discussion forums held on the IBP Knowledge Gateway, and its evolution over six years. The paper also included next steps for improving the evaluation of future virtual discussions.

1. Introduction

For over a decade, the Implementing Best Practices (IBP) Initiative has created and implemented a strategy at the global, regional and country levels, designed to foster collaboration, reduce duplication and harmonize approaches to support the identification, implementation and scaling-up of effective technical and managerial practices to improve reproductive health. By 2011, this partnership had grown to 35 members. During 2011, IBP partners worked together to develop a new 5-year strategy. This new strategy, guided by a results framework that aims to increase the scale-up of effective practices in reproductive health, aims to strengthen the ability and commitment of IBP partners to actively work towards expected results, to support sustained collaboration at the country level, to focus support on five focus countries and to enhance knowledge sharing.

2. Fostering change to scale-up effective practices

At the heart of IBP's work in implementation and scale-up of effective practices are the principles of managing change. What has often been missing in change efforts – and what the related IBP Guide for fostering change to scale up effective practices was designed to reinforce – is the synergy between using proven change-management practices and the introduction, adaptation, use, and scale-up of clinical or programme practices.

2.1 Progress

2.1.1 Follow-up of countries trained in fostering change

A review of countries that have been trained in fostering change in the East Central and Southern African (ECSA) region was completed over the last year. Several countries have completed their action plans. Among these, Zimbabwe has demonstrated success. To combat a high level of unwanted pregnancies among the nursing students in the main Harare nursing school, the Zimbabwe team identified student champions and set up youth-friendly sexual and reproductive health services within the main nursing school. Preliminary results show a dramatic decrease in unwanted pregnancies and abortions. The programme is now being scaled-up in three other Harare nursing schools and planning is under way for expansion of this model throughout the country.

The Afghanistan country team, in collaboration with the staff of the Regional Office for the Eastern Mediterranean, finalized a plan for the scaling-up of intrauterine device (IUD) provision.

2.1.2 New training in fostering change to scale-up effective services in the Regional Office for South-East Asia

IBP partners assisted the WHO Regional Office for South-East Asia to conduct a workshop in Hua Hin, Thailand, in July 2011, to enhance skills for countries in fostering change to scale-up. A second workshop organized by WHO Regional Office for South-East Asia in Colombo, Sri Lanka, in September 2011, to advance family planning in the region, produced specific family planning plans.

2.2 Planned activities

2.2.1 Follow-up to regional training courses in fostering change

Selected countries in the ECSA region, already trained in the first two phases of fostering change, will now be supported in the scaling-up process. Kenya, Swaziland, the United Republic of Tanzania, Zambia (which will be an IBP focus country) and Zimbabwe will be among those to take part in this ECSA health community training.

Support will be provided to Afghanistan in using the fostering change guide to assist in scaling-up the provision of IUDs.

India has been selected as an IBP focus country. Plans are under way to support an action plan to scale-up effective practices, (e.g. postpartum IUD provision), through working with key partners, including the local government (Uttar Pradesh).

3. Knowledge Gateway

The technology platform that powers the IBP Knowledge Gateway is being reached by over 350 000 people around the world. The technology is being shared by other organizations and agencies, enabling them to own, customize and manage their own global committees and subcommunities of practice.

3.1 Progress

3.1.1 Knowledge-management working groups

Four IBP knowledge-management task teams have been working on the following assignments: developing elevator speeches that summarize the value added of knowledge management to an organization, developing frameworks for monitoring and evaluation of knowledge-management strategies, publication of the knowledge-management tool kit and conducting a steering committee for IBP knowledge-management activities

3.1.2 Discussion forums

The IBP Knowledge Gateway hosts global discussion forums and the formation of knowledge networks across the United Nations and other international organizations. This year several forums took place.

- *Emergency contraception* (March 2011): a total of 1124 people representing 106 countries registered for the discussion. During the forum, 102 different people posted contributions from 42 countries.
- *African Agenda for Reproductive Health* (July 2011): a total of 426 people registered for the discussion, with a total of 95 contributions from 22 countries.
- *On the Road to Dakar* (July to October 2011): three discussion themes (progress since the 2009 Kampala family planning meeting, youth and contraceptive security) in both French and English led up to the November 2011 International Conference on Family Planning. Almost 700 participants from over 70 countries participated.
- *Future of the MDGs* (Millennium Development Goals; November 2011): Women Deliver facilitated this online discussion forum with assistance from IBP. Nearly 500 participants from 77 countries participated.

3.2 Planned activities

It is planned to expand the use of the Knowledge Gateway with a focus on training consortium member staff. Under the new strategy, partners will be trained in the use of the Knowledge Gateway, facilitation of virtual discussion forums and creation and maintenance of communities of practice.

4. Disability and sexual and reproductive health

4.1 Progress

The Guidance note for sexual and reproductive health and persons with disabilities developed by WHO and UNFPA was introduced at the WHO/SEARO technical update meeting in Hua Hin, Thailand in July 2011. All countries identified short- and long-term actions to improve access to people with disabilities. A national follow-up workshop was held in November 2011 by the Myanmar team, to introduce the *World report on disability*.

4.2. Planned activities

Countries requesting assistance in training or developing a sexual and reproductive health and disability strategy will be supported. A paper discussing the different levels of integration and successful models will be published in 2012.

Reproductive health essential medicines

Summary

Key objectives

The Department's Reproductive Health Essential Medicines (RHEM) project has contributed to laying the groundwork for more effective public-sector procurement of good-quality reproductive health medicines, including contraceptives and commodities. In 2011, it continued to play a pivotal role in the development of normative guidance and capacity building needed to support the production and procurement of quality RHEM products. However, activities have been constrained due to the paucity of funding available, which may threaten further the ability to implement the plans for 2012–2013.

Major achievements



- Technical papers were prepared on:
 - analysis of issues that must be considered when establishing the general, safety, efficacy and performance criteria for the female condom;
 - guidance for the manufacturers to enable submission of product dossiers and manufacturing site master files as part of the prequalification process;
 - scientific and technical requirements for review of the female condom, to create a generic specification to support a bulk procurement and guidance document on how to undertake a clinical evaluation of the female condom.

PPI: Female condom procurement processes should use the specified criteria for bulk procurement.

- The WHO/United Nations Population Fund (UNFPA)/Family Health International (FHI 360) Female Condom Technical Review Committee was convened.
- A draft specification for cryotherapy equipment and a paper detailing the safe management of gases were prepared.
- A specification and advisory note to support the procurement of cycle beads, a visual aid for the Standard Days Method were prepared.
- In collaboration with partners, preparation and ethical and technical review of a framework to undertake the clinical evaluation, in South Africa and China, of three female condoms was supported.
- An international conference on professionalizing logisticians was convened, in collaboration with major bulk procurement agencies, with over 120 participants.

1. Introduction

Access to reproductive health essential medicines is acknowledged as the missing link in many reproductive health programmes, as evidenced by many countries still challenged with ensuring commodity security. The Department has made a major contribution in the context of the Reproductive Health Essential Medicines (RHEM) project. An essential component of this success is that activities have been undertaken in collaboration with a diverse range of partners and collaborating organizations and agencies from both the public and private sectors, but in particular with the United Nations Population Fund (UNFPA), FHI 360 (formerly Family Health International) and the Reproductive Health Supplies Coalition (RHSC).

2. Highlights of selected key activities

The Department played a key role in developing the normative guidance to support a diverse range of stakeholders in bulk procurement and their policy, and programmatic counterparts in ministries of health, national regulatory authorities, national testing laboratories and service delivery in activities associated with improving access to and the use of quality-assured reproductive health essential medicines.

2.1 Female condoms

There is still only one female condom approved for bulk procurement. Although other products are emerging onto the market, a number of problems associated with the clinical evaluation and quality assurance of these products has emerged in the process. In 2011, the Department convened two female condom technical review meetings in collaboration with UNFPA and FHI and prepared four technical and scientific background papers that could be used as a basis for discussing and reaching consensus on essential issues. The outcome of these meetings included:

- the formulation of draft generic specifications for female condoms
- a paper identifying technical inaccuracies included in the draft international standard for female condoms
- a revision of the review criteria for site master files and product dossiers
- nine confidential reports identifying technical issues manufacturers must address in order to participate in the WHO/UNFPA prequalification scheme
- a review and proposed revision of the prequalification scheme.

Following publication of the meeting reports, UNFPA used the outcomes to initiate the implementation of a prequalification scheme for female condoms and to prepare a manual detailing the specification and requirements for a prequalification scheme. Financial constraints limited WHO's participation in this process. Three female condoms have been accepted in principle for prequalification, based on the outcome of a response to technical issues, factory inspections and clinical evaluation.

2.1.1 Clinical evaluation of three female condoms

In the past, manufacturers have made a number of errors when undertaking clinical evaluation of their products, which has adversely affected getting these products onto the market. To expedite the effective evaluation of these products,

the RHEM project has worked with partners to develop an evaluation framework that has been technically and ethically reviewed and approved by the WHO Technical and Ethics Review Committees. The study has been implemented in two study sites located in South Africa and China. A guidance document on how to undertake the clinical evaluation of female condoms has been prepared and peer reviewed, and it is planned to submit it for publication in 2012.

2.2 Cryotherapy specification for the management and prevention of cervical cancer

Development of the cryotherapy specification for the management and prevention of cervical cancer has been challenging, as it needs to examine and specify a variety of aspects of cryotherapy. In 2011, guidance was developed addressing (i) the challenges with cryotherapy equipment and gases; (ii) the technical basis paper for cryotherapy equipment for the treatment of precancerous lesions; (iii) generic specification; (iv) advice and guidance on the safe use of gas supplies; and (v) advice and guidance on cleaning and disinfection.

2.3 The correct additional lubricant to bulk procure with male and female condoms

The Department was asked to specify the correct type of additional lubricant for male latex condoms and female condoms that can be bulk procured, if justified by programmatic requirements. This is a complex issue, as it deals with lubricants required for both vaginal and anal sexual intercourse and there are differing requirements that relate to safety and effectiveness issues that must be taken into consideration. A guidance document has been prepared, based on a review of available evidence and a consultative process with experts in microbicides. The document has been peer reviewed by a broad audience of interested parties and experts in this field from both the private and public sector, and submitted for publication.

2.4 Specification for cycle beads to support the use of the standard days method

An advisory note specifying the visual aid that supports the use of cycle beads method for family planning using the standard days method (SDM) was prepared, to support the bulk procurement of this method.

3. Plans for 2012–2013

Improved access to and use of reproductive health essential medicines and commodities requires close attention and unwavering support across a spectrum of complex activities, each requiring specialized expertise. In 2012–2013, it is planned to contribute to the Commission on Commodities for Mothers and Children Health, which is in the process of being launched by the United Nations Children's Fund (UNICEF), to support implementation of the UN Secretary-General Global Strategy for Women's and Children's Health. RHR will conduct case-studies that explore key bottlenecks for availability and use of reproductive health essential medicines in a range of country contexts, to inform the discussions of the commission. Follow-up actions for the relevant recommendations of the commission will also be carried out. Other planned activities are as follows:

- to complete, publish and disseminate effectively normative guidance on the use of lubricants, cryotherapy specifications and guidance on the safe use of gases, female condom specification and the prequalification scheme
- to respond to other priorities identified by the reproductive health community, such as rapid diagnostics for cervical cancer
- to work with UNFPA to accelerate and sustain prequalification, to increase the number of manufacturers prequalified
- to contribute to building capacity of the national regulatory authorities and laboratories to work with international standards, support the prequalification process and apply a standardized regulatory process to reproductive health essential medicines and commodities in both public and private-sector procurement.

Knowledge Synthesis and Exchange & Implementation Research

Summary

Key objectives

The key objectives of the work of the Department's working group on Knowledge Synthesis and Exchange & Implementation Research (KSE & IR) are to coordinate the Department's work linking relevant activities within the thematic areas (such as maternal and perinatal health) to implementation efforts with emphasis on the "Knowledge-to-Action" framework adopted by the Department and on improving the knowledge and science of various methodological aspects of knowledge transfer, exchange and implementation research.

In 2011, important KSE & IR activities were initiated by the Department. By focusing on research and capacity strengthening in both conducting research and its methodology at the country level and within WHO, the Department established its leadership in this field. The breadth and depth of the Department's KSE & IR portfolio can be seen in individual thematic areas and the Research Capacity Strengthening reports.

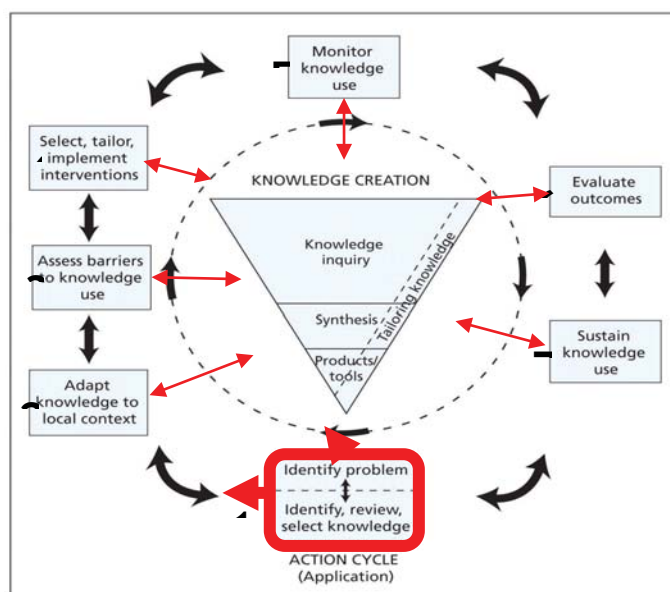


Major achievements

- The Programme is managing implementation research projects that were shortlisted following a competitive process launched within the Implementation Research Platform. A common feature of these projects is the focus on reducing maternal and perinatal mortality and improving the quality of care.
- Several other implementation research projects are being managed by the thematic areas including an antenatal care trial focusing on improving supply-chain management and implementing counselling to reduce violence against women in a cluster randomized trial.
- Thirteen systematic reviews are being supported that assess results from implementation research studies in selected areas.

Introduction

In 2010 the “Knowledge Synthesis and Exchange” working group was merged with the Department’s “Implementation Research” working group.



The working group aims to coordinate the Department’s work linking relevant activities within the thematic areas (such as maternal and perinatal health) to implementation efforts with emphasis on the “Knowledge-to-Action” framework adopted by the Department. This framework notes different steps in knowledge transfer and emphasizes the need to address the barriers and facilitators at each step.

2. Progress

2.1 Working group activities

Following the definition of “implementation research” used in the peer-reviewed publication authored by several WHO department directors, a short document highlighting some key IR activities of the Department was issued. During 2011 several departmental meetings and WHO-wide seminars were organized. These included technical discussions about incorporating evidence from qualitative research in guidelines to more organizational issues such as ways of improving and streamlining the Department’s normative work across thematic areas.



2.2 Implementation Research Platform (IRP)

The IRP is collaborative project between the Programme and The Alliance for Health Policy and Systems Research, the WHO Department of Maternal, Newborn, Child and Adolescent Health (MCA), and the Special Programme for Research and Training in Tropical Diseases (TDR). In 2011, the following activities were conducted in collaboration with other departments in IRP and some were led by HRP as indicated.

2.2.1 Primary research funding and monitoring

Following a call for letters of intent in the second half of 2010 seven projects were funded. HRP is managing three of these projects.

- *Middle East Alliance*: Assessing the acceptability, feasibility and effectiveness of a strategy for improving the quality and safety of maternal/neonatal health care in the health-system contexts of four urban hospitals in Egypt, Lebanon, West Bank and Gaza Strip, and Syria. Currently, the formative phase is ongoing.
- *Uganda*: Innovations for increasing access to integrated safe delivery, PMTCT and newborn care in rural Uganda. This project is evaluating scaling-up of successful pilots implemented on improving community care through lay health workers, facilitating transfer through vouchers and improving facility quality of care through training in South-east Uganda.
- *Guatemala*: A matched-pair cluster-randomized implementation study to measure the effectiveness of an intervention package aiming to decrease perinatal mortality and increase institution-based obstetric care among indigenous populations in Guatemala.

All three projects have started and currently conducting the formative phase of the research.

2.2.2 Evidence synthesis initiative

The Department prepared the call for the letters of intent and reviewed the applications together with other partners. Thirteen systematic reviews were funded in March 2011. Three of the systematic reviews relate to the assessment of barriers and facilitators of task-shifting programmes between doctors and midwives, doctors and nurses and to lay health workers.

2.2.3 Leveraged funding initiative

The Department co-leads this activity together with the MCA Department. The objectives are: to convene workshops in selected high-burden countries in collaboration with the ministries of health to identify IR priorities using the Child Health and Nutrition Research Initiative (CHNRI) methodology; to initiate a ministry of health-led process to invite proposals; to support protocol development of selected projects; and to facilitate fundraising for the research. The priority-setting workshops were conducted in DRC, Ethiopia, Guinea Conakry, Mozambique, Nigeria and Zambia. The MCA Department conducted workshops in Cameroon, Egypt, India, Kenya, and Pakistan. The results are currently being analysed and will be published in peer-reviewed journals. The main objective in these workshops was to bring together researchers, policy-makers and programme managers so that the research priorities reflect the collective views of the stakeholders. The next step in this process is for groups to submit letters of intent to the ministry of health. Then, a shortlist of selected proposals will be developed further through workshops that will include researchers, policy-makers and programme managers. In this way, we aim to develop protocols that will be applicable, sustainable and feasible.

The IRP partners also met on a one-day retreat to plan for future activities.

2.3 GREAT project related activities

2.3.1 Kosovo maternal health guideline project

In collaboration with the WHO Country Office and the University of Toronto, a survey was conducted among policy-makers and practitioners in Kosovo about their knowledge of and reported use of WHO guidelines related to maternal and perinatal health. The survey is currently being analysed and will be followed by a meeting to discuss the survey findings and barriers to the adaptation and use of guidelines in Kosovo in 2012.

2.3.2 Guideline prioritization in maternal and perinatal health

As part of the GREAT project, a Knowledge Gateway discussion was conducted among more than 1000 participants in late 2010. The discussion was followed by a survey of WHO country offices, ministries of health and individuals participating in the electronic discussion forum. The results were published in a peer-reviewed journal in 2011.

2.3.3 Survey to evaluate a tool designed to support policy-makers' and managers' use of evidence in health-system decisions

The way recommendations are developed and worded in clinical guidelines is often difficult to apply to health systems and policy-related recommendations. In a survey, including 10 policy-makers from 14 countries (Cameroon, Canada, Ethiopia, Finland, Germany, Italy, Mozambique, Netherlands, Norway, South Africa, Spain, Uganda, United Kingdom, and Zambia) and WHO, we aim to develop and evaluate communication strategies to support evidence-informed decisions by building on the work of the GRADE Working Group (www.gradeworkinggroup.org) and the Cochrane Applicability and Recommendations Methods Group (www.armg.cochrane.org). The study is conducted as part of the DECIDE (Developing and Evaluating Communication Strategies to Support Informed Decisions and Practice Based on Evidence) project. DECIDE (www.decide-collaboration.eu) is a collaborative research project funded by the European Commission's Seventh Framework Programme. The project's objective is to improve the dissemination of evidence-based recommendations by building on the work of the GRADE Working Group to develop and evaluate methods that address the targeted dissemination of guidelines.

As part of this project we are developing strategies for communicating evidence to inform decisions about health systems. The purpose of this survey of a diverse sample of policy-makers, managers and other stakeholders is to obtain their perceptions regarding a decision-making tool that we have developed for going from evidence to decisions.

3. Planned activities

3.1 KSE & IR working group

- The working group will continue with seminars and discussions on methodological and organizational issues related to advancing implementation research.
- The progress with various IRP projects will also be discussed to learn from the experiences.

3.2 Implementation Research Platform

- IRP activities will continue with primary research projects starting the implementation phase. The leveraged funding initiative will also continue with proposal-development workshops depending on the responses received from the countries. The Department will work with the IRP partners and the national authorities in fundraising for protocols developed within the leveraged funding initiative.

3.3 GREAT project

Together with the University of Toronto, country partners in Argentina, Kenya, South Africa, and Thailand, the Department submitted a grant proposal to establish a GREAT Global Knowledge Network. The objectives include:

1. Developing an interdisciplinary collaborative network of partners and stakeholders (including clinicians, health-care managers, researchers, and members of the public) interested in improving maternal and infant health in low- and middle-income countries through effective knowledge transfer.
2. Developing a research agenda relevant to the needs of partners in low- and middle- income countries and advancing the science and practice of knowledge transfer through understanding how to adapt, implement and evaluate guidelines that span community-level and hospital-based care, improvements in access to care and in the referral process in low- and middle-income countries.
3. 3. Building capacity in the science and practice of knowledge transfer across relevant stakeholder groups in low- and middle-income countries.

QUESTIONS TO STAG

1. Considering the knowledge-to-action framework steps and the research domains within, what would be STAG's advice on areas where the Programme should put more emphasis?

Innovations to improve sexual and reproductive health

Summary

Key objectives

For 40 years, RHR has been a champion of innovation in the field of sexual and reproductive health, contributing to enormous gains in health among populations globally. The work of the Department supporting innovations aims to:

- foster the development and validation of innovations that focus on improving sexual and reproductive health in populations with the greatest need;
- develop and support mechanisms that improve the awareness, availability, and use of innovations that focus on improving sexual and reproductive health; support research that aims to understand and overcome barriers that prevent innovations from achieving widespread adoption.

Major achievements

- RHR was awarded a Wellcome Trust grant to develop, assess the impact of, and scale a mobile technologies for health (“mHealth”) package for rural health workers in India, in support of the Ministry of Health National Rural Health Mission.
- RHR was awarded the “Saving Lives at Birth” Grand Challenge award for the new low-cost Odon device to aid safe delivery during prolonged labour; RHR also co-developed the mCheck project, focusing on empowering clients to recognize danger signs during the seven days postpartum, which was a Grand Challenge project finalist.
- RHR was awarded a three-year United Nations Foundation grant to lead research focused on scaling-up 25 “mHealth” projects awarded catalytic grants from the United Nations Secretary-General’s Innovations Working Group.



1. Introduction

Reproductive health innovations can help to reduce barriers to accessing reproductive health services; bring improved quality or reduced cost, making critical services or timely information more accessible; and/or improve the efficiencies and effectiveness of health-care providers. Fostering innovation is a core principle driving technical work in the Department – discovering, developing, testing and promoting improved approaches that collectively strengthen the potential for achieving universal access to reproductive health.

2. Progress

2.1 Activities related to innovation

2.1.1 RHR/HRP’s role in support of innovations

Innovations can be defined as actions that deliver something new or make changes in something established that bring improvement, especially by introducing new methods, ideas or products. In other words, innovation means “doing things better and doing better things”. RHR plays an important and diverse role in fostering

innovations across the lifespan (see Figure 1), from early conceptual stages to wide-scale adoption, and at every stage in between. Related to innovations, the Department actively:

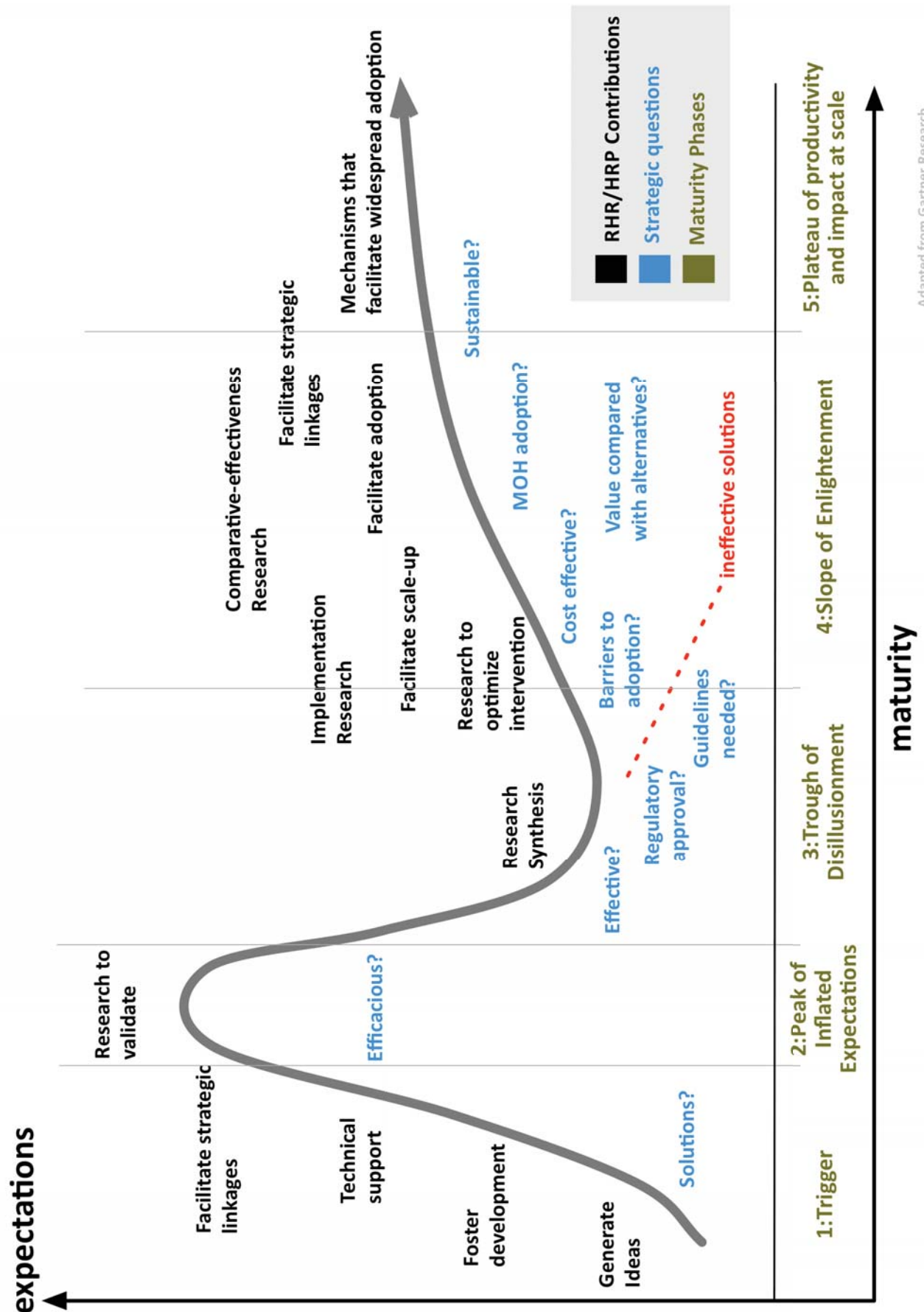
- *generates the ideas* behind the innovation (makes discoveries, conducts research, etc.) and helps to articulate them
- *fosters the development* of innovative solutions (policies, products, services, methods, analyses, technology, analysis approaches, financial mechanisms, ways of delivering solutions, etc.), by providing financial or technical support to others' efforts
- provides resources for *conducting research that validates* innovations
- facilitates *strategic linkages* between innovators, implementers, donors, researchers, and decision-makers, to catalyse new opportunities and collaborations that add value
- *synthesizes research* related to a domain of innovation work, in preparation for guidelines development
- supports efforts to ensure effectiveness and strengthen value through *optimization*
- *develops tools or approaches* that facilitate widespread adoption of the innovation into common practice (e.g. development of guidelines, mechanisms to ensure widespread deployment, new costing models, communication approaches, platforms to inform people about the innovation)
- *leverages innovative approaches* to achieve goals articulated in the WHO Global Reproductive Health Strategy.

Innovation life-cycle

As represented in Figure 1, RHR variously contributes to the development, validation, optimization and widespread adoption of SRH innovations along an innovations life-cycle.¹ In this version of the cycle, the *phase 1* "trigger" includes identifying needs, generating ideas and developing innovative solutions that overcome identified sexual and reproductive health challenges. Here, there is a rapid increase in the level of expectations from stakeholders, in which questions of efficacy under idealized circumstances are raised. During *phase 2*, RHR supports research that aims to test, and ideally validate these innovations. In the third phase, innovations face an uncertain future as stakeholders typically question the strength and generalizability of evidence, balanced against the benefits and possible risks and operational and financial implications of adopting the innovation. During the "trough of disillusionment" of *phase 3*, concerted effort is needed to ensure that an innovation meets the potentially inflated expectations and needs of various stakeholders, and that the body of related research is synthesized in a manner that is valued (e.g. guideline). Optimization of the innovation may be necessary, as is collection of evidence that addresses various stakeholder needs, including those of ministries of health, intended adopters and beneficiaries of the innovation, and donors. During the "slope of enlightenment" *phase 4*, various public and private-sector institutions are supported by RHR/HRP to adopt and experiment with the innovation, conducting research and optimizing it to their particular needs and circumstances, assessing the practical implications

1. Fenn J. *When to leap on the hype cycle*. Gartner Group, 1995 (http://www.gartner.com/DisplayDocument?doc_cd=22229&ref=g_fromdoc)

Figure 1. Life-cycle of innovations in sexual and reproductive health, with illustrations of RHR contributions to fostering development, validating and supporting their adoption.



(including costs–benefits relative to existing or alternative practices) of deploying the innovation, which in turn strengthens uptake. In *phase 5*, RHR leverages various partners and RHR-developed mechanisms to facilitate wide-scale adoption and deployment of the innovation, supporting its transition to “best practice” and widely practised standard of care.

2.1.2 Current status of sexual and reproductive health innovations

RHR is engaged in fostering a range of innovations. Some illustrative examples and the role of RHR in fostering the innovation are detailed in Appendix 1: 2011 Table of RHR/HRP innovations by category. Table 1 presents a framework of broad categories for grouping innovations.

Table 1. Categories of innovations

Category	Description
A. Organizing delivery	Programmes that reduce fragmentation and informality of health-care delivery and that may enable financing, regulation, training and new business models. Innovations include: franchising, integration of intervention-delivery systems, policy changes, etc.
B. Financing care	Programmes that mobilize funds for health care and align provider incentives to increase access for targeted groups of patients or to support select health interventions. Innovations include: vouchers, micro-insurance, cross-subsidization, etc.
C. Regulating performance	Programmes that set standards and enforce or incentivize higher-quality care or increased access for target populations. Innovations include: pay for performance, policies or regulatory mechanisms that incentivize quality and provide consumer protection, etc.
D. Changing behaviours	Programmes designed to change the behaviour of individuals involved in health-care transactions by educating patients about what kind of care to seek, or providers about how to deliver higher-quality services. Innovations include: provider training, social marketing, etc.
E. Enhancing processes	Processes, technologies, or products that facilitate increased efficiency, lower costs, higher quality, and/or improved access. Innovations include: new operational processes, mobile health (“mHealth”), new medical products, supply-chain enhancements, etc.
F. Methodologies and tools	New methodologies or tools that provide new insights or strengthen ability to collect, analyse or synthesize data for stakeholders.
G. Facilitating adoption	Mechanisms that facilitate the expansion of innovations from concept and pilot to validated, optimized, sustainable solutions that are adopted widely and demonstrate improvements at scale.

Adapted from: Center for Health Market Innovations. *Center for Health Market Innovations. Highlights: 2011*, Washington DC. Results for Development Institute, 2011 <http://healthmarketinnovations.org/sites/healthmarketinnovations.org/files/CHMI-report-120211-digital.pdf>.

details the current status of individual sexual and reproductive health innovations (innovation descriptions are supplied in Appendix 1) and the focus of RHR/HRP contributions to variously support the development, research validation, synthesis of relevant research, optimization, and facilitation towards wide-scale adoption and deployment.

The role of different types of evidence for stakeholders, and implications for the innovation

Different stakeholders, whether funders, intended users or beneficiaries, or partners, have different priorities that they use to assess their interest in supporting, adopting, or promoting the use of a particular innovation. Evidence thresholds may need to be achieved in order to ensure that different stakeholders support an innovation. In Table 2, illustrative types of evidence are detailed for each relevant stakeholder. To ensure that an innovation becomes viable, by moving along the life-cycle towards wide-scale adoption, RHR/HRP takes into account these information needs, strategic questions (see Figure 1), and the priorities of the various stakeholders and supports research and technical assistance.

Table 2. Illustrative value of evidence related to innovations by stakeholder

Stakeholder	Illustrative examples	Evidence required	Key decision
Donors	DFID, Rockefeller Foundation, Bill and Melinda Gates Foundation, etc.	Potential for health outcome or population benefit; sustainability	Investment, promotion
Private sector	Pharmaceutical companies	Potential return on investment	Investment
Regulator	FDA	Risk, safety versus benefit	Market authorization
Medical profession	WHO	Effectiveness, clinical outcome	Creation of clinical guidelines; best practices established
Payers	Ministries of health, insurance companies	Value for money; system benefits; relevance to government goals	Reimbursement; eligibility for treatment; budget line
Health-care providers	Health workers, nongovernmental organizations	Clinical outcome; cost-effectiveness	Adoption of innovations
Patients/end-users	Family members	Usability; perceived benefit; preference	Utilization of innovation; personal investment

DFID, Department for International Development; FDA, Food and Drug Administration.

2.1.3 Mechanisms to support and facilitate scale

When delivered at scale, innovations can accelerate progress towards achieving national and global reproductive health goals, including MDG 5. New medical devices, rapid diagnostic tests, mobile technologies for health ("mHealth"), financial incentives, new processes and policies, etc.: all manner of pioneering solutions are creating and delivering value by simplifying the complex, improving accessibility or affordability, and/or delivering quality improvements in health services to populations. Importantly, innovative programming coupled with

enabling policy and economic environments can drive successful outcomes and improved reproductive health.²

Included in Figure 2 are specific RHR/HRP mechanisms, Implementing Best Practice (IBP) Knowledge Gateway (no. 21), the HRP Innovations Catalyst research mechanism (no. 22), WHO Implementation Research Platform (no. 23), *WHO Reproductive Health Library* (no. 24), and ExpandNet (no. 25) that explicitly aim to facilitate the process of ensuring that an innovation is developed, and research is conducted that supports the innovation, systematically moving from idea to pilot, to evidence-informed innovative solution, to support and adoption by multiple stakeholders, to ensure scaled deployment and impact on sexual and reproductive health. Collaborating with stakeholders including ministries of health, professional organizations, and health workers themselves is critical to ensuring appropriateness and wide-scale application of innovations at country-level. Descriptions of each of these mechanisms are included in Appendix 1.

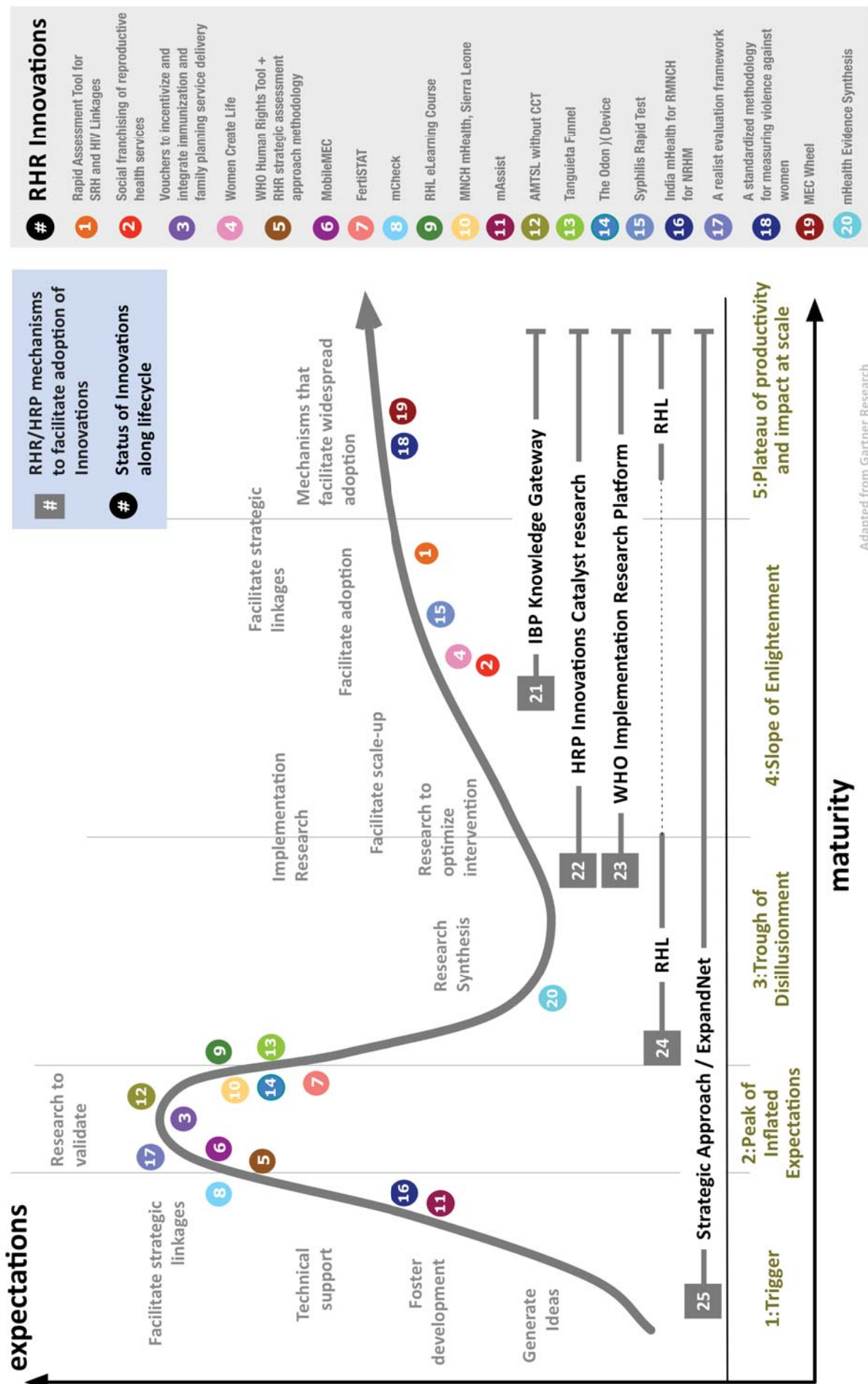
For reproductive health, the deployment of creative micro-financing mechanisms including micro-credit, conditional cash transfers, health voucher schemes, and removal of user fees have already impacted on access, empowerment, uptake of services including family planning and antenatal care, and birth outcomes. Other mechanisms, such as task shifting, which expands the roles and functions of lower-level health-care providers, have greatly improved population access to family planning and maternal health services. In the scale-up phase, research approaches that inform adaptation to local settings and operational improvements, as well as document the additional value resulting from the innovation (performance improvements, health outcomes, etc.) are included in the work of the Department.

The rapid increase in the affordability and use of information technology in low-resource settings has made possible the availability of information content, data exchange, and communication, which has hitherto been difficult, if not impossible, for populations in resource-poor settings. Internet-based communities of practice such as the IBP Knowledge Gateway facilitate virtual knowledge networking in and across countries, improving access to resource materials and tools, to both inform and improve awareness of innovations and enhance practice (see Figure 2; no. 21).

The use of mobile technologies for health ("mHealth") has emerged as a massive democratizing innovation with huge potential to improve health. Mobile phone access is becoming ubiquitous, radically expanding people's ability to communicate and exchange information – providers and patients, alike. Mobile text-messaging, data exchange, audio and video capacities are being harnessed to improve communication, reduce obstacles of distance, and enhance quality of care, effectively extending the reach of primary health-care services. Additionally, countries are deploying mHealth tools in the service of critical health needs as diverse as vital registration, client tracking, maintaining medicine stocks, remote diagnostics, point-of-care support and health promotion. RHR is playing a role in focusing mHealth on sexual and reproductive health, fostering development (Figure 2, nos. 6, 8, 10, 11, 16), coordinating research (Figure 2, nos. 11, 16),

2. Global Campaign for the Health Millennium Development Goals, Thematic Report: *Innovating for every woman, every child*. Oslo, Ministry of Foreign Affairs, Norway, 2011 (http://www.norad.no/en/thematic-areas/health-and-aids/maternal-child-and-womens-health/innovation-report-2011/_attachment/383124?_download=true&_ts=13259c26975, accessed 19 January 2012).

Figure 2. Status of sexual and reproductive health innovations and focus of RHR/HRP mechanisms to facilitate widespread adoption.



AMTSL, active management of the third stage of labour; CCT, controlled cord traction; EWEC IWG, Every Woman Every Child Innovations Working Group; IBP, Implementing Best Practice; MEC, WHO *Medical eligibility criteria for contraceptive use*; MNCH, maternal, newborn and child health; NRHM, National Rural Health Mission; RHL, WHO *Reproductive Health Library*; RMNCH, reproductive, maternal, newborn and child health, UN, United Nations

supporting scale-up of solutions (Figure 2, no. 22) and synthesizing relevant evidence (Figure 2, No. 20; WHO Technical Advisory Group on mHealth Evidence).

Bold leadership, vision, and effective execution can ensure that countries adopt and deploy innovations at scale and reach populations in need. An emphasis on building partnerships, seeking integrated solutions, finding opportunity in challenges, empowering others to achieve their full potential, and guiding innovations through political and economic hurdles is needed; in this final stage, countries that embrace these and other groundbreaking approaches will ultimately gain, and accelerate their progress towards reaching national and international goals for sexual and reproductive health.

Questions for STAG

1. How can the current work on Innovations within RHR be strengthened?
2. With innovation comes increased risk for failure. How should risk be reflected in our work with donors and partners when there is greater prospect for failure? What proportion of research focus should be on new disruptive innovations (i.e., greater risk) vs. strengthening the adoption of, and iterating already developed solutions (i.e., less risky innovations)?
3. How should we leverage the technical strengths of the private sector in the departments' work on innovations? How can potential pitfalls of working with the private sector be mitigated? Who else should RHR engage in work on innovations?

Appendix 1: Table of RHR/HRP innovations by category (as of 2011)

Innovations category	Innovation	Role of RHR/HRP	Why is it an innovation?
A. Organizing delivery	1. Rapid assessment tool for sexual and reproductive health and HIV linkages: a tool to assess bidirectional linkages between sexual and reproductive health and HIV at the policy, systems and service levels	The International Planned Parenthood federation (IPPF), UNFPA, WHO, Joint United Nations Programme on HIV/AIDS (UNAIDS), the Global Network for People living with HIV/AIDS (GNP+), the International Community of Women with HIV/AIDS (ICW and Young Positives) collaborated to develop the tool. RHR/HRP was a key partner in developing the tool. Implementation of the tool is through partners of the interagency working group on sexual and reproductive health/HIV linkages, co-chaired by RHR.	Strengthening linkages between sexual and reproductive health and HIV is an important strategy for attaining the joint universal access goals of HIV and reproductive health (MDGs 5 and 6). In most countries and organizations, the HIV and sexual and reproductive health areas are siloed – both for funding and programmatically. This tool has been critical in promoting dialogue and collaboration in this area.
	2. Social franchising of reproductive health services	RHR has worked to develop the evidence on the impact of social franchising since 2005 and today is conducting impact evaluations of social franchise programmes in Myanmar. In 2012 it will begin research in Cambodia, Kenya and the Philippines.	Social franchising is a significant improvement in the use of private-sector providers to serve the poor with reproductive health services.
B. Financing care	3. Vouchers to incentivize and integrate immunization and family planning service delivery	Conceived of the linkage between vouchers and social health insurance; conducting the independent research to validate the innovation.	It introduces the use of vouchers to increase the use of family planning and maternal health services by the poor, improve the quality of service delivery and strengthen universal health coverage.
	4. Women Create Life (WCL)	RHR conceived of the innovation, identified partners, stakeholders and financing, and manages the creative financing effort.	WCL merges art, design and consumer markets to generate awareness of, and resources for, maternal health. WCL commissions paintings that portray women throughout the world – brand-name designers integrate the WCL logo and images into a range of products. A percentage of the sale of WCL products is invested in initiatives to improve the lives and health of women and their families.
C. Regulating performance	5. WHO Human Rights Tool + RHR strategic assessment approach methodology	RHR developed the strategic approach to strengthening sexual and reproductive health services (an innovation in itself). RHR developed the Human Rights Tool (another innovation). And, RHR linked the two.	It has incorporated the WHO Human Rights Tool into the RHR strategic assessment approach. This is significant because it: helped to engage the human rights community; highlighted human rights agreements signed and ratified by the country that were incongruent with national laws and policies on abortion; and helped link the concepts of human rights and health.

Innovations category	Innovation	Role of RHR/HRP	Why is it an innovation?
D. Changing behaviours	6. MobileMEC (mobile Medical Eligibility Criteria), mHealth tool for family planning	RHR/HRP developed the MEC guidelines. The MobileMEC concept originated at HRP, and has been developed with external information technology (IT) technical partners and deployed on three mobile phone operating systems; it is now being tested for usability and acceptability among providers.	The adaptation of WHO sexual and reproductive health protocols and guidelines to formats that are more widely available than current channels will broaden the access of validated highly valued tools. By deploying a mobile version of the MEC wheel through mobile phones, a larger proportion of health-care providers will have access to the MEC than previously, through paper and electronic publishing using PC desktop formats.
	7. FertiSTAT fertility awareness tool	RHR/HRP has been fostering the innovation together with the researchers who developed FertiSTAT. RHR/HRP has focused particularly on adapting it for use in developing and low-resource settings, in order to ensure that FertiSTAT is culturally sensitive, language appropriate and locally relevant in these populations, thereby enhancing the potential of the innovation to address client needs.	FertiSTAT (Fertility Status Awareness Tool) is a fertility self-awareness tool that assists women to gain personalized guidance about reducing risks to their fertility and seeking timely fertility medical advice based on their own lifestyle and reproductive profile. Until FertiSTAT was developed, there was no tool available for fertility health, despite the importance of children in the life of most people.
	8. mCheck – a mobile phone checklist solution to empower women during the immediate postpartum period	RHR/HRP and WHO Patient Safety collaborated with IT partners to develop the solution, and are currently conducting research in India that will result in validation of the mHealth solution. RHR/HRP is supporting the research, and obtained the necessary funding to develop and research the innovation with Indian partners.	The first 7 days is a critical time period for mothers and neonates. Women are unsure if symptoms that they or their babies are experiencing warrant medical attention. mCheck is a paper- and mobile-phone-delivered checklist solution that enables families and mothers to recognize 12 danger signs in mothers and neonates, and provides information on when to seek care. The checklist and mHealth innovation is scalable, even in illiterate populations.
	9. WHO Reproductive Health Library (RHL) e-learning course – evidence-based medicine distance-learning course	RHR/HRP conceived of the innovation, developed the content, identified the technical partners, obtained the financial support, and realized the system, and now deploy, update, and manage the Moodle-based e-learning system from RHR/HRP.	This online distance-learning course enables health-care providers to identify and use evidence-based practices for sexual and reproductive health care in underresourced settings. Users of the evidence-based medicine e-learning course will become familiar with the basics of evidence-based medicine in their sexual and reproductive health service delivery.

Innovations category	Innovation	Role of RHR/HRP	Why is it an innovation?
E. Enhancing processes	10. mHealth for maternal and newborn health in resource-poor community and health-system settings – Sierra Leone	RHR staff generated the idea, identified potential partners and funding, facilitated development of strategic partnerships that resulted in raising required funding with ministry of health (MOH), research and nongovernmental organization (NGO) partners. RHR/HRP have since supported the project technically through reviewing project documents, data-collection instruments, etc.	The mHealth applications are focused on priorities identified through needs assessment in Sierra Leone: establishment of a health-information line; closed user-group facility for communication between providers; and provider to client communication using commercial rates and negotiated tariffs. Because of the high illiteracy rate in Sierra Leone, an interactive voice response system will be used for the hotline.
	11. mAssist – using mobile phones in medical abortion to remind, support, inform and assess completion, and promote contraceptive use	RHR/HRP encouraged the expansion of a research proposal to include mHealth and fostered a collaboration between two new research partners; they also provided technical assistance in development of a research protocol and WHO funding.	mAssist focuses on improving information provision; and postpartum reminders to support contraceptive use, for all post medical abortion clients. mHealth solutions for medical abortion are to strengthen information provision, allow for self-assessment of abortion completion, support clients, and reinforce family planning messages. The study assesses whether mobile phones reduce the requirement for multiple clinic follow-up visits.
	12. Active management of the third stage of labour (AMTSL) without controlled cord traction (CCT)	HRP has conducted a large randomized controlled trial to evaluate the role of misoprostol in active management of the third stage of labour and conducted systematic reviews of management of the third stage of labour. RHR has been working with numerous stakeholders. The main objective of this trial was to investigate whether a simplified package of third-stage management can be recommended without increasing the risk of postpartum haemorrhage.	AMTSL reduces the occurrence of severe postpartum haemorrhage by approximately 60–70%. AMTSL consists of several interventions packaged together; the relative contribution of each is unknown. Controlled cord traction (CCT) is one of the components requiring training. If it is possible to dispense with CCT without losing efficacy, there would be major benefits for effective management of the third stage of labour at peripheral levels of the health-care system.
	13. Tanguieta funnel: a life-saving procedure for recuperation of intraperitoneal blood after intraperitoneal haemorrhage in case of ruptured ectopic pregnancy, followed by immediate auto-transfusion of this blood to the woman	Brother Florent (Hôpital Saint Jean de Dieu in Tanguieta, Benin) worked for years in the design and production of the funnel. RHR/HRP is currently supporting the development of a research protocol to test the safety and efficacy of the Tanguieta funnel.	The Tanguieta funnel is a simple, low-technology, low-cost, reusable device that can help prevent women's deaths in low-resource settings, in the absence of blood banks, adequate donor blood, or where auto-transfusion may help reduce the spread of HIV in contaminated donor blood.

Innovations category	Innovation	Role of RHR/HRP	Why is it an innovation?
E. Enhancing processes (continued)	14. The Odon device: an instrument for assisted vaginal delivery	RHR/HRP identified the innovation, support the development, and foster strategic linkages including supporting WHO research. The research will determine if the Odon device is feasible, safe and efficient for delivering babies during the prolonged second stage of labour.	Odon is a low-cost instrument to deliver the fetus when complications occur during the second stage of labour. The device is made of film-like material and may be potentially safer and easier to apply than forceps and vacuum extractor for assisted deliveries. It is a safe alternative to caesarean sections in settings with limited surgical capacity and human-resource constraints.
	15. Syphilis rapid test	Rapid syphilis diagnostic testing is an example of collaborative RHR, the Special Programme for Research and Training in Tropical Diseases (TDR), and WHO Department of Maternal and Child Health efforts to support critical validation studies of the initial rapid syphilis tests, as well as field-studies to better understand implementation, acceptability, and scale-up, and programmatic support to regions and countries for introduction of this innovation.	The development of point-of-care rapid syphilis diagnostic tests now allows any trained antenatal care provider to test for syphilis, provide immediate results and prompt treatment, thus making universal access to this important reproductive health service now a possibility. Evidence has shown that introduction of the rapid syphilis test can lead to increases in coverage of syphilis screening for pregnant women. A cluster randomized trial in Mongolia supported by RHR showed that women tested by rapid syphilis testing had a lower rate of congenital syphilis as compared to women tested by the conventional off-site test.
	16. RMNCH mHealth package to strengthen the India MOH National Rural Health Mission	With academic and information and communication technology (ICT) partners, RHR/HRP conceived of the mHealth innovation, identified and obtained funding, and leads the research and scale-up of the solution in collaboration with the Karnataka State Government, NGO, academic and private-sector partners.	It is an “mHealth package”, a mix of mobile technology, and support materials designed to facilitate and support various aspects of rural health workers’ work, and enabling a flow of communication between community members, health workers and health-care facilities. It integrates existing discrete, mature and proven mHealth innovations (ChildCount+, OpenMRS, OpenDataKit, Interactive Voice Response, and MCTS) into an open and interoperable package that meets the information needs of rural health-care providers and populations. Tools include: digital client registry, risk assessment at service delivery, reminders to health workers and clients, checklists, and interactive voice response information. Health areas of focus are: family planning, maternal and child health.

Innovations category	Innovation	Role of RHR/HRP	Why is it an innovation?
F. Methodologies and tools	17. A realist evaluation framework to assess the impact of civil society advocacy for reproductive health on national policy, planning and budget allocations	RHR collaborated with HISP, London, on the conceptualization, application and interpretation of results from the realist evaluation case-studies.	The original realist evaluation framework was developed and used in three country case-study evaluations.
	18. A standardized methodology for measuring violence against women	RHR contributed to development of the protocol, methodology, and all implementation materials (questionnaires, ethical guidelines, training materials for interviewers and supervisors, etc.).	WHO developed a standardized methodology for measuring violence against women, particularly intimate partner violence (physical, sexual, emotional and controlling behaviours) and its health consequences, as well as risk and protective factors, and facilitated the use of data for policy and programming. Standardizing the measures and methods has enabled data to be compared across studies and between countries.
G. Scaling-up innovations	21. Implementing Best Practice (IBP) Knowledge Gateway	WHO/RHR and partners developed both the technology and the knowledge-management methodologies that support the use of the IBP Knowledge Gateway	The IBP Knowledge Gateway fosters virtual knowledge networking in and across countries, and between health organizations. It enables departments in WHO, and organizations outside of WHO to go beyond the confines of a meeting, to engage people from many countries around the world in virtual discussion forums that inform policy and practice. It is used in every country of the world and has become the largest public-sector virtual networking site in the world.
	22. “HRP Innovations Catalyst” research mechanism to strengthen the health impact of innovations –supports research and evaluation that informs and facilitates widespread adoption of innovations (currently focused on mHealth)	This project was jointly developed by the mHealth Alliance and RHR/HRP in partnership with the UN Every Woman Every Child Innovations Working Group (EWEC IWG)	RHR/HRP will work with up to 10 mHealth RMNCH projects each year to help projects to: understand the evidence in support of their innovation, review and work with each to strengthen their evaluation efforts to align their evidence-generation approaches with the needs of different stakeholders who are in a position to support the scale-up, integration and development of project sustainability. By ensuring that projects are achieving evidence that stakeholders need; and supporting the development of standardized evaluation and monitoring tools, mHealth projects will be in a position to demonstrate the value needed to go to scale, and achieve sustainability and impact.

Innovations category	Innovation	Role of RHR/HRP	Why is it an innovation?
G. Scaling-up innovations (continued)	23. WHO Implementation Research Platform (IRP)	This mechanism was jointly developed by the Alliance for Health Policy and Systems Research, HRP, Department of Child and Adolescent Health and Development (CAH), the HIV/AIDS Department, and the Special Programme for Research and Training in Tropical Diseases (TDR). Research is being supported by RHR/HRP and the other research departments in WHO. The leveraged funding platform of IRP is an additional IRP focus that RHR leads.	It supports research that: (i) identifies common implementation problems and their main determinants that hinder effective access to interventions; (ii) develops and tests practical solutions to these problems that are either specific to particular health systems and environments or that address a problem common to several countries in a region; and (iii) determines the best way of introducing these practical solutions into the health system and facilitates their full-scale implementation, evaluation and modification as required.
	24. <i>WHO Reproductive Health Library</i> (RHL)	RHL is a product of collaboration between RHR, the Cochrane Collaboration, and RHL partner institutions in low- and middle-income countries. Input and support from RHR collaborating institutions worldwide ensure that the RHL remains relevant and useful to health-care workers in various settings, especially underresourced settings.	RHL takes the best available evidence on sexual and reproductive health from Cochrane systematic reviews and presents it as practical actions for clinicians to adopt to improve health outcomes. RHL is recognized as a leading tool for the promotion of evidence-based sexual and reproductive health care in developing countries. The full Cochrane reviews can be accessed free of charge through RHR via CD-ROM and the Internet in all developing countries. To help clinicians master specific details of complex interventions, RHL also includes short training videos. RHL one of the largest and most widely available sources of evidence-based clinical information on sexual and reproductive health worldwide. It is available in Arabic, Chinese, French, Russian, Spanish and Vietnamese.
	25. ExpandNet – to scale-up validated packages of interventions	The development of the ExpandNet guidance materials and tools grew out of the work of the Strategic Approach to Strengthening Reproductive Health Policy and Programmes. The conceptual development of the framework and tools have been conducted by the ExpandNet secretariat, of which an RHR member of staff is a member.	ExpandNet provides tools and guidance that aim to overcome the widespread and common failure of successful research pilot projects to be scaled-up to benefit wider populations. ExpandNet provides systematic, evidence-based guidance on developing successful strategies for scaling-up (both expansion and institutionalization) of health innovations. Prior to ExpandNet, there was little or no focused or systematic guidance available on scaling-up in the field of public health.

Linkages between sexual and reproductive health and HIV/AIDS

Summary

Key objectives

The objective of this area of work in the Department is to strengthen linkages between sexual and reproductive health (SRH) services and HIV interventions in order to transform the broader health and development agenda and accelerate progress towards the Millennium Development Goals on gender equality, child health, and maternal health (MDGs 3–6).



Major achievements

- Operations research was implemented in Zambia to evaluate the feasibility, acceptability, quality and effectiveness of innovative models for strengthening the continuum from antenatal, pregnancy, delivery and postpartum care.
- The first comprehensive baseline study of STI components in all HIV proposals approved by the Global Fund to Fight AIDS, Tuberculosis and Malaria from Rounds 1–9 was completed and published discussing how investments into STI prevention, treatment and care can be leveraged to advance sexual and reproductive health and rights.
- Three subregional consultations to share the experiences of the implementation of the Rapid assessment tool for sexual and reproductive health and HIV linkages were held in: (1) Europe–central Asian republics, (2) Latin America and the Caribbean, and (3) the South Asia and Western Pacific regions. This tool has now been implemented in over 45 countries and country briefs have been developed for 15 of them (Belize, Benin, Botswana, Burkina Faso, Cote d'Ivoire, Kyrgyzstan, Lebanon, Malawi, Morocco, Pakistan, Russian Federation, Swaziland, Tunisia, Uganda and United Republic of Tanzania) highlighting experiences and best practices to inform national, regional and global agendas.
- A resource pack on SRH/HIV linkages was updated and widely disseminated. This pack is an output of the interagency working group on SRH/HIV linkages and has helped to build a common understanding of key issues and definitions, and provide an overview of the current status of linkages among key partners.
- A subregional consultation was held on the engagement of men in PMTCT that defined male engagement in PMTCT, including indicators and methods of measurement as well as a conceptual framework that embeds male engagement in the four key elements of PMTCT.
- A global action plan was finalized to minimize the impact of antimicrobial resistance in *Neisseria gonorrhoeae* through articulating the public health, policy and economic case for urgent, heightened and sustained action to control *N. gonorrhoea* infection and to mitigate the emergence and impact of antimicrobial resistance; and to coordinate communication, partnership and advocacy efforts at national, regional and international levels to support the global response.

1. Introduction

Linkages between programmes are too often inadequate, uncoordinated or nonexistent, particularly regarding programmes for the prevention of mother-to-child transmission of HIV and other efforts to reduce gender inequality, the improvement of maternal and child health, and the increase of access to antenatal and postnatal care, as well as family planning and other sexual and reproductive health services. The strategic integration of these programmes, informed by local conditions, will help reduce costs, avoid duplication, increase programme efficiencies and improve women's access to needed services.

Regional inequities related to sexual and reproductive health (SRH) and HIV prevention, treatment, care and support are extreme, with 90% of maternal and infant deaths, and mother-to-child transmission of HIV occurring in developing countries. In addition, HIV is the leading cause of death in women aged 15–44 years worldwide. Strengthening sexual and reproductive health and HIV linkages is therefore an essential part of formulating national strategies for making health services accessible to the people in greatest need. It is also vital to maximize developing countries' access to health resources, increase the impact of programming in both areas, and meet the United Nations Millennium Development Goals (MDGs), particularly MDGs 4–6.

2. Supporting countries in assessing SRH/HIV synergies – generating the evidence

2.1 Progress

2.1.1 National SRH/HIV assessments

In 2009, IPPF, UNFPA, WHO, UNAIDS, GNP+, ICW and Young Positives developed the *Rapid assessment tool for sexual and reproductive health and HIV linkages* to assess current national HIV and SRH bi-directional linkages, identify gaps, and contribute to the development of country-specific action plans. Following the initial implementation of the *Rapid assessment tool* in Botswana with support from RHR, over 45 countries have now undertaken the assessment.

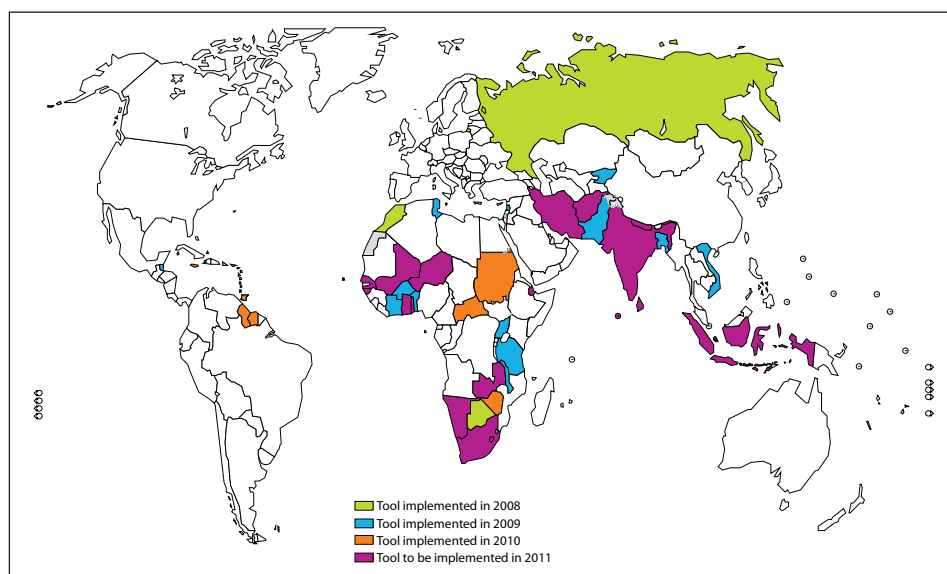


Figure 1. Countries that have implemented the *Rapid assessment tool for sexual and reproductive health and HIV linkages* since 2008.

The national sexual and reproductive health and HIV linkages assessments helped identify actions needed at the country level to improve health, human rights, and gender equality outcomes related to both sexual and reproductive health and HIV. The results of the assessment have supported countries in planning national follow-up actions to strengthen SRH/HIV linkages, including recommendations on activities to be included within Global Fund to Fight AIDS, Tuberculosis and



Malaria (Global Fund) and other donor proposals as well as stimulating stakeholders to incorporate SRH/HIV integrated action plans within national health plans. To date, the process, results and outcomes of implementing the *Rapid assessment tool* has been compiled in country summaries for 15 countries (Belize, Benin, Botswana, Burkina Faso, Cote D'Ivoire, Kyrgyzstan, Lebanon, Malawi, Morocco, Pakistan, Russian Federation, Swaziland, Tunisia, Uganda, and United Republic of Tanzania).

2.1.2 Consultations to discuss country implementation of the *Rapid assessment tool for sexual and reproductive health and HIV linkages*

Three subregional consultations have been convened in collaboration with partners and WHO regional offices in WHO's Europe, Americas, South-East Asia and Western Pacific regions. These consultations helped provide a better understanding of how to scale up best practices in linkages on different HIV epidemic contexts, to continue to help support dialogue between ministries of health, national AIDS control programmes and civil society at national levels, to strengthen development of a linked response in national planning and strategies.

Linking sexual and reproductive health and HIV in countries of Eastern Europe and Central Asia – examining the future of integrated services, Antalya, Turkey, 2–4 November 2011: co-hosted by UNFPA, UNICEF and WHO, representatives from 13 countries in Eastern Europe and Central Asia met in to consider current best practices in linked sexual and reproductive health and HIV services, including experiences from the implementation of the *Rapid assessment tool*, as well as identifying opportunities for better linking of services and planning next steps for how to implement them. Key aspects of linked services were considered at governance, financing, resources and service-delivery levels, including comprehensive prevention of mother-to-child transmission of HIV, management of STIs, and condom programming for dual protection to prevent HIV transmission and unplanned pregnancies.



Consultation to discuss strengthening of sexual and reproductive health and HIV linkages in the Caribbean within the framework of the Rapid assessment tool, Nassau, Bahamas, 18–21 November: in the past two years the WHO Regional Office for the Americas supported the implementation of comprehensive health systems evaluations of the HIV response in several Caribbean countries, including the implementation of the Rapid assessment tool. A WHO–UNFPA SRH/HIV linkages skills-building session, bringing together 10 Caribbean countries and stakeholders, convened at the 2011 Caribbean HIV Conference. Key points discussed included: integrating SRH/HIV in antenatal services and family health programmes; ensuring access to SRH/HIV services for adolescents and other vulnerable groups; and integrating provider-initiated testing & counselling for HIV and syphilis.

First Asia and the Pacific Regional Consultation on SRH and HIV Linkages, Kuala Lumpur, Malaysia, 6–8 December 2011: to increase the momentum and effectiveness of linking sexual and reproductive health with HIV, IPPF, UNAIDS, UNFPA and WHO in collaboration with Seven Sisters and community partners (ICW-AP, APN+ and APCOM), organized this consultation bringing together key stakeholders from 10 countries where the *Rapid assessment tool* has been, is being or potentially will be implemented. The consultation provided a platform for experiences sharing, brainstorming and formulating priority recommendations for the improvement of sexual and reproductive health and HIV linkages in the Asia and Pacific Region.

Overall the findings indicate that there is still a larger pool of human and financial resources for HIV than sexual and reproductive health, but that the dialogue, which has been initiated and strengthened through the assessment process, between ministries of health and the national AIDS control programmes has enabled countries to develop national policy frameworks that are comprehensive and supportive of sexual and reproductive health and HIV integration. The outcomes have also supported countries in including recommendations on SRH/HIV integrated activities that have been included within HIV proposals submitted to the Global Fund and other donors.

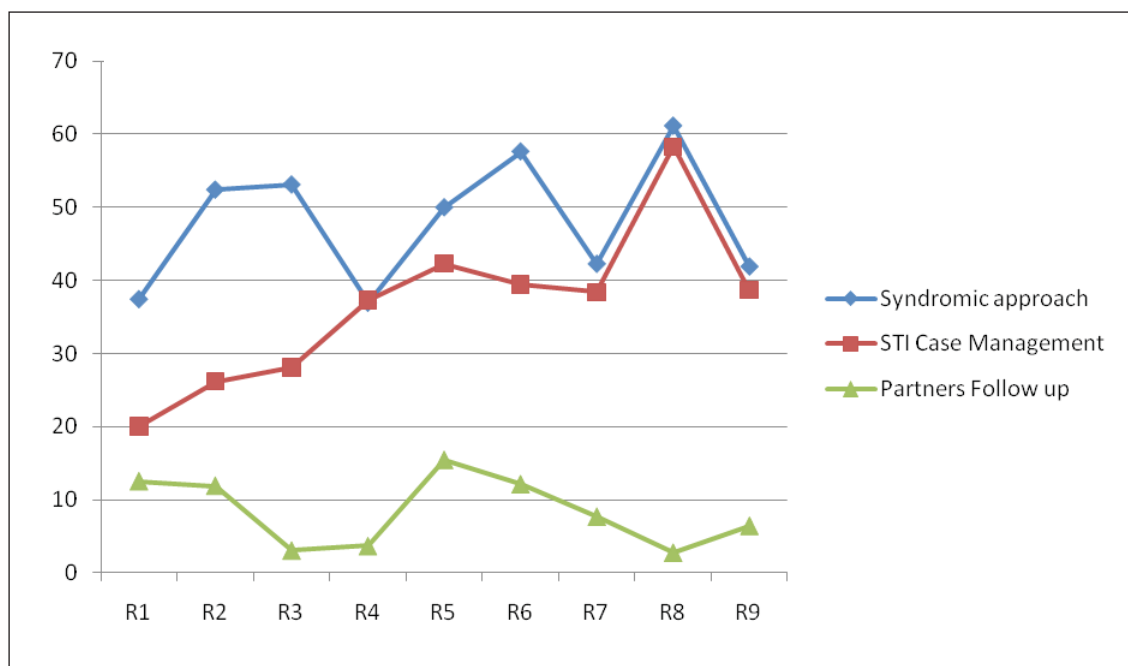
2.1.3 Advocacy in SRH/HIV linkages

The Interagency Working Group (IAWG) convened by RHR and UNFPA has developed an SRH/HIV linkages resource package that includes a list of definitions, presentations, and advocacy briefs for the donor community and other materials. Its purpose is to build a common understanding of this area and provide an overview of the current status of linkages among key partners. The linkages agenda is a dynamic field and the package is designed as a “living”, adaptable set of resource materials targeted to national governments, international and national nongovernmental organizations, United Nations agencies, and donors. This material is updated prior to World AIDS Day yearly and widely disseminated through the IAWG and other partners.

2.1.4 Analysis of the importance of STIs in HIV proposals to the Global Fund

In developing countries, STIs and their complications are among the top five reasons that adults seek health care. This analysis of key elements of STI prevention and care from Rounds 1–9 of funded HIV proposals submitted to the Global Fund shows the first thorough baseline data of opportunities and gaps that exist in including aspects of diagnosis and treatment of STIs (results were published in *Sexually Transmitted Infections*, 2011, 87).

Figure 3. Inclusion of the syndromic approach, STI case management, and partner follow-up in proposals from round 1–9 of proposals funded by the Global Fund.



2.2 Planned activities

- Impact assessments will be performed to evaluate how countries are following up on the findings, gaps, recommendations and analysis from the national SRH/HIV assessments in order to determine financial and technical support needed for national scale up of best practices.
- The *Rapid assessment tool* will be further implemented at country request.

3. Sexual and reproductive health of people living with HIV

3.1 Progress

3.1.1 Male involvement in the elimination of mother-to-child transmission of HIV

This work is detailed in the Male Involvement Working Group report.



Subregional consultation on Male Involvement in prevention of mother-to-child transmission of HIV, Kigali, Rwanda, August 2011.

3.1.2 Preventing unintended pregnancy among women living with HIV: Technical considerations

This work is reported in the Promoting Family Planning report. In acknowledgement of the poor scale to date of a comprehensive approach to PMTCT, technical recommendations are being developed in partnership with UNFPA and FHI360. In addition, an indicator to measure Prong 2 of PMTCT, on unmet need for family planning for women living with HIV will be field-tested. The global target agreed to in the interagency task team (IATT) is to eliminate 100% of current unmet need for family planning by 2015 in all the 22 countries with the greatest number of HIV-positive pregnant women.

3.1.3 Evaluating the feasibility, acceptability, quality and effectiveness of innovative models for strengthening postpartum care and family planning, including for women living with HIV

A multisite randomized controlled trial to develop and evaluate new models of integrated postpartum care for women living in Zambia has been initiated to determine the feasibility, acceptability, quality and effectiveness of innovative models for strengthening postpartum care and family planning, including for women living with HIV. The study uses a cluster randomized design to evaluate the effectiveness of the new services package, and follows cohorts of women receiving postpartum services in the intervention and control clinics over a 24-month period to measure behaviour and health status of the woman and her infant. The first phase of the study is nearing completion and has assessed the effectiveness of a strengthened package of postpartum care during a six-month postpartum period, comparing it with the effectiveness of the existing standard of care, in terms of client utilization of family planning services, essential maternal and newborn health services and HIV/AIDS services.

3.2 Planned activities

- Publication in Spring 2012 of “Pregnancy intentions of HIV-positive women: forwarding the research agenda”, a supplement in *Reproductive Health Matters*, framed around the concerns of HIV-positive women before and during pregnancy, exploring issues raised by desired and undesired pregnancy.
- Continued implementation of the operations research on evaluating models of postpartum care in Zambia.
- A technical consultation on hormonal contraception and HIV acquisition is planned for January 2012.

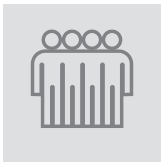
Men and sexual and reproductive health

Summary

Key objectives

The working group on men and sexual and reproductive health was established to address men's behaviour and roles in decision-making and sexual and reproductive health outcomes. The working group has provided a formal process to discuss strategy and programming related to men's sexual and reproductive health needs and the roles and responsibilities of men in bringing about positive changes in the sexual and reproductive health of women, families and communities. The Department's work related to men and sexual and reproductive health takes place within the technical teams and is therefore prioritized and implemented within the context of each team's workplan. The multidisciplinary working group is open to all Department staff.

Major achievements



- RHR played a significant role in the development of the sections related to sexually transmitted infections in the WHO guideline *Prevention and treatment of HIV and other sexually transmitted infections among men who have sex with men and transgender people: recommendations for a public health approach 2011*.
- The first international consultation on the engagement of men in the prevention of mother-to-child transmission of HIV was convened by WHO, UNAIDS and the Government of Rwanda. The background paper, meeting report and resulting conceptual framework will help to focus key policy and programmatic strategies.
- The RHR-coordinated Implementing Best Practices Initiative sponsored a knowledge-to-action session on "Engaging men in family planning" at the 2011 International Conference on Family Planning in Dakar, Senegal. This topic had been identified as one of the five action areas that emerged from the 2009 International Conference on Family Planning.

1. Introduction

It is increasingly acknowledged that effective initiatives to prevent morbidity and mortality related to human reproduction and sexuality need to address the important roles of men in decision-making related to sexual and reproductive health and of men's behaviour in their own as well as their partners' health. The Department aims to improve the sexual and reproductive health of individuals and communities through involving men in bringing about positive changes in gender norms, sexual and health seeking behaviours. STAG suggested in 2010 that separate detailed reporting on work addressing men and sexual and reproductive health was not necessary. Therefore, this report highlights several collaborative activities that have had substantial input from RHR and have the potential to make a significant positive impact on sexual and reproductive health, through partnership with and engagement of men, and briefly describes future plans related to those specific activities. This is not an exhaustive reporting of all RHR work in this area; additional activities have been described in the other reports.

2. Men and HIV and sexually transmitted infections

Through collaborations with other WHO departments and various partners, RHR has been active in promoting men's roles in addressing and reducing the burden of HIV and sexually transmitted infections (STIs).

2.1 Progress

2.1.1 Guidelines and tools

Since the beginning of the HIV epidemic, men who have sex with men (MSM) and transgender people have been disproportionately affected in many settings. In 2011, in response to a need for an evidence-based package of interventions for implementation by the health sector to prevent and treat HIV and other STIs among MSM and transgender people, WHO's HIV/AIDS Department published and launched *Prevention and treatment of HIV and other sexually transmitted infections among men who have sex with men and transgender people: recommendations for a public health approach*. The guidelines include evidence-based recommendations, the summary and grading of evidence, implementation issues and key research gaps. The document presents good practice recommendations that focus on ensuring an enabling environment for the recognition and protection of the rights of MSM and transgender people, as required for the successful implementation of the specific technical recommendations.

RHR contributed to the STI component of this guideline, ensuring that the main recommendations in this area of health-care delivery are based on the most up-to-date WHO policies, global guidelines and scientific evidence. Contributions to this component included all stages from the initial scoping, to systematization and grading of the evidence, and finally formulation of the final set of recommendations. The STI component addresses STI syndromic case management; testing of asymptomatic urethral and rectal *N. gonorrhoeae* and *C. trachomatis* infections; serological testing for asymptomatic syphilis infection; and hepatitis B vaccination. This is the first WHO guideline to contain recommendations for management of STIs in these populations.

The guideline is designed for use by national public health officials and managers of HIV/AIDS and STI programmes, nongovernment organizations and health workers. Collaboration is ongoing among the WHO Departments of RHR and HIV/AIDS, UNAIDS, and other partners on promotion and implementation of the recommendations. The guideline will continue to be disseminated widely at different forums and to key WHO partners at international, regional and country levels.

2.1.2 Support to countries

Motivated by the Global Plan on *Elimination of New HIV Infections among Children by 2015, and Keeping their Mothers Alive*, the Government of Rwanda joined WHO and UNAIDS, with the participation of UNICEF and UNFPA, to co-host a subregional consultation on the engagement of men in the prevention of mother-to-child transmission of HIV (PMTCT) in August 2011. The goal of the consultation was to look at the interface between policies and programmes for sexual and reproductive health, maternal, neonatal and child health (MNCH) and HIV interventions, with a focus on strengthening male involvement in the elimination of MTCT of HIV. The meeting participants examined strategies to: help women and men remain HIV-free; increase women's adherence to PMTCT programmes through support from their partners; enhance the quality of services for men and women by addressing stigma and discrimination and potential benefits for maternal and new born health outcomes; reduce violence against women following disclosure of HIV-positive status; recognize and respond to the sexual and reproductive health needs of men, including men in key affected populations such as sex workers and young men; provide effective services to discordant couples; and increase awareness among health-care providers and in communities. The meeting report is available on the Department's web site. The report has generated considerable interest, discussion and planning of follow-up activities among partner organizations. RHR will seek opportunities to contribute to the further work in this area, focusing on developing key policy and programmatic responses.

In late 2011, RHR provided support to a UNAIDS interagency workshop on integrating gender-based violence and engaging men and boys for gender equality into national AIDS plans. The Department's support to countries in this area is based on a forthcoming programming guide to address gender-based violence in the context of HIV. The guide situates male involvement in a conceptual framework that promotes engagement and involvement of men and boys in the context of promoting gender equality and uses the terminology "engaging men and boys for gender equality". Involvement of men and boys is one of the four strategies for gender-transformative programming in sexual and reproductive health and complements efforts to empower women and girls, transform harmful gender norms including on masculinity, and implement laws and policies that promote gender equality and human rights.

2.2 Planned activities

- The background paper that was prepared for the consultation on engaging men in PMTCT will be published in 2012. The paper identifies opportunities for the advancement of constructive men's engagement in PMTCT. It highlights the benefits of, and barriers to, men's engagement, promising strategies to involve men, and conceptual and methodological issues for further consideration and

research. The conceptual framework combining an ecological approach with the four prongs of PMTCT will also be finalized and published in 2012.

- The Men and Sexual and Reproductive Health Working Group will work to facilitate greater collaboration with the WHO HIV/AIDS Department on various issues, including male circumcision and engaging men to reduce violence against women in the context of HIV.

4. Men and family planning

The Department's work related to men and family planning (FP) has included biomedical research to develop methods of male fertility regulation as well as social science studies to examine male roles and perceptions in FP and contraception.

4.1 Progress

4.1.1 Research

In 2008, HRP, in collaboration with the CONRAD programme, initiated a Phase II safety and contraceptive efficacy trial of norethisterone enantate combined with testosterone undecanoate for male contraception. The trial enrolled 321 couples at 10 implementing centres in seven countries and was the first multinational efficacy trial of a combined progestin + androgen regimen for male fertility regulation. In March 2011, the Department's Research Project Review Panel recommended early termination of the intervention, due primarily to side-effects. Of greatest concern were the mood-related serious adverse events and the number of less severe mood-related adverse events. All participants were transitioned to the recovery phase of the study, per protocol. The side-effects attributable to the regimen and their possible causes will be explored. The Research Group on methods for the regulation of male fertility noted that the study results will provide valuable data and encouraged continued pursuit of a hormonal regimen for male contraception. They recommended the development of a strategy that incorporates method development with social science research and behaviour change interventions to increase positive male engagement in FP initiatives.

4.1.2 Support to countries

At the 2011 International Conference on Family Planning in Dakar, Senegal, the Implementing Best Practices (IBP) Initiative, coordinated by RHR and supported by USAID, UNFPA and over 30 other organizations working in family planning and reproductive health, sponsored a series of interactive knowledge-to-action sessions focused on each of the five action areas that emerged from the 2009 International Conference on Family Planning. One of these, "Engaging men in family planning," was organized by the Institute for Reproductive Health (IRH) and IPPF. At the session, participants learnt about a variety of initiatives to engage men in family planning, assessed the initiatives through the lens of gender equality and discussed and identified gender-equitable strategies for engaging men in family planning through outreach and service delivery. Initiatives were discussed from partner organizations including EngenderHealth, IPPF, Save the Children, IRH and the Universal Access to Female Condoms Joint Programme. The session was designed to share evidence-based and innovative practices, including issues related to scaling up and promoting partnership, through an interactive format.

Rotating stations where organizations shared their experiences and involved participants in discussions were used to maintain a high level of energy, stimulate exchange of ideas, and generate maximum participation. Close to 80 participants attended; all were asked to identify at least one action to further efforts to engage men in FP.

4.2 Planned activities

- A strategy positioning male contraceptive research and development within a broader context of men's roles and responsibilities in FP will be developed to guide further work in this area and to be used as an advocacy tool for further investment.
- Results from the IBP session on engaging men, as well as the other knowledge-to-action sessions, will be the focus of a publication which will document the progress made from the 2009 International Conference on Family Planning in Kampala to the 2011 meeting in Dakar. This report should be available in the second half of 2012.

Questions to STAG

1. STAG is asked for advice in identifying issues and topics to consider in designing implementation research activities to promote and implement the recommendations for prevention and treatment of HIV and STIs, as well as within the context of sexual health among men who have sex with men and transgender people.
2. STAG is asked to suggest research leads that could be prioritized to strengthen men's roles in reducing unmet need for family planning, considering approaches that target men as well as those to support contraceptive uptake by their partners, and considering interventions to work with young men to support partners in avoiding first pregnancy.
3. Small-scale projects have successfully engaged men and boys to challenge and change gender norms and improve health outcomes. STAG is asked to suggest priority areas for scaling up of proven interventions, through implementation research or other means.

Biostatistics and data management

Summary

Key objectives

The Biostatistics and Data Management work of RHR provides support for the statistical data processing and coordination of the HRP's research projects, supports the research capacity strengthening of institutions in biostatistics and data management, and provides informatics support for the Department.



Major achievements

- Support in statistics data management, research coordination and monitoring was provided for more than 30 clinical trials and epidemiological studies. On-site research training of staff was conducted in collaborating centres participating in HRP projects in the Democratic Republic of the Congo, Ethiopia, Guinea, Hungary, Kenya, Niger, Nigeria, Sierra Leone, South Africa, Uganda, Zambia and Zimbabwe.
- The Department continues to implement new technologies to support the conduction of good-clinical-practice-compliant research in resource-poor settings.

1. Introduction

The present report summarizes the work of SIS in two of the three main domains, namely technical support for research projects and capacity building for collaborating institutions in low- and middle-income countries.

2. Support for research activities

The SIS unit provides technical support in biostatistics for protocol development and review, including advice on study design, computation of sample size estimates, writing of interim and final statistical analysis plans, data analysis, preparation of statistical reports and participation in the writing of scientific papers resulting from the projects. For all projects, the SIS unit also develops and deploys a comprehensive monitoring and data quality-assurance programme. As part of capacity-building activities, SIS also trains research teams in these areas, in the context of research project support.

SIS develops, or assists in the development of, paper and electronic case-report forms (CRFs), standard operating procedures (SOPs) and monitoring reports. The unit works closely with research sites and partners to assure the highest level of quality for the research conducted by the Department, with a strong focus on compliance with good clinical practice (GCP). SIS staff conduct site visits to study sites for training and support of country teams, and for auditing and monitoring. Remote, web-based access technologies are increasingly used for support and training.

2.1 Progress and planned activities

2.1.1 Technical support for clinical trials and epidemiological studies

Non-pneumatic Anti-Shock Garment trial (NASG) – cluster randomized clinical trial: the data management was fully revised and upgraded in OpenClinica. On-site training was conducted in Zambia and Zimbabwe by the SIS trial coordinator in March 2011. Several interim analyses were conducted as requested by the study data safety and monitoring board (DSMB) and the Bill and Melinda Gates Foundation, as additional funding is needed to extend the recruitment period and include more sites to reach the projected sample size.

- *Pericoital oral contraception with levonorgestrel – randomized controlled clinical trial. A prospective, open-label, single arm, multicentre study to evaluate efficacy, safety and acceptability:* support was provided for the research design, statistical analysis plan and development of study CRFs, training materials, SOPs and monitoring plan. The data-management system was developed using OpenClinica, which is ready to be deployed in five countries (Brazil, Hungary, Singapore, Thailand and Tunisia). A site visit to Hungary was conducted in November 2011 by the SIS trial coordinator, and initiation visits are planned to all study sites in 2012.
- *Calcium supplementation in women at high risk of pre-eclampsia – a randomized, placebo-controlled trial:* support was provided for protocol development, the statistical analysis plan, development of CRFs, training materials, SOPs, drug allocation and stock management and randomization procedures. On-site training was conducted in September 2011 in South Africa. The data-management system was developed using OpenClinica. This is the first study

using the new SIS web-based randomization and study drug-management services. This system was developed in collaboration with more than 40 leading research institutes, and has already been used in over 400 research studies at over 4000 sites across the globe.

- *Non-inferiority of short-term catheterization following fistula repair surgery:* support was provided for the research design, statistical analysis plan, development of the CRFs, SOPs and monitoring plan. The data-management system is being developed in OpenClinica. In November 2011, a site visit to Nairobi, Kenya, was conducted, with research assistants and principal investigators from eight countries.
- *Multicentre randomized clinical trial of two implantable contraceptives for women, Jadelle and Implanon:* the trial coordination of this study, which was initially outsourced, was moved back to SIS in late 2010 because an audit revealed several problems with data-management procedures. The transfer was completed successfully, and a set of rigorous data-cleaning procedures was put in place. The first interim analysis of the first- and third-year outcomes was completed and is being reviewed. The statistical analysis of the first study paper, reporting the baseline data, has been completed and handed over to the lead investigators.
- *Active management of the third stage of labour without controlled cord traction:* this randomized trial was completed and submitted for publication in 2011. The trial recruited more than 24 000 women in eight countries, and SIS provided both statistical and data-management support.
- *Phase IIb study on the safety and efficacy of norethisterone enanthate (Net-En) plus testosterone undecanoate (TU) as a male contraceptive:* two interim analyses were completed and reported to the study DSMB.
- *Triple-antiretroviral [ARV] prophylaxis during pregnancy and breastfeeding compared to short-ARV prophylaxis to prevent mother-to-child transmission of HIV – The Kesho Bora randomized trial:* additional analyses are being conducted following the publications plan. The analysis on maternal disease progression at 18–24 months is almost complete.
- *Side-effects of malaria treatment during pregnancy:* the study has been launched in Ghana, Kenya and the United Republic of Tanzania, and is scheduled to start in Brazil and Uganda. In collaboration with the WHO Special Programme for Research and Training in Tropical Diseases (TDR), SIS provides data-management support using OpenClinica.

Preparatory activities started for two new projects:

- How well do community health volunteers assess eligibility for medical abortion? An evaluation of assessment tools for medical abortion
- Simplifying early medical abortion service delivery: is service delivery with one or two clinic visits and a take-home pregnancy test effective and acceptable?

Several analyses for clinical trials and epidemiological studies were conducted. These include statistical analyses of data from the WHO Global Survey; synthesis of data from countries in the WHO Region of the Americas on the initiative for the elimination of congenital syphilis; assessment of the effect of hormonal contraception during breastfeeding on child growth and development; and support to WHO global estimates of maternal mortality and skilled birth attendance.

Statistical support was provided to the Global WHO Working Group on Performance Management and Development, to design and implement the effectiveness of the newly adapted performance-management framework developed by WHO's Department of Human Resources.

3. Research capacity strengthening in biostatistics and data processing

The unit has a strong commitment to support research-training activities at country level. On-site training was provided to staff participating in research projects in the Democratic Republic of the Congo, Ethiopia, Guinea, Hungary, Kenya, Niger, Nigeria, Sierra Leone, South Africa, Uganda, Zambia and Zimbabwe. Several training activities were conducted with the use of Internet technologies to deliver web-based, remote training sessions.

SIS participated in a research-training workshop on implementation research design, methodology, and proposal writing, conducted in New Delhi, India in April 2011, with participants from Myanmar, India, Bangladesh, Indonesia and Sri Lanka. This was done in collaboration with TDR and supported by the Implementation Research Platform and the United States Agency for International Development (USAID). Support is also being provided to help the country teams implement the research projects in the field.

A member of the unit gave lectures at the seventh GCP conference and course in Szeged, Hungary. The course was organized by the Department of Obstetrics and Gynaecology at the University of Szeged, and the Hungarian Clinical Trial Management Society, with support from HRP.

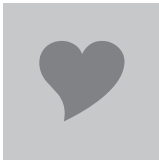
Advocacy for sexual and reproductive health and for HRP/RHR

Summary

Key objectives

Through its work in advocacy and communication, the Department aims to promote uptake of its evidence-based outputs, to build awareness of key issues in sexual and reproductive health, and to raise funds and to ensure the continued commitment and engagement of Member States, WHO and other agencies.

Major achievements



- 42 new technical publications in English were produced and distributed. Fourteen publications were translated into official languages.
- A new e-bulletin – *RH Update* – was launched informing subscribers of Department research publications, events and new documents.
- There were 2.9 million visits to the HRP, Reproductive Health and RHL web sites, and 696 000 documents were downloaded.
- Three donors returned to RHR in 2011, two new donors joined, and many donors increased their contributions.

1. Introduction

An Advocacy Working Group was established in late 2008 to support advocacy and communication, which meets periodically drawing on expertise across all teams in RHR and provides support to, peer review and coordination of activities. Advocacy in RHR is still led by teams, and advocacy budgets are controlled by each team.

In developing approaches to its work in the area of advocacy, the Advocacy Working Group has agreed on three strategic directions:

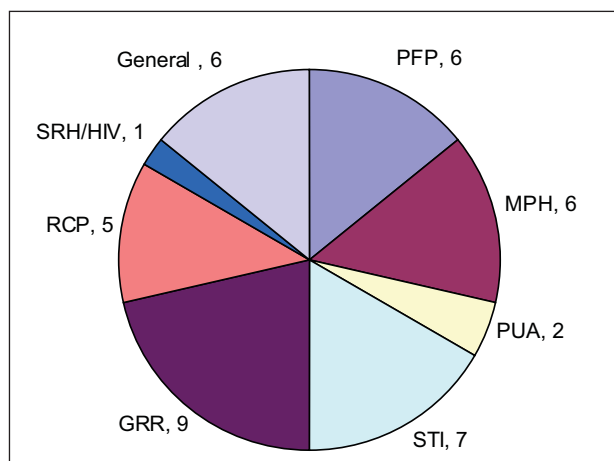
1. RHR will focus on advocating for the uptake of its evidence-based outputs, e.g. evidence-based approaches, strategies, research findings, clinical and scientific guides and norms, and other departmental outputs.
2. RHR will contribute to high-level advocacy and awareness building for key issues in sexual and reproductive health. This will involve the initiation or contribution to international or regional partnerships, engaging with the international development community [e.g. International Health Partnership and related initiatives (IHP+), UN H4+].
3. RHR will promote the work of the Department and HRP, in order to raise funds and to ensure the continued commitment and engagement of Member States, WHO and other agencies.

Although the work of the Department covers all three of the above areas, based on guidance of STAG in 2010 the focus during 2011 was on selected high-impact activities under 1 and 3.

The RHR Programme Management Team (PMR) supports key aspects of advocacy and communication in the Department, including: document editing and production; multimedia development; creation of display materials; graphic design; web development; dissemination of information products; and conference and workshop site support. PMR also acts as Secretariat of the RHR Documents Committee, which meets several times a year to review all proposals for new publications from the Department and aims to: rationalize the issuing of documents; improve planning for document production within RHR; ensure that the documents produced reflect the overall strategies of RHR; enhance the impact of the work of RHR at country level.

2. Achievements in 2011

2.1 Advocating for uptake of evidence-based outputs



Documents produced per thematic area

The Department produces and disseminates serial and nonserial documents and information materials for a variety of target audiences, including researchers, policy-makers, and health-care programme managers. In 2011, 42 new technical publications in English were produced and distributed. Fourteen publications were translated into official languages, and requests by external partners to translate RHR publications into non-official languages were managed. RHR guidelines and tools were introduced and demonstrated at 25 workshops with participants including ministry of health staff, programme managers, and health-care providers.

In order to reduce costs, printed copies were kept to a minimum, and dissemination was primarily electronic (696 000 downloads); however the complete contents of the Department's web site were made available on CD-ROM allowing those without good Internet services to access all the Department's materials in a searchable electronic form.

Two electronic newsletters – *RH Update* and *HRP/RHR e-news* – were also produced. *RH Update*, launched in July, is a monthly email bulletin highlighting recently published research from the Department, notable events, and new RHR publications. The number of subscribers has grown steadily, and is now over 1000: anyone with an interest in the work of the Department can subscribe. Link monitoring software shows a high click-through rate from the e-bulletin to the RHR web site and to download electronic copies of publications, as well as high interest in externally published research articles from the Department.

2.1.1 Web sites

The RHR web site continues to be updated daily. The RHR and HRP sites are one of few WHO sites available in multiple languages. During 2011, the Department added a "mini site" in Spanish that adds to the French and Russian sites developed in 2010. The site includes selected key information and pages and a list of those RHR publications with Spanish translations.

For 2011, the entire WHO web site design was updated to increase accessibility and usability, and features were added such as buttons for users to share content on social media channels. In addition, for the first time in 2 years, WHO IT services were able to provide usage data for the RHR site.

The RHR sites remain among the most visited technical sites of WHO. During 2011, there were 2.9 million visits to the HRP, Reproductive Health and RHL web sites. During 2011, 689 000 publications were downloaded. The average number of pages opened per visit was 4.8.

Top seven RHR downloaded publications

- | | |
|---|------------|
| 1. <i>WHO laboratory manual for the examination and processing of human semen</i> | English |
| 2. <i>Trends in maternal mortality: 1990 to 2008</i> | English |
| 3. <i>Medical eligibility criteria for contraceptive use</i> | English |
| 4. <i>Guidelines for the management of sexually transmitted infections</i> | Portuguese |
| 5. <i>Social determinants approaches to public health</i> | English |
| 6. <i>Male circumcision: global trends and determinants of prevalence, safety and acceptability</i> | English |
| 7. <i>Family planning: a global handbook for providers</i> | Portuguese |

Most research articles from the Department are printed and disseminated by peer-reviewed journals. WHO has a policy of insisting wherever possible on open access journal articles, and therefore, most articles are not housed on the Departmental site, so do not appear in our statistics. On occasion, however, we do publish direct and the figures indicate a strong interest in our articles. For example, there were nearly 21 000 downloads of "World Health Organization reference values for human semen characteristics", which was also published in *Human Reproduction Update*.

2.1.2 *The WHO Reproductive Health Library (RHL)*

The 2011 issue of *The WHO Reproductive Health Library (RHL)*, containing 193 Cochrane reviews, was published in English on CD-ROM (5000 copies). However, translations were delayed due to lack of funds and support from IT services for migration into the WHO web content management system. Migration is now complete, and all official language versions available online in December.

RHL commentary authors and language versions accessed, 1.2.2011–1.1.2012

Total number of commentaries	237
Commentary authors – developed countries	51
Commentary authors – developing countries	149
Language versions accessed	
United States	67 546
China	58 956
France	12 618
Mexico	10 084
United Kingdom	8544
Spain	7955
Canada	5073
Quebec	1293
Peru	4429
India	4102
Russian Federation	3907

2.2 High-level advocacy and awareness

Alongside presentations and speeches by Department staff, RHR materials were actively disseminated at 23 major international conference and events. A wide variety of advocacy materials for use at events was produced, including exhibits, posters, flyers, and logo designs. For high-level events, such as the Geneva Policy Dialogue Series for Reproductive Health, specific advocacy documents were created targeted to participants.

Mission Roundtables remain a continuing mechanism for informal dialogue with Member States, at which the Geneva-based diplomatic missions and partners are convened to informally review recent developments in sexual and reproductive health.

2.3 Fundraising

Fundraising and donor relations remain vital in the changing global fiscal climate and as RHR adapts under the umbrella of WHO organizational reforms. During 2011, emphasis was placed on partnership development to maximize comparative advantages based upon mutual strategic interests. RHR also sought to bring back former donors and to invite now contributors into the RHR donor community.

Three donors returned in 2011 and two new donors joined RHR. Returning donors include John D. and Catherine T. MacArthur Foundation, Wellcome Trust and the

European Commission. New donors include an anonymous donor to support RHR's work in human rights, plus Gynuity Health Projects. Furthermore, many donors increased their contributions including: Family Health International, Flanders, France, Norway, Sweden, The Bill and Melinda Gates Foundation, The David and Lucile Packard Foundation, The United Kingdom, The World Bank and UNFPA.

Donor and partner communications outreach has grown substantially, especially for e-communications as noted earlier in this report.

A list of all donors to HRP and PDRH is shown in the financial report (document RHR/STAG(29)/2012/6.1).

For information on the business plan for fundraising through the Women Create Life initiative see the Maternal and Perinatal Health report 'Advocacy and innovative financing' (document RHR/STAG(29)/2012/5).

3. Planned activities

3.1 Uptake of evidence-based outputs

The Department will continue to produce and disseminate technical publications and guidelines in English and other languages; there are currently over 20 materials in production, with many others at planning and writing stages.

A searchable database listing peer-reviewed publications produced by the Department since 1990 will be published online.

3.2 High-level advocacy and awareness

Throughout 2012, an extensive programme of high-level, targeted events and activities is planned for the 40th anniversary of HRP aimed at sexual and reproductive health policy-makers, partners and donors, including at the World Health Assembly, at PCC, at the UN General Assembly, and at FIGO.

3.3 Fundraising

Plans for the next biennium include leveraging the success of 2011 by attracting other partners to RHR through existing donor relationships. Furthermore, RHR will continue to build an infrastructure that invites partner participation and investment that supports mutual interest, with the goal to capitalize fully on opportunities for partnership. Stewardship and achieving a high level of responsiveness in communications will continue to be mainstays of donor relations.

QUESTIONS TO STAG

1. STAG is asked to advise on how HRP/RHR could further advocate for the use of its tools, guidelines and related publications.

Research Ethics and Project Review

Summary

The Research Project Review Panel (RP2) is an external expert body whose objective is to provide scientific, technical, ethical and financial review for research projects supported by HRP. RP2 assists the Department and its collaborators to foster recognition of universal ethical principles and scientific principles of good research practice, when developing and implementing studies in sexual and reproductive health, in order to protect the health and rights of individuals in different social and cultural settings, as acknowledged and supported according to World Health Assembly resolution WHA41.9.

1. Introduction

Prior to 2010, the responsibility for review of all research projects sponsored by RHR/HRP was taken individually by four specialist panels in reproductive health and the Scientific and Ethical Review Group (SERG) (see Annex, Figure 1). After discussions within the Department, and endorsement by STAG in February 2010, a single review body, RP2, was formed by the incorporation of membership and project review activities of the five existing review Panels. In June 2010, the HRP Policy and Coordination Committee endorsed the formation of RP2, and six RP2 meetings have subsequently been held. The WHO review process for HRP-supported research is described in the Annex, Figure 2.

2. Project review (RP2) responsibilities and research ethics activities

RP2 reviews new HRP projects with meeting consensus and provides electronic interim review to either complete review or for continuing review of multiyear projects.

2.1 Progress

2.1.1. RP2 Full Committee and Interim Review

The RP2 consensus review meetings are scheduled every 4 months. Meetings are either face-to-face at headquarters or via tele/videoconference, depending on the number of projects submitted for review. Project assessment outcomes are: unconditional approval, conditional approval, deferment or disapproval.

“Interim review” is an electronic review of a project, which is conducted in the period between committee meetings: (1) following committee review (projects with “conditional approval”); or (2) a multiyear project requiring continual HRP support. Either approval during or following an RP2 meeting, or successful completion of interim review, results in a RP2 unconditional approval, following which HRP projects are submitted direct to the WHO Ethics Review Committee (ERC) for ethics review (an institutional requirement of WHO). (See Annex, Table 1 – New and multiyear HRP Proposals reviewed by RP2 in 2011.)

2.1.2 Support to countries – Application forms and RP2 ethics capacity-strengthening activities

RP2 research project application guidance and forms have been revised. New ethics materials, presentations and ethics scenarios are continually being developed and prepared for workshops on ethical issues in reproductive health. The HRP ethics guidance documents “Procurement and use of human tissues, cells and fluids”, and “Consent process to obtain human materials for research” have been reviewed, with a paper analysis in process. A consultation was supported by the GRR Team to update guidance on ethics and safety of research with adolescents, with contribution by two RP2 members. No ethics capacity-strengthening workshops were supported in response to requests made by countries through RHR regional managers in 2011; However, at request of the country, in Costa Rica, July 2011, an Ethics Legal and Social Implications (ELSI) of introducing reproductive medicine interventions was conducted with 100 participants, with contributions from two RP2 members. In collaboration with the European Society of Human Reproduction and Embryology (ESHRE) Special Task Force “Developing countries and infertility”, RHR supported a meeting on “Socio-cultural and ethical aspects of biomedical infertility care in poor resource countries” in November 2011, in Genk, Belgium, with one STAG member contributing to this activity.

2.2. Planned activities

- Evaluation of RP2 function was initiated following the last RP2 meeting. Data are being collected, a database created for assessment, and collaboration has begun with the ERC to complete analysis of RP2 project review throughout WHO.
- RP2 is scheduled to meet approximately every 4 months in 2012. Ethics capacity-strengthening activities will be supported and conducted in response to country or regional requests through RHR regional managers. Ethics guidance in sexual and reproductive health will continue to be revised and updated as required.

Annex:

Figure 1. Formation of RP2

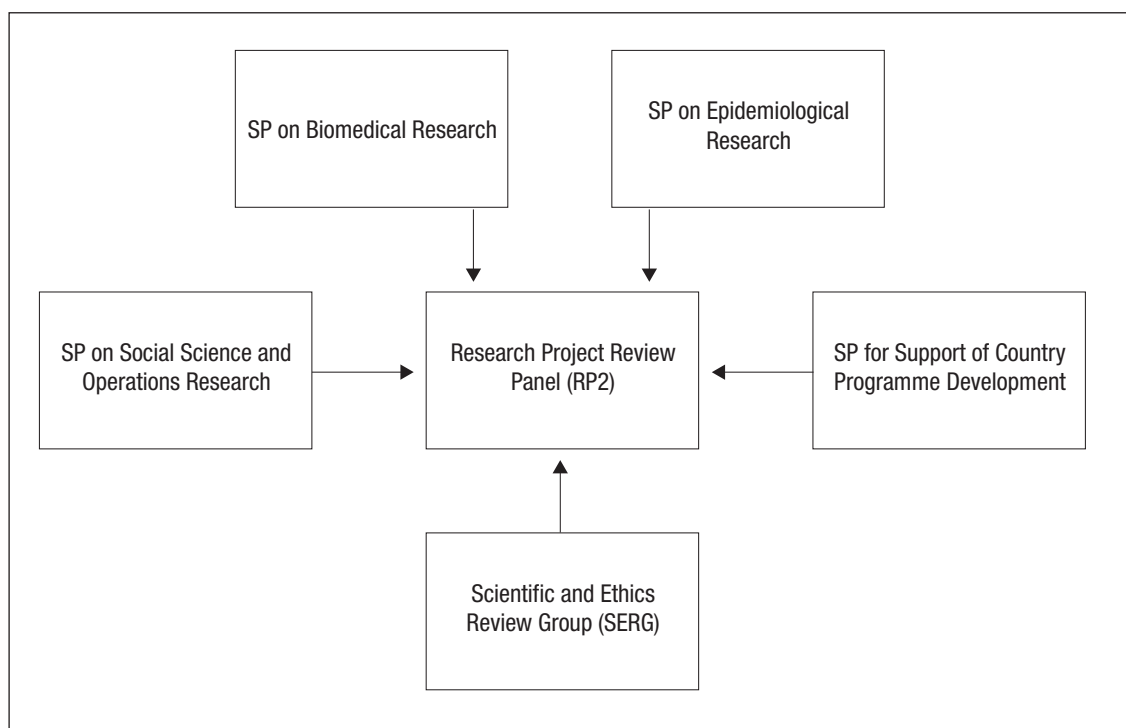


Figure 2. Review process for HRP-supported research

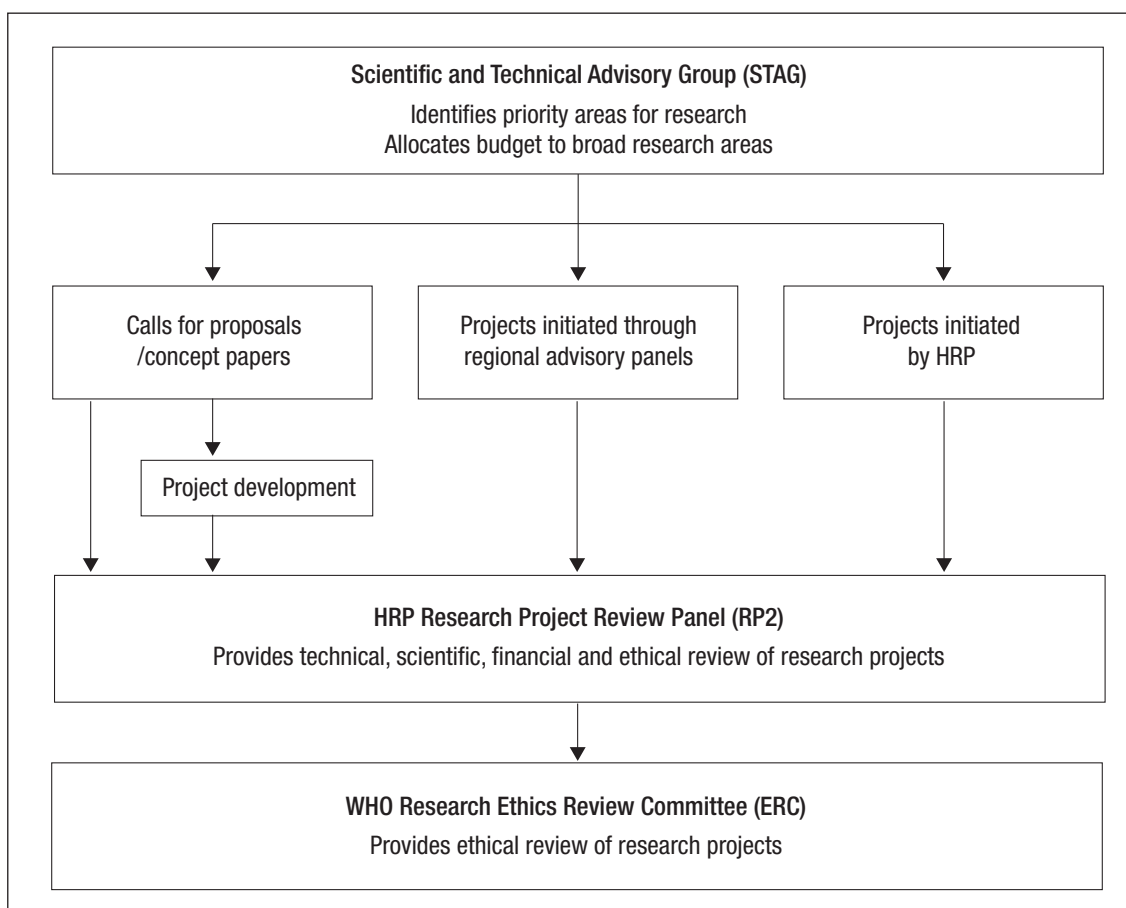


Table 1. New and multiyear HRP proposals reviewed either in consensus or via interim review by RP2 in 2011

Type of review	Project numbers	Outcome of consensus meetings and interim review				
		Attaining full approval	Conditional approval with amendments	Conditional approval with amendments & clarifications	Deferment	Disapproval/stopped
RP2-March	12	1	0	5	5	1
RP2-June	10	1	1	5	3	0
RP2-Sept	10	5	0	0	5	0
Interim/CR	57*	57	0	0	0	0
TOTALS	89	64	1	10	13	1

* 8 projects remain at interim.

Abbreviations

ADA	Advanced Development for Africa
ADG	Assistant Director-General
AERMN	Afro European Research Medical Network
AGREE	appraisal of guidelines research and evaluation
AHPSR	Alliance for Health Policy and Systems Research
ALIRH	Asociación Latino Americana de Investigadores en Reproducción Humana [Latin American Association for Research in Human Reproduction]
AMTSL	active management of the third stage of labour
ANC	antenatal care
ANM	auxiliary nurse midwives
AOGIN	Asia Oceania research organization on Genital Infections and Neoplasia
APHI	Afghan Public Health Institute
ART	assisted reproductive technology
ARV	antiretroviral (drug)
ASB	asymptomatic bacteriuria
ASPHER	Association of Schools of Public Health in the European Region
ASRH	adolescent sexual and reproductive health
ASRM	American Society of Reproductive Medicine
AZT	zidovudine
BAN	breastfeeding, antiretroviral treatment and nutrition
BMD	bone mineral density
BMGF	Bill and Melinda Gates Foundation
BMI	body mass index
CAPRISA	Centre for the AIDS Programme of Research in South Africa
CAR	Central Asian Republics
CCM	country coordinating mechanisms
CCOMS	Centres Collaborateurs de l'OMS
CCT	controlled cord traction
CDC	United States Centers for Disease Control and Prevention
CEDAW	Committee on the Elimination of all Forms of Discrimination against Women
CEPEP	Centre for Population Studies, Paraguay
CERREGUI	Cellule de recherche en santé de la reproduction en Guinée
CGRP	calcitonin gene-related peptide
CHC	combined hormonal contraceptive
CHERG	Child Health Epidemiology Reference Group
CHNRI	Child Health and Nutrition Research Initiative
CHP	Chronic Diseases and Health Promotion
CHPS	Centre for Health and Population Studies
CI	confidence intervals
CID	Council for International Development
CIDA	Canadian International Development Agency
CIDES	Centre for Research in Development Sciences, Plurinational State of Bolivia

CIR	competitive intraregional research (grant)
CIRE	Continuous Identification of Research Evidence
CIS	Commonwealth of Independent States
CLAP/PAHO/WHO	Latin American Centre for Perinatology and Human Development (Centro Latinoamericano de Perinatología)/PAHO/WHO
CLAP/SMR	Latin American Perinatology Center/Women's and Reproductive Health
COC	combined oral contraceptives
CoP	Community of Practice
CPR	contraceptive prevalence rate
CRC	Committee on the Rights of the Child
CREP	Centro Rosarino de Estudios Perinatales (Centre for Perinatal Studies, Argentina)
CRESARCI	Reproductive Research Health Unit
CRF	clinical report form
CRISP	cysteine-rich secretory proteins
CRRH	Centre for Research in Reproductive Health
CS	caesarean section
CSO	civil society organization
CTS	clinical trial simulator
CWS	courses/workshops/seminars
DFID	Department for International Development, United Kingdom
DHS	Demographic and Health Surveys
DMPA	depot medroxyprogesterone acetate
DMT	Decision making tool for family planning clients and providers
DSMB	data safety and monitoring board
EC	emergency contraception
ECE	Economic Commission for Europe
ECP	emergency contraceptive pill
ECRU	Effective Care Research Unit
ECSA-HC	East, Central and Southern Africa Health Community
EFCNI	European Foundation for the Care of the Newborn Infant
ELSI	ethics and legal and social implications
EMA	European Medicines Agency
EML	Essential Medicines List
ESCAP	UN Economic and Social Commission for Asia and the Pacific
ESD	Extending Service Delivery
ESHRE	European Society of Human Reproduction and Embryology
EU	European Union
EVA	electric vacuum aspiration
EWEC	Every Woman Every Child Innovations Working Group
FBO	faith-based organization
FCI	Family Care International

FDA	Food and Drug Administration
FertiSTAT	Fertility Status Awareness Tool
FGD	focus group discussions
FGM	female genital mutilation
FHI360	formerly Family Health International
FICA	Flemish International Cooperation Agency
FIGO	International Federation of Gynecology and Obstetrics
FOKO	The Nordic Network for Research on Female Circumcision
FP	family planning
FRG	Fertility Regulation Group
GANM	Global Alliance for Nursing and Midwifery
GAP	Gender and Rights Advisory Panel
GAVI	Global Alliance for Vaccines and Immunisation
GBD	Global Burden of Diseases
GCP	Good Clinical Practice
GCP	good clinical practice
GDM	gestational diabetes (mellitus)
GE	General Electrics
GFMER	Geneva Foundation for Medical Education and Research
GHC	Global Health Cluster
GHO	Global Health Observatory
GHWA	Global Health Workforce Alliance
GIERAF	Groupe Inter africain d'Etudes de Recherche et d'Applications sur l'Infertilité
GLOBE	Gestación Ligada a Obesidad y al Entorno. Estudio longitudinal multicéntrico de factores de riesgo asociados a la obesidad en el embarazo (project)
GNP+	Global Network for People living with HIV/AIDS
GP	general practitioner
GPS	guideline production system
GRADE	Grades of Recommendation Assessment, Development and Evaluation
GRC	Guidelines Review Committee
GREAT	Guidelines, Research Priorities, Evidence synthesis, Applicability of evidence, Transfer of knowledge
GRR	RHR Gender, Reproductive Rights, Sexual Health and Adolescence Team
GSG	Guidelines Steering Group
GURM	Genitourinary Reproductive Medicine
GWAS	genome wide association study
GWH	WHO Department of Gender, Women and Health
GWHA	Global Watch for Humanitarian Affairs
GWU	George Washington University
HAC	Health Action in Crises Cluster
HELLP	haemolytic anaemia, elevated liver enzymes and low platelet count
HEW	Health Extension Worker

HIFA	Health Information for All by 2015
HPV	Human papillomavirus
HRH	Human Resources for Health
IACHR	Inter-American Commission on Human Rights
IAEA	International Atomic Energy Agency
IAFM	Inter-agency field manual on reproductive health in humanitarian settings
IARC	International Agency for Research on Cancer
IAS	International AIDS Society
IATT	interagency task team
IAWG	Inter-Agency Working Group
IBP	Implementing Best Practice Initiative
IBYME	Experimental Medicine and Biology Institute
ICAAC	Interscience Conference on Antimicrobial Agents and Chemotherapy
ICBDSR	International Clearinghouse for Birth Defect Surveillance and Research
ICD	International Classification of Diseases
ICD-MM	ICD applied to maternal mortality
ICHRP	International Council for Human Rights Policy
ICJ	International Commission of Jurists
ICMART	International Committee for Monitoring Assisted Reproductive Technologies
ICMER	Instituto Chileno de Medicina Reproductiva [Chilean Institute of Reproductive Medicine]
ICPD	International Conference on Population and Development
ICT	information and communication technology
ICU	intensive-care unit
ICW	International Community of Women Living with HIV/AIDS
IDU	injecting drug users
IEC	information, education and communication material
IFFS	International Federation for Fertility Societies
IHP+	International Health Partnership and related initiatives
IMPAC	Integrated Management of Pregnancy and Childbirth
IPPF	International Planned Parenthood Federation
IPSR	Institute for Population and Social Research
IPU	Inter-Parliamentary Union
IPV	intimate partner violence
IR	implementation research
IRH	Institute of Reproductive Health
IRP	Implementation Research Platform
IRSS	Institut de Recherche en Science de la Santé
ISMAAR	International Society for Modified Approaches to Assisted Reproduction
ISMB	Institute Mario Boella
ISUOG	International Society of Ultrasound in Obstetrics and Gynecology

IT	information technology
IUD	intrauterine device
IUGR	intrauterine growth restriction
IUSSP	International Union for the Scientific Study of Population
IVF	in vitro fertilization
IVM	in vitro maturation
IVR	Initiative for Vaccine Research
Jhpiego	Johns Hopkins Program for International Education in Gynecology and Obstetrics
KAP	knowledge, attitudes and practices
KG	Knowledge Gateway
KMS	WHO Department of Knowledge Management and Strategies
KO	knockout
KSE	knowledge synthesis, exchange
KTA	knowledge-to-action
LAM	lactational amenorrhea method
LAS	League of Arab States
LEEP	loop electrosurgical excision procedure
LID	long-term institutional development (grant)
LMP	last menstrual period
LNG	levonorgestrel
LSHTM	London School of Hygiene and Tropical Medicine
MCA	WHO Department of Maternal, Child and Adolescent Health
MCHIP	Maternal and Child Health Integrated Project
MDG	Millennium Development Goal
MEC	Medical eligibility criteria for family planning
MGF	mutilazioni genitali femminili
mhealth	mobile health
MME Info	Maternal Mortality Estimates Information
MMEIG	Maternal Mortality Estimation Interagency Group
MMR	maternal mortality ratio
MNCH	maternal, newborn and child health
MoH	ministry of health
MoPH	ministry of public health
MOU	memorandum of understanding
MPH	RHR Improving Maternal and Perinatal Health Team
MSH	Management Sciences for Health
MSI	Marie Stopes International
MSM	men having sex with men
MSSL	Marie Stopes Sierra Leone
MTCT	mother-to-child transmission
MVA	manual vacuum aspiration
MVP	Millennium Village Project
NAC	national AIDS control
NASG	nonpneumatic anti-shock garment

NCPNN	Lebanese National Collaborative Perinatal Neonatal Network
NGO	nongovernmental organization
NICHD	National Institute of Child Health and Human Development
NIH	National Institutes of Health, United States
NIRRH	National Institute for Research in Reproductive Health
NMCHC	National Maternal and Child Health Centre
NNRHRT	Nigerian network for reproductive health research and training
NNRTI	non-nucleoside reverse transcriptase inhibitor
NPO	pational programme officers
NRL	National Reference Laboratory
NSV	non-scalpel vasectomy
OBA	output-based aid
ODI	Overseas Development Institute
OHCHR	Office of the High Commissioner for Human Rights
ONDa	National Observatory for Women's Health
OR	odds ratio
OWER	Organization-wide expected result
PAC	postabortion care
PAHO	Pan American Health Organization
PATH	(formerly) Program in Appropriate Technology in Health
PBG	performance-based grant
PCC	Policy and Coordination Committee
PCG	Pregnancy and Childbirth Group
PCOS	polycystic ovarian syndrome
PCS	programme capacity-strengthening (grant)
PDRH	Programme Development in Reproductive Health (PDRH) component of RHR
PEPFAR	President's Emergency Plan for AIDS Relief
PFP	RHR Promoting Family Planning Team
PGP	Preterm Birth Genome Project
PHC	primary health care
PHI	public halth institute
PIERS	Pre-eclampsia Integrated Estimate of Risk
PITC	provider-initiated testing and counseling
PLEAS	Latin American programme for the standardization of semen analysis
PLHIV	People living with HIV
PLISSER	Latin American Programme for Research and Training in Human Reproduction
PLWHA	people living with HIV/AIDS
PMNCH	Partnership for Maternal, Newborn and Child Health
PMR	RHR Programme Management Team
PMTCT	Prevention of Mother to Child Transmission
PMTCT	prevention of mother-to-child transmission (of HIV)

PP	placenta previa
PPH	postpartum haemorrhage
PPI	Policy and Programmatic Issues group
PRB	Perinatal Research Branch
PREBIC	Preterm Birth International Collaborative
PRE-EMPT	Pre-eclampsia monitoring, prevention and treatment
PSI	Population Services International
PTB	preterm birth
PUA	RHR Preventing Unsafe Abortion Team
RAFT	Réseau d'Afrique francophone en télémédecine
RAP	Regional Advisory Panel
RCP	Research Capacity, Policy and Programme Strengthening (RHR)
RCS	research capacity strengthening
RCT	randomized controlled trial
REN	Research Evidence and Norms (RHR)
RHEM	Reproductive Health Essential Medicines (project)
RHL	The WHO Reproductive Health Library
RHR	WHO Department of Reproductive Health and Research
RHRTU	Reproductive Health Research and Training Unit
RHSC	Reproductive Health Supplies Coalition
RMC	Reproductive Medicine Committee
RMG	resource maintenance and capital grant
RPM	research project mentoring
RRP	risk reduction and emergency reparedness
RTG	research training grant
RTI	reproductive tract infection
SAM	Service Availability Mapping
SDC	Swiss Agency for Development and Cooperation
SDM	standard days method
SERG	Scientific and Ethical Review Group
SFPRI	Sichuan Family Planning Research Institute
SGG	service guidance centre grant
SGL	Society for Gynecologic Investigation
SIP	Perinatal Information System
SIS	RHR Statistics and Information Services Team
SMG	small supplies grant
SO	strategic objective
SOP	standard operating procedures
SPP	Strategic Partnership Programme
SPR	Selected practice guidelines for contraceptive use
SPTB	spontaneous preterm birth
SRH/HIV	sexual and reproductive health/HIV
STAG	Scientific and Technical Advisory Group

STI	sexually transmitted infection
SVRI	Sexual Violence Research Initiative
SWAp	sector-wide approach
SWApS	Sector Wide Approaches
SWOT	strengths, weaknesses, opportunities and threats
TAG	technical advisory group
TAG	Topic Advisory Group
TDR	Special Programme for Research and Training in Tropical Diseases
TFR	total fertility rate
TRP	training resource package for family planning
TU	testosterone undecanoate
UMSA	San Andres University
UN	United Nations
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNESCO	United Nations Scientific and Educational Organization
UNFPA	United Nations Population Fund
UNH4+	UNAIDS, UNFPA, UNICEF, the World Bank and WHO
UNHCR	Office of the United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNPD	United Nations Population Division
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
UNSC	United Nations Statistical Commission
USAID	United States Agency for International Development
VAW	violence against women
VCT	voluntary counselling and testing
VIA	visual inspection with acetic acid
VIH	Le virus de l'immunodéficience humaine (HIV)
VIP	WHO Department of Violence and Injury Prevention and Disability
VTE	venous thromboembolism
WAP	wireless application protocol
WAS	World Association for Sexual Health
WCL	Women Create Life
WHA	World Health Assembly
WHIPT	Women's HIV Prevention Tracking
WHO CC	WHO Collaborating Centre for Reproductive Health
WHS	World Health Statistics
WONCA	World Congress of Family Physicians

RHR/HRP publications 2011

Technical documents

Scientific and technical requirements to formulate a female condom generic specification and prequalification scheme. Female condom technical review committee report

Review of submissions by manufacturers of female condoms to initiate the prequalification process for bulk procurements. Female condom technical review committee report

Beginning with the end in mind: planning pilot projects and other programmatic research for successful scaling up

Methods for surveillance and monitoring. Congenital syphilis elimination within existing systems

Preventing gender-biased sex selection. An interagency statement OHCHR, UNFPA, UNICEF, UN Women and WHO

Quality of care in the provision of sexual and reproductive health services. Evidence from a WHO research initiative

Strengthening country office capacity to support sexual and reproductive health in the new aid environment. Report of a technical consultation meeting: wrap-up assessment of the 2008–2011 UNFPA–WHO collaborative project. Glion, Switzerland, 21–23 March 2011

The sexual and reproductive health of younger adolescents. Research issues in developing countries

Unsafe abortion. Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. Sixth edition

WHO guidelines. Use of cryotherapy for cervical intraepithelial neoplasia

Evaluating the quality of care for severe pregnancy complications. The WHO near-miss approach for maternal health

WHO recommendations for prevention and treatment of pre-eclampsia and eclampsia

WHO recommendations for the induction of labour

Prevalence and incidence of selected sexually transmitted infections. *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, syphilis and *Trichomonas vaginalis*. Methods and results used by WHO to generate 2005 estimates

Briefing notes/policy briefs/ research summaries/meeting reports/statements

Universal access to reproductive health. Accelerated actions to enhance progress on Millennium Development Goal 5 through advancing Target 5B

Kesho Bora Study. Preventing mother-to-child transmission of HIV during breastfeeding. Briefing note

Child-fostering promises and trafficking in children for domestic work in Nigeria: issues and implications for policy. Research summary

Sociocultural motivations for female genital mutilation: matrimonial strategies, family motivations and religious justifications among the Al Pulaar and the Soninké in the River Senegal Valley. Research summary

Estimating the obstetric costs of female genital mutilation in six African countries. Research summary

Female Genital Mutilation programmes to date: what works and what doesn't. Policy brief

An update on WHO's work on female genital mutilation (FGM). Progress report

Report of the expert consultation and review of the latest evidence to update guidelines for the management of sexually transmitted infections.

The sexual and reproductive health of young adolescents in developing countries: Report of a WHO technical consultation, Geneva, 4–5 November 2010

WHO Statement on antenatal care

National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995. Policy brief

Emergence of multi-drug resistant *Neisseria gonorrhoeae* – Threat of global rise in untreatable sexually transmitted infections. Fact sheet

Statement on the Heffron et al study on the safety of using hormonal contraceptives for women at risk of HIV infection

Implementation Research in HRP. Operationalizing the United Nations Secretary-General's Global Strategy for Women's and Children's Health. Briefing note

Addressing essential areas for improving sexual and reproductive health. Partner brief

Intimate partner violence during pregnancy. Information sheet

WHO recommendations for prevention and treatment of pre-eclampsia and eclampsia.. Summary of recommendations

Programme documents

HRP research breakthroughs contributing to saving women's and children's lives
HRP Biennial report 2009–2010
RHR Highlights
HRP Highlights
WHO Sexual and Reproductive Health Medium-term Strategic Plan for 2010–2015 and HRP Proposed Programme Budget for 2012–2013
WHO Sexual and Reproductive Health Medium-term Strategic Plan for 2010–2015 and Proposed Programme Budget for 2012–2013
Strategic direction of the Department of Reproductive Health and Research
Countries for WHO RHR Strategic Focus 2011–2015
Guidance for the HRP Research Proposal Application Forms
Tools and techniques to support knowledge networking and virtual collaborations
Report of the 28th meeting of the Scientific and Technical Advisory Group

Newsletters

RH Update. Monthly electronic newsletter begun in July (6 issues)
HRP RHR news (6 issues + 1 special issue)

Language versions

Core competencies French
Medical eligibility criteria for contraceptive use French
Medical eligibility criteria for contraceptive use Spanish
HRP Highlights French
RHR Highlights French
WHO Sexual and Reproductive Health Medium-term Strategic Plan for 2010–2015 and HRP Proposed Programme Budget for 2012–2013 French
Nine steps for developing a scaling-up strategy Spanish
Nine steps for developing a scaling-up strategy Spanish
WHO recommendations for prevention and treatment of pre-eclampsia and eclampsia.. Summary of recommendations. French, Russian Spanish
Trends in maternal mortality 1990 to 2008 French
Report of the 28th meeting of the Scientific and Technical Advisory Group. French
Report of the 23rd meeting of the Policy and Coordination Committee. French

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