DESIGNING THE FUTURE:

promoting research in sexual and reproductive health
Entre Nous is published by:
Country Policies and Systems Unit
WHO Regional Office for Europe
Scherfigsvej 8
DK-2100 Copenhagen Ø
Denmark
Tel: (+45) 3917 1602
Fax: (+45) 3917 1818
E-mail: entre nous@euro.who.int
www.euro.who.int/entre nous

Chief editor
Dr. Gunta Lazdane
Editor
Dr. Lisa Avery
Editorial assistant
Dominique Gundelach
Layout
Sputnik Reklame Aps, Denmark.
www.sputnikreklame.dk
Print
Central tryk Hobro a/s

Entre Nous is produced in:
Bulgarian by the Ministry of Health in Bulgaria as a part of a UNFPA-funded project;
Portuguese by the General Directorate for Health, Alameda Afonso Henriques 45,
P-1056 Lisbon, Portugal;
Russian by the WHO Regional Office for Europe Rigas, Komercfirma S & G;
Spanish by the Instituto de la Mujer, Ministerio de Trabajo y Asuntos Sociales, Almagro
36, ES-28010 Madrid, Spain.
The Portuguese and Spanish issues are distributed directly through UNFPA representatives and WHO regional offices to Portuguese and Spanish speaking countries in Africa and South America.

Material from Entre Nous may be freely translated into any national language and reprinted in journals, magazines and newspapers or placed on the web provided due acknowledgement is made to Entre Nous, UNFPA and the WHO Regional Office for Europe.

Articles appearing in Entre Nous do not necessarily reflect the views of UNFPA or WHO. Please address enquiries to the authors of the signed articles.

For information on WHO-supported activities and WHO documents, please contact Dr. Gunta Lazdane, Country Policies and Systems unit, office T-316 at the address given above.
Please order WHO publications directly from the WHO sales agent in each country or from Marketing and Dissemination, WHO, CH-1211, Geneva 27, Switzerland

ISSN: 1014-8485
In 1994 the International Conference on Population and Development in Cairo, Egypt, placed sexual and reproductive health firmly on the international agenda as fundamental to the social and economic development of communities and countries. Governments from around the world and many international organizations, including WHO, committed to this platform. Sexual and reproductive health should not be difficult to achieve, yet 18 years later the challenge of making sexual and reproductive health a focal part of international efforts for the elimination of poverty, illness and disability continues to be a reality. Globally, each year, 210 million women suffer from life-threatening complications of pregnancy, just over half a million women die from pregnancy-related causes, three million infants die in the first week of life, at least 120 million couples have unmet need for contraception, 80 million women have unwanted or unintended pregnancies and 340 million new cases of curable sexually transmitted infections (excluding HIV and other incurable viral infections) occur.

Recently, the ICPD goal of achieving universal access to reproductive health by 2015 was incorporated as a second target 5B under Millennium Development Goal (MDG) 5 on improving maternal health. Thus, more and more countries can be expected in the coming years to place greater emphasis on strengthening their sexual and reproductive health policies and programmes. For progress to be made in this area, however, at least three ingredients will be essential, namely expanding the knowledge base to underpin the formulation of new policies, programmes and interventions and their pilot testing and scaling up; political commitment and “courage” to tackle the barriers (political, cultural and religious) that impede the provision of appropriate information and services for better sexual and reproductive health; and, last but not least, the allocation of the required human and financial resources. Research plays an integral role in all three of these aspects.

Research enables individuals to lead healthier sexual and reproductive health lives in several ways. It identifies sexual and reproductive health needs and priorities within communities, it generates new knowledge that can be used for advocacy and for policy and programme formulation, it identifies and promotes best practices, and it aids with the development of evidence-based interventions, guidelines and tools. Through increased utilization of research findings research helps to strengthen sexual and reproductive health programmes and policies. Furthermore, the use of a multidisciplinary approach towards research (combining economic, social, behavioural, health systems, policy, epidemiological and biomedical disciplines) helps to ensure that key issues in sexual and reproductive health are understood from a variety of pertinent and cross-cutting perspectives. As a result, scientifically well-conducted and ethically sound research provides policy makers at local, national, regional and international levels with the necessary knowledge to offer quality information and services to individuals so that they are able to protect their sexual and reproductive health and exercise their human rights related to sexuality and sexual and reproductive health.

Advocating for and improving sexual and reproductive health has been a longstanding goal of the WHO Collaborating Centres in sexual and reproductive health. Grounded in the belief that “research in the field of health is best advanced by assisting, coordinating and making use of the activities of existing institutions” the Organization has had the deliberate policy, probably as long as WHO has existed, of involving national institutions in both the national and international research promoted by the Organization. The WHO Collaborating Centres form part of an institutional collaborative network setup by the Organization in support of its programmes at all levels: country, intercountry, interregional and globally. The Centres’ mandate is to provide services to WHO in support of programmes that are of interest at a global level and to be involved in technical cooperation for national health development. WHO Collaborating Centres are required to participate in the strengthening of country resources and national health development via information sharing, service provision, research and training. The European Region is fortunate to have 19 of these Collaborating Centres dedicated to research in sexual and reproductive health.

This issue of Entre Nous highlights the research undertaken – and the challenges experienced and successes achieved in undertaking this research - by various WHO Collaborating Centres in the European Region, as well as other research institutions, all of which are dedicated to advancing the state of sexual and reproductive health within their countries and across the Region. By focusing on the work done by these institutions it is hoped that the reader will be able to gain a new appreciation for the importance of research in sexual and reproductive health and health in general. Our hope is that this issue of Entre Nous will demonstrate that research is not only about designing studies in a scientifically robust and ethically sound way, collecting and analyzing data and reporting findings at scientific congresses and in scholarly papers, but that research is – and must be made – also an integral part of health systems development through impacting on individual, organizational, national and international policy levels. Only then can research claim its rightful place as a global public health good for the achievement of better sexual and reproductive health and well-being for individuals, communities and entire populations.

Paul F.A. Van Look, MD, PhD
Director
Department of Reproductive Health and Research
WHO headquarters, Geneva, Switzerland
Research serves to define the most appropriate interventions or technologies for improving sexual and reproductive health (SRH). Research findings should contribute to the formulation of policies and provide the evidence base for the development and strengthening of SRH programmes. In addition, findings from well-designed research should provide the basis for:

- identifying crucial issues, gaps and needs for improving SRH;
- generating new knowledge regarding developments in SRH;
- developing new and improved technologies, tools and guidelines;
- identifying and testing interventions for prevention and care strategies;
- improving the management and allocation of resources and;
- advocating for change and for the adoption of best practices for improving SRH.

To ensure maximum utilization of research findings, researchers need to engage in innovative and strategic communication and information dissemination approaches. For their part, policy-makers and service-providers need to have a sound appreciation of how research can contribute to the development and modification of policies and practices. A key obstacle to the utilization of research is the lack of dialogue between the various stakeholders.

Pathway to implementation of research

Figure 1 presents a model for strengthening utilization of research to improve SRH. Its success depends on ensuring that appropriate media are used (journal article, report, policy brief) for the target audiences (researchers, policy-makers, practitioners). The journal article is aimed at the scientific community, whose role it is to ensure that the results are scientifically sound and valid. These findings are then converted into policy briefs and press releases in order to reach policy-makers and the general public. Where relevant, and once steps appropriate for policy-making have been initiated, the findings are introduced into practice guidelines. Findings could thus be used to inform SRH policies or programme development and strengthening. They could also serve to advocate for implementation of best practices. In some instances, and depending on the nature of the study, primary findings can be used to develop and test interventions. Successful interventions are subsequently promoted through training. Such interventions could further be integrated into health systems through an adaptation and adoption process and scaled-up for wider application. At the SRH system level, pertinent issues, problems and needs emerge or arise as part of a dynamic process for ensuring efficiency, effectiveness and quality of services. These feed back into global or national research questions and priorities. Questions to be considered at different stages of the research-to-practice continuum are presented below.

Research planning

- How relevant is the research question to the priority SRH problems in the country? The greater the relevance, the greater the chance findings will be utilized.
- What linkages and partnerships exist between the researchers and the stakeholders? The closer the links, the better the communication between the interested parties and the higher the chances the research will be utilized.
- In relation to the research question, what level of interaction exists between the research group and the service delivery programmes? Close interaction between these two is particularly important in operations research.
- Has a technical advisory team for the study been established? This team guides the research planning process and includes researchers and various stakeholders.
- Are the interventions to emerge from the research cost-effective? It is vital to examine the cost implications of the interventions being proposed, focusing on possible, less expensive alternatives.
- What level of credibility does the research team enjoy among its peers and other stakeholders? The higher the level of credibility, the greater the likelihood of the research findings being communicated widely and of their utilization.
- Is there interest in the research on the part of the beneficiary community or
industry? The greater the interest, the greater the chance the results will be utilized.

- To what extent does a culture of finding scientific solutions to problems exist in the country? Demand for evidence-based interventions and solutions are an important determinant of utilization of research findings. Sometimes, owing to socio-cultural pressures, policy-makers may not be willing to accept scientific findings.

- How feasible is the proposed research project? It is important to select research questions that can be answered with the available ethical research methods.

- Have plans been made for dissemination of research findings during the life of the research project and beyond? Involving stakeholders throughout the entire life of the research project is as important as disseminating the findings after the project is completed.

- Are the study design and methods appropriate and ethical? This is vital for sound research results and credibility.

- Does the research question deal with an issue about which there is public sensitivity? Research on sensitive issues can be more difficult to conduct. Opposing camps may emerge among the policy-makers and politicians, which may lead to lengthy debates on the merits and demerits of the research and thwart utilization of findings.

**Research conduct**

- Is the research being conducted in accordance with the highest technical, scientific and ethical standards? Deviation from the highest standards can affect the credibility of the researchers and the findings.

- What actions are being taken to ensure that progress in research work is being communicated to the stakeholders, particularly the community in which the research is being done? One way to keep the community and other stakeholders interested in research is to appoint them to technical advisory bodies for the research project.

- Are measures taken to ensure adherence to ethical and safety standards in research functioning as intended?Incoming data must be monitored constantly during the research process. This ensures that: (i) researchers are able to take timely steps to protect the study population from undesirable consequences of the intervention, should these be detected; and (ii) if preliminary data already indicate significant benefits of the intervention, the control group is not unethically denied the intervention on the grounds of scientific interest.

- Are sound review and feedback mechanisms in place for the research project? These ensure that the project remains on track.

- Is local capacity-building planned for in the research project? It is desirable to engage and train local staff in research conduct. This helps with the long term goal of using research to solve public health problems.

**Upon completion of research**

- Have steps been taken to ensure that the findings have been communicated to policy-makers and the public in the form of policy briefs or press releases in a timely manner? Policy briefs are useful to inform policy-makers of the policy recommendations that emerge from the research findings. Press releases are designed to inform the mass media and the public about the research findings.

- In preparing policy briefs and press releases, has care been taken to ensure that the findings are presented in the local context? This is particularly important in the case of research undertaken at the global or national level. Findings from one setting are not always transferable to other settings.

- How compatible are the research findings with the existing health system? Interventions that require less disruptive changes to the health system have a greater chance of being adopted.

- How receptive are the staff in the health-care delivery system to the proposed interventions? To bring about change, staff in the health system need to be open to it. Keeping them informed about the research and its findings can help increase their receptivity to new interventions.

- How will advocacy for change be managed and who will be involved? Advocacy campaigns need to involve those best suited to undertake it (stakeholders, media) and reach those who need to be informed and convinced (policy-makers, programme managers, end-users).

- Is the evidence strong enough to suggest changes (in policy, practice)? Recommendations that are not backed by solid evidence are less likely to be implemented.

- Will resources be available and sustainable to make the suggested changes? To carry the implementation process through, available and sustainable funds are required.

- Will researchers remain involved in the process of applying the findings? The real test of any research is in its application. Researchers can learn a lot about their field of research by remaining involved in the process of implementation of their findings.

Finally, the tenet and principle guiding research is to build on what already exists, or strengthen the evidence base on which decisions are made. The overriding goal is to improve the community’s well-being by proposing solutions that are based on the best available evidence on efficiency, efficacy and safety.
The WHO Strategic Approach to Strengthening Sexual and Reproductive Health Policies and Programmes (1) is the methodology used to identify and prioritize the needs for sexual and reproductive health (SRH) services and technologies, test the necessary interventions on priority needs and apply the successful interventions at the national level. It uses a multidisciplinary approach to develop strategic decisions essential for improvements in selected areas of SRH.

The purpose of the strategic assessment (SA) in Ukraine was to:

1. identify quality of family planning and abortion services;
2. develop sustainable programmatic interventions to improve the quality of SRH;
3. decrease the need for abortion services;
4. improve the quality of abortion and family planning services in public and private sectors of the country;
5. assist the Ministry of Health in coordinating resources to strengthen these services.

This article serves to share the challenges and lessons learned when conducting the SA in Ukraine.

First steps
In order to be successful with our SA numerous parties were involved from the very beginning. Involvement of top policy makers and key stakeholders is essential in order to reach the goals of a SA. In 2004 when WHO was organizing the workshop on the latest tools available in improving access and quality of reproductive health services, including those on safe abortion, Ukraine, as well as, four other countries (the Russian Federation, the Republic of Moldova, Latvia and Lithuania) were represented by representatives of the Ministry of Health, professional and non-governmental organizations (NGO).

Our experience was that because a SA involves multidisciplinary exercises it was important to establish good rapport among members from the start. Failure to do so can compromise the success of the planning activities. Once all team members have come together and have accepted the idea of a SA, proposal development can then be done.

Proposal development
The challenge of developing successful proposals is not a new phenomenon. The first challenge was that of preparing a proposal in a very specific format; those involved may not always be familiar with the style.

The second challenge was that the proposal needed to be written in the English language. The required translations and back translations were time consuming. Due to the lack of familiarity with English in Ukraine, direct communication between English speaking international consultants and the SA country coordinator was extremely difficult. As a result many comments from English speaking consultants were unable to be answered in a timely fashion and the proposal development thus took more than a year to proceed.

In response to this second challenge an international Russian/English speaking coordinator was assigned to work directly with the Ministry of Health and the international consultants. This was extremely beneficial and would have greatly decreased the time required for proposal development if done early on in the project.

The third challenge was deciding on the organization that would be responsible for the SA implementation in the country. The ideal solution would have been to use a national NGO. However, in Ukraine these organizations do not exist and the next most suitable option was a local NGO. It was important to be able to identify a local NGO that would be involved in the SA from the start and be responsible for the SA implementation not only in their region of the country, but at a national level as well.

National workshop to develop data collection instruments
A background document characterizing the situation in the area of family planning, unplanned pregnancies and abortion was prepared by the Ministry of Health experts and served as useful basis to identify strategic questions for the field work.

A planning workshop with involvement of a broad range of stakeholders was held in order to identify the broad programmatic issues and priority areas to be assessed using the SA methodology.

Unfortunately, the background document was not available to all participants of the workshop in enough time to allow them to work with it. It is important to ensure that all involved parties have received and studied the background document before the national workshop on preparation for the fieldwork.

At this point, two teams were created that adapted the tools for the field work to national needs and strategic questions raised in Ukraine. As the country is large and the level of health services is similar, two regions were chosen to carry out the field work. More diverse representation of the different involved parties would have been of benefit for the field work, as health care providers were abundant in both teams and only some young people, journalists and peer educators were involved. High level policy makers were in the field for only a few days due to other priorities. This influenced the ability of the teams to develop a multidisciplinary...
Iryna Mogilevkina, MD, PhD
Professor, Obstetrics, Gynaecology and Perinatology
Donetsk State Medical University, Ukraine
imogilevkina@gmail.com

approach and the capacity to conduct a SA. Luckily, we were able to help overcome this challenge by incorporating representatives from various sectors (educational, economic, social and mass media) into the SA teams at various sites.

Interview guides were also developed during the workshop. Due to different levels of expertise more time could be allotted for development of instruments and their pre-testing. This would allow better understanding of the process and decrease difficulties of the first few days in the field. Similar documents from other SAs would be beneficial to have as a reference to help provide an understanding of what the final product (interview and observation instruments) should look like.

Due to the large number of interviews and group discussions conducted daily, good preparatory work was essential in ensuring the success of the SA field work. Qualitative research methodology was quite new for many team members and evening discussions were interesting, but time consuming as well.

Time management is crucial. Flexibility and creativity are key. We found that splitting the teams into those responsible for organization and those responsible for interviewing helped facilitate the work load.

Field work
Our challenge was to communicate to those being interviewed that the goal of the SA was not to blame and find mistakes, but to identify areas for improvement and gaps in the system. It may require time for people in health care facilities to understand that this is not a team from the Ministry of Health with international experts that is coming for control and punishment, but a method that enables each individual involved, whether a woman from a marginalized group or the head of the local administration, to assist in the improvement of SRH in Ukraine.

Willingness to change is essential in order to conduct a SA successfully and move toward system improvement. Individuals need to be assured of their anonymity and their ability to speak freely without punishment.

However, it was a very interesting time that gave each of the team members the possibility to encounter diverse attitudes and practices and to discuss all that was heard or seen together in the group. Even the process of the SA itself was a capacity building exercise for all colleagues involved.

Conclusion
The draft report of the field work is ready and recommendations will be discussed during the dissemination meeting where a much broader group of stakeholders than those participating in the field work will be present. We all hope that these recommendations will be agreed upon and will be the basis for the future action in Ukraine to improve the health of women and their families.

Reference
http://www.who.int/reproductive-health/strategic_approach/index.htm (available in English and Russian)
In 1992 the Institute of Child Health in Trieste, Italy, was first designated a WHO Collaborating Centre; it has been re-designated since then every four years. The terms of reference agreed upon in 2004 are very similar to those established in 1992 and include:

- **Research activities for the development and assessment of appropriate technologies and interventions related to WHO programmes and initiatives on maternal and child health;**
- **Development and field testing of guidelines and training materials on the use of appropriate technologies and interventions related to the same WHO programmes and initiatives;**
- **Support to the introduction and implementation, including evaluation, of WHO programmes, plans and initiatives related to maternal and child health.**

**Research contributions to improve maternal and child health**

During the past 15 years, the Centre has actively contributed to research, development and implementation in several fields pertinent to maternal and child health. Several of these projects are outlined below.

- **Kangaroo Mother Care (KMC)**

  Originally started in 1979 by Drs. Rey and Martinez in Bogotá, Columbia, KMC is a universally accepted method of care that is important for all infants, but especially for preterm infants. KMC involves 3 basic principles: provision of skin to skin contact between the mother and baby, exclusive breastfeeding and the provision of medical, emotional and psychological support to the mother and infant, including the concept of early discharge from hospital. In resource limited settings it is an effective way to help meet baby’s need for warmth, breastfeeding, protection from infection, safety and love. After initial experience in Maputo, Mozambique, and the completion of a multi-centre randomized controlled trial (1), the Centre organized an international conference in 1996 that gave birth to the International Network on KMC. The Network meets every two years and the 7th meeting and conference will take place in Uppsala, Sweden, from 6 to 11 October 2008 (www-conference.slu.se/KMCeurope08/). On behalf of WHO, staff of the Centre developed, in collaboration with other experts, a practical guide for KMC (2).

- **Planning for Perinatal Care (PPC)**

  The widespread introduction of expensive technology has occurred in many countries, often without good evidence of effectiveness, appropriate training of staff, adequate technical support or strategic needs assessment. In order to help policy makers and decision makers identify the appropriate choices of technologies available for perinatal care in their individual settings (primarily middle income) the Centre organized a short course on PPC, aimed at this target audience in 1997. The course was repeated several times in Trieste and exported to countries of eastern Europe and Latin America. As a follow up to these courses, staff from the Centre gave support to national initiatives for the development of plans for perinatal care. The contents and methods of the course were more recently integrated into a summer course on Public Health Approaches to Maternal, Neonatal, Child and Adolescent Health held every year in Trieste (www.burlo.trieste.it/?Lang=european-school). The experience gained with all these activities allowed the Centre to actively contribute to the development of the WHO European Strategy for child and adolescent health and development (www.euro.who.int/childhealthdev/strategy/20060919_1).

- **Essential Newborn Care (ENC)**

  Globally nearly half of all infant deaths are neonatal deaths, with 2/3 occurring in the first week of life. Birth asphyxia, infections (pneumonia, diarrhoea, sepsis, HIV), pre-maturity and congenital abnormalities remain the leading causes of neonatal mortality. As most of these causes are either preventable or treatable ENC was developed to highlight preventative interventions that are simple, inexpensive, available and cost effective and that can occur at 3 various levels of care: home/family, the health centre and the referral district hospital. In 1998 the Centre developed, in collaboration with the WHO Regional Office for Europe, a manual and course on ENC (www.euro.who.int/document/e79227.pdf). Its goal is to review evidence and best practice for prevention of neonatal morbidity and mortality and to help integrate these practices into existing health systems and methods of care. The course was translated into Russian and Portuguese and was run in several countries of the WHO European Region (3) and several states of Brazil. In the latter country, the ENC manual was also submitted for research on effectiveness. The work on ENC continued along the years and included the collaboration with WHO in Geneva.
• Breastfeeding (BF)

Breastfeeding has long been recognized as an ideal way to ensure young infants obtain the needed nutrients for healthy growth and development. The Centre has been very active in the protection, promotion and support of BF since inception. For instance, it carried out one of the few controlled trials on the effectiveness of the Baby Friendly Hospital Initiative package (5). Since 2002 the Centre coordinates EU-funded projects for the development of a Blueprint for Action, first launched in 2004 and available online (http://ec.europa.eu/health/ph_projects/2002/promotion/promotion_2002_18_en.htm) in many languages. The project continued with a pilot test of the Blueprint in eight EU countries and will lead, by mid 2008, to the publication of a revised and field tested Blueprint. During the pilot test, the Centre contributed to the development, in 2006, of standard recommendations on infant and young child feeding (6).

Conclusion and future directions

In addition to the above main fields of interest, the Centre has carried out research and development activities in a variety of other issues, from bacterial meningitis to violence in children to the identification of near-misses for improved obstetric care. Along the years, the Centre has shifted its focus geographically (from Sub-Saharan Africa to eastern Europe) and thematically (from research, development and training on appropriate technologies to development of policies and plans, focusing on inequalities and inequities). This latter shift in focus can be better expressed by quoting a sentence that Giorgio Tamburlini and Adriano Cattaneo, the two senior staff of the Centre, wrote in a letter to the Lancet: “Focusing on health interventions alone to reduce child mortality looks short-sighted and may reduce the chances of acting on the factors that cause increased exposure and vulnerability of children to disease, and ultimately lead to death or to a miserable life”(7). It is with this ideal in mind that the Centre looks to the future to continue to do research on maternal and child health that can be used to advocate for better maternal and child health policies and interventions, to provide training and guidelines that improve quality of care and to share knowledge with others through education and dissemination that can help make best practices and evidence accessible to all.

References


Adriano Cattaneo
Epidemiologist, Coordinator
WHO CC for Maternal and Child Health
Trieste, Italy
cattaneo@burlo.trieste.it

Giorgio Tamburlini
Scientific Director
Institute for Child Health IRCCS
Burlo Garofolo
Trieste, Italy																	
tamburlini@burlo.trieste.it
UNINTENDED PREGNANCIES: THE DUTCH SITUATION

Like the WHO Collaborating Centres, Rutgers Nisso Groep Expert Centre on Sexuality in the Netherlands, has been dealing with sexual and reproductive health for decades. Rutgers Nisso Groep aims to improve sexual and reproductive health programmes by continuously reviewing lessons learned, best practices and experiences that can be adjusted to other situations and innovative ways of working. The organization has a research department that surveys aspects of sexual and reproductive health and that evaluates education programmes. An important goal of the organization is to facilitate talking openly about sexuality. Effective sexuality education programmes contribute to the empowerment of (young) people to make informed decisions regarding their sexuality and sexual well-being.

In the Netherlands most reproductive age women who do not wish to have a child use contraception. We have a tolerant societal norm, accept that (young) people want to have sex, and find it important that they protect themselves; not only against STI’s, but also against unwanted pregnancies. As a result unintended pregnancies are rare and abortion rates are low. This is, in a nutshell, how the Dutch situation could be summarized, and compared to most other countries this description is true. But it does not mean however that all is well. By reviewing recent research in the field of reproductive health, this paper shows that not all Dutch women are able to, or in circumstances that allow them to, prevent unwanted pregnancies.

In the Netherlands two large scale studies on sexual behaviour and sexual health were recently done. Both studies had representative samples: “Sex under 25” gathered data in 2005 among 4820 12-18 year-olds (1). One year later the study “Sexual Health in The Netherlands 2006” was done with a sample of 4147 adult men and women aged 19-70 years (2). These important pieces of research have helped further our understanding of the current situation in the Netherlands regarding unwanted pregnancies.

Contraception

A large proportion of Dutch women aged 12 and 45 use contraception. Of sexually active girls aged 12-18, nine out of ten girls use contraception. One in ten (11%) does not use anything to protect herself from unintended pregnancy. There is a large repertoire of contraceptive methods available to young people; the vast majority (78%) choose the pill, just over a quarter (27%) choose to use a condom and one in five (20%) use both methods simultaneously (Double Dutch). Contraceptive use of young women does differ from that of adult women in the age of 19-45. In the adult population 28% of women use the contraceptive pill, 6% choose to use condoms and 11% opt for the Double Dutch method, combining oral contraceptives with condoms. The adults make far more use of the large spectrum of methods that is available to them, although the so called ‘new’ contraceptives, like the contraceptive ring and the contraceptive patch are not very popular. 13% of women have opted for male or female sterilization, while 7% use an IUD. It is obvious that age is an important predictor of contraceptive choice: the older women are, the more likely they will choose the longer lasting or permanent alternatives. Of course, age does correlate with number of children and partner status, both of which have a significant effect on method choice (see table 1)(1,2).

Numbers of unintended pregnancies

Of all pregnancies, almost one third were not intended. However, when confronted with such a pregnancy almost all men and women eventually say that they do want to have the child. Therefore only a small minority of all unintended pregnancies are unwanted pregnancies.

The risk of an unintended pregnancy is eminent for women who do have sex but do not take action to protect themselves from pregnancy, for women who make use of unreliable methods of contraception and for women who make mistakes in use of their method of choice. When the data from the surveys are extrapolated to the Dutch population it is estimated that about 67 000 (CI 46 600-96 000) pregnancies a year are caused by lack of contraceptive use. The reason why no contraceptives were used vary widely, from religious rules to having an ambivalent child wish.

The second important cause of unintended pregnancies is ineffective or faulty use of contraceptives. Examples of this include forgetting one or more contraceptive pills or improper application/removal of condoms resulting in leakage or breakage. In the Netherlands almost one in five women (18%) is not able to use her method of contraceptive correctly for six months in a row. Approximately a few thousand unintended pregnancies a year occur as a result of this. Between contraceptive methods there are marked differences in percentage of women failing contraceptive use. Women using the pill more often have problems using it correctly; more than a quarter of them say they have not been able to use it properly over the last 6 months.

Morning after pill

When the risk of an unintended pregnancy is high Dutch women have the possibility to purchase the morning-after pill, either over the counter of a pharmacy or from a chemist. This is a recent option, becoming possible in January 2005, which has lead to a considerable increased wholesale trade. Over the course of the first year sales increased by about 65%. 3.5% of young people (age 12-19) in the Netherlands report having used the morning-after pill the past year. For adult women (age 19-49) this percentage is slightly lower: 2.2%. Results from a study among buyers of emergency contraceptives showed that buyers usually are under 25, often childless, mainly belong to the indigenous population, are fairly well educated and usually in a long-term relationship (3). This suggests that it is not the known ‘risk-groups’ for unintended pregnancies which are buying this product. High abortion rates are mostly found among people of non-Dutch origin. Compared to women who have
had an abortion, morning-after pill-buyers use contraceptives of any type more often. Though their use of contraception is better, something has gone awry which results in them purchasing the morning-after pill. Morning-after pill-users can be subdivided into three groups: the “careless” (33%), who have not used any contraception and have been “surprised” by their sexual contact represent the first group. They realize only later that they have run a risk of pregnancy. The second group consists of women where contraception has failed (54%). They intended to prevent a pregnancy but most of them forgot to take one or more pills, or the condom slipped off or tore. Finally, a third group of women bought the morning-after pill as a preventive measure (10%). These women keep the morning-after pill in stock at home, or take it, while there is actually no need for it.

Abortion

When a woman wishes to terminate an unintended pregnancy she has the possibility to attend one of the countries 16 abortion clinics. When she is living in the Netherlands, all costs are covered by the national insurance. Access to abortion services is very good. Annually in the Netherlands just under 33,000 pregnancies are terminated. About 4500 of these abortions are done by women who do not live in the Netherlands, but come to our country in order to have an abortion. The Dutch abortion rate is 8.6 per 1000 women aged 15-44 (4). After an increase of the abortion rate in the late nineties, the rate has remained stable for the past five years. One in every ten adult women has had at least one abortion in her life time (2). Abortion rates for teenagers in the eighties and nineties of the past century were very low. At the turn of the century however teen abortion rates rose dramatically. Partly as a result of preventive interventions targeted at teenagers in the ‘riskgroups’, the teen abortion rate has decreased and in 2006 it was only 7.4 per 1000 (see figure 1) (4).

Conclusion

Research in the field of unintended pregnancies does show that in general women in the Netherlands are able to prevent unintended pregnancies. When compared with rates from other countries the Dutch rates are among the lowest in the world. Still the data also indicate that there is a considerable group of women who find it difficult to prevent a pregnancy. Our low abortion and teenage pregnancy rates may by no means be an excuse to think we have done what is necessary. In fact, these two recent pieces of research highlight the fact that a fairly large group of women are in need of our efforts to help them to be able to prevent unintended pregnancies.

References


Cecile Wijsen, PhD

Head of programme Reproductive Health, Rutgers Nisso Groep, Dutch expert centre on sexuality, Utrecht, The Netherlands c.wijsen@rng.nl
When the Reproductive Health Programme (RHP) in Turkey started, responding to learning needs and awareness raising of its target groups were principal fields of activity, in addition to gathering information needed for its own implementation. If the two target groups for information are considered as the demand and supply sides, the RHP has not only produced needed information for both, but also developed and provided necessary tools for the adequate dissemination and usage in other components of the RHP.

**Research: In depth and ad-hoc discoveries**

Fifteen data collection activities have been conducted under the RHP, with a total budget of approximately €4 million (1). These activities were planned to cover specific information needs of the Ministry of Health (MoH) for RHP intervention areas. Three out of fifteen are especially important for policy-level decision-making and are discussed in this article: Turkish Demographic and Health Survey 2003 (TDHS), National Maternal Mortality Study (NMMS), and Health Seeking Behaviour Study (HSBS).

The TDHS started in 1968, later to become the only data source for monitoring the health level of the population and the quality of healthcare services, is conducted at 5-year intervals. The last DHS was conducted in 2003 and supported by the RHP. Despite its usefulness in providing necessary data to estimate most of the reproductive health indicators, TDHS fails to estimate maternal mortality levels and answers most of the “what’s” but not the “how’s”. Therefore, in addition to mother and child health data provided by TDHS, the NMMS Study, which provides data on maternal mortality, and the HSBS, which, together with the others, provides data on risk factors related to maternal deaths, were required.

**Mutually complementing findings**

Findings of the 3 studies complement each other. While the “what’s” are answered by the TDHS, the HSBS complements results on the “how’s”: The total fertility rate (2) and the maternal mortality rate (4) perfectly correlate geographically. The HSBS is not always comparable to the 2 other studies since its data are of qualitative nature and its universe is limited to 3 provinces. The validity of comparing their data should be considered carefully due to both the time gaps and the comparability of their sampling universes: the quality and incidence of antenatal care, skilled birth attendance rates and other characteristics differ between NMMS and TDHS.

Overall, the socio-economic status of the woman’s family is the main independent variable that explains the determinants and patterns of service use and morbidity-mortality related risk factors. It also correlates with risk of unwanted pregnancy, use of free of charge prenatal care and with skilled birth attendance, again free of charge. Strikingly, maternal mortality appears to be correlated to caesarean sections (C/S); one out of every two dead mothers had undergone C/S. This method is known to be the preferred delivery method of high socio-economic level families in the West and the country average of caesareans is slightly above 20% (2). When the woman has access to healthcare, the quality of care received and the communication skills of the service providers do not always meet her expectations. Only a negative past experience in the neighbourhood may be a source of worry for the pregnant woman (3).

**Effects of urbanization**

Another main independent variable, caused by recent economic transition, is the high internal migration rate, which is a huge issue affecting the population distribution of Turkey. Large numbers of people have moved from rural to urban areas and from the East to the West in the last 20 years. A direct implication of this is a rapid decrease in the size of “urbanized” young families, and a considerable increase of single parent families. As a result of this development, vertiginous differences are observed between the regions concerning the use of family planning methods or maternal mortality rates; while the former is still far lower in the East versus the West, the latter in the Northeast is double the Turkish average (2, 4). When it comes to fertility the West-urban, by decreasing itself two-fold, versus the East-rural, is now equal to European rates (2). The need for quality sexual and reproductive health services is rapidly increasing, together with the increase of service-demanding families in the speedy modern metropolitan areas. Whereas service coverage and accessibility are still priority issues in the traditional East, its urban areas are now ruralized, as a result of migration.

**Other knowledge generating activities: potential data sources for local health management**

In order to provide the needed information for both the RHP and the Provincial Health Directorates, working groups (youth, management, safe motherhood/ emergency obstetrical care, family planning, STI’s, training, community service organizations) conducted eleven various information gathering activities. The information generated has been useful mostly to determine the needs of both target groups and health care facilities. The approach of consensus building meetings is especially important for Turkey and the stakeholders (decision makers, provincial managers, service pro
Box 1

Programme information
Active behaviour of the population influencing health service utilization includes delay in health seeking behaviour mostly due to shortage of the family’s resources. Passive behaviour seems to be not even being aware of the need when it is present or not taking a decision when danger signs appear.

Programme response
Education is a basic variable in deciding on service use, but the CSO contribution to adult awareness raising is still limited and pilot-sized. Its impact should be extended through inter-sectoral collaboration. The IEC/BCC activities planned under the RHP were unnecessarily delayed and thus the expected achievements have fallen short.

What is next?
In sum, the information produced under the RHP has been useful mainly to define the two-winged bottlenecks of health care: one is the active or passive behaviours fed by the values and attitudes of the population, and the other is the active or passive effects of service provision (see Box-1).

Future data gathering activities
While interventions in the social factors need a longer-term and broader strategy of awareness raising and behavioural change than the duration the RHP offers, improving the level of skills and the attitudes of service providers could be achieved in the short term.

What type of data will be required in the future to help the improvement of primary and SRH healthcare services and for the development and orientation of policies towards the national strategic targets? Data generated exclusively by research will always be needed even if routine data collection systems would prove one hundred percent reliable. Furthermore, decision makers will always need data of qualitative nature complementing the quantitative data generated by future TDHS’s. The social science profession should concentrate its efforts on using a variety of qualitative research methods and widespread use of their results.

Epilogue
The RHP gathered a considerable amount of data on various fields of SRH to define its priorities. The knowledge thus generated has been shared widely in collaboration with other result areas of RHP, mainly with decision makers, managers, service providers, clients and the general public. The information generation approaches will be useful for monitoring and improving the SRH care service and policy development in Turkey.

References

Cem Turaman, MD
Consultant, Public Health Expert
turaman@gmail.com

Sibel Bilgin, MD
Officer of the Turkish Ministry of Health, Mother and Child Health/Family Planning General Directorate
LEVEL OF KNOWLEDGE ON EMERGENCY CONTRACEPTION AMONG WOMEN REQUESTING TERMINATION OF PREGNANCY

The Research Center of Maternal and Child Health Protection in Yerevan, Armenia has been a WHO Collaborating Centre on Human Reproduction since 1985. Contraception is one of the main areas for research and collaboration at the Centre. In 2005 this project, examining knowledge of emergency contraception among women requesting termination of pregnancy, was identified as a priority topic for research in sexual and reproductive health.

Rationale
Unwanted pregnancy is a major medical, social and public health problem. Since induced abortion became legalized in Armenia in 1955, it has become the most common method of childbearing regulation in our country. Even after launching 77 family planning centers in 1997 the situation has changed only slightly. According to the data of the 2005 Demographic and Health Survey (1), 37% of women have had at least one abortion. The average number of abortions among women who have ever had an abortion was 2.6. Only 53.1% of women use contraception, and the majority of them (33.6%) use traditional methods of contraception. Withdrawal is the most widespread method of contraception, whereas 19.5% of women use modern methods of contraception. 52% of women requesting termination of pregnancy use some method of contraception. This means that pregnancy among these women is the result of contraception failure. Emergency contraceptives (EC) are methods that can prevent unwanted pregnancies if administered within 120 hours after intercourse(1-5). There are no official data about the use of EC in Armenia. Thus the aim of this study was to determine the knowledge and use of EC in the group of women requesting termination of pregnancy.

Methods and Results
Voluntary and anonymous questioning of 840 abortion patients aged 17-45 was conducted at the Research Center of Maternal and Child Health Protection during May 2006-April 2007. Interviews with patients were conducted confidentially, face to face, in a private setting. Inclusion criteria for the selection were the following: requesting an abortion on demand and agreeing to the interview.

The maximum age of the patients was 45, the minimum 17. The majority of abortion patients (77.3%) were between the ages of 20-35. 47.6% of patients had university education, 34.5% had high school education (10 grades) and 17.8% had secondary professional school education (14 grades). The greatest proportion of abortion patients (90.5%) lived in urban areas and only 9.5% lived in rural areas. Women who live in rural areas usually have the opportunity to undergo abortion in the same region they live in; thus they prefer to have the abortion in that region as opposed to traveling to Yerevan to have the procedure performed there. This is felt to be due to the following reasons: not all regions of Armenia are located closely in distance to Yerevan, it is more convenient to have the abortion performed in the same village than to travel to Yerevan, and termination of pregnancy in Yerevan will require additional expenses, such as for traveling, accommodation and sick leave from work. This is probably the reason for having only a small number of rural inhabitants in our sample.

Overall, the majority of abortion patients (91.7%) were married and most of them have had only one sexual partner. Only 3.5% of abortion patients have had more than one sexual partner.

If one looks at the number of children of abortion patients, the picture is as follows: 15.5% had no children, 31% had only one child and more than half had 2 or more children (40.4% had 2 children and 13.1% had 3 children).

More than half of all abortion patients (51.2%) did not use any contraceptive method before the current pregnancy. 48.8% of women were using contraceptive methods at the time they became pregnant: 43% were using withdrawal, 29.2% were using condoms, 24.4% were using the rhythm/calendar method and 2.4% were using spermicides. One would expect that the preferable types of contraception were traditional methods (withdrawal and rhythm/calendar) and condoms. Our data shows that traditional methods were used by 68.3% of abortion patients whereas modern methods (mainly condom) were used by 31.6% of them.

The majority of abortion patients (76.2%) were of the opinion that it is better to prevent unwanted pregnancy by using contraceptives. 15.5% of patients had no opinion on this matter. Thus our data support that the majority of abortion patients theoretically realize that contraception is better than abortion, but in practice they do not use contraception consistently or effectively.

Only 8.3% of all abortion patients believed that abortion was a better choice. The reasons for considering abortion a better choice than contraception were the following (more than one answer was possible): abortion is safer (100%), abortion is a short procedure (100%) and abortion is painless (85.5%). This data again supports that abortion patients have incomplete and overall incorrect information about the danger and possible complications of abortion.

The greater proportion of abortion patients (59.5%) expressed their inten-
tion to use contraceptive methods after their current abortion: 44% opted for the condom, 20% preferred the IUD, 18% preferred contraceptive pills, 10% decided on rhythm/calendar method, 4% on withdrawal, 4% on sterilization and 2% chose spermicides. Only 4% could not decide on future use of contraceptive method. A high proportion of all abortion patients (70.3%) appreciated the protection offered by the contraceptive method. 53.1% stated that contraceptives have no negative effect on health. Only 9.3% of the patients had no opinion on this matter (again more than one answer was possible).

It was observed, that a great proportion of abortion patients (70.2%) had no information on EC and only 29.8% of abortion patients had heard about EC. We performed an evaluation based on the responses received from abortion patients relating the source of their information on EC. 54.4% of abortion patients who had information on EC received that information from books and 31.8% from friends. Only 18.2% mentioned their health providers as a source of information. 68% of abortion patients, who had received information on EC, believed that they had enough knowledge on EC, although during the interview it became evident that their knowledge could not be assessed as complete. Some study participants, who considered their knowledge on EC as complete, mentioned withdrawal (8%), rhythm/calendar method (12%) and spermicides (16%) as methods of EC. 12 patients even mentioned vaginal douching as an appropriate EC method.

The majority of abortion patients (48%), who had information on EC, mentioned damage of the condom as an indication for EC. Other indications for EC use included: unprotected intercourse (36%), rape (28%), unplanned intercourse (24%) and missed contraceptive pills (16%). Some patients (4%), who mentioned that they had information on EC, could not mention any indications for EC use. Another 4% of patients even mentioned regular menstrual cycle as an indication for EC (again more than one answer was possible).

**Conclusion and Recommendations**

Based on our research and the analysis of the results the following conclusions and recommendations can be made about the situation in Armenia regarding EC.

1. There is a gap between theoretical knowledge and practical implementation of contraceptives among abortion patients.
2. The knowledge and experience in the proper use of contraception methods are insufficient – a fact that suggests we need to pay closer attention to the educational aspects of this problem. Our data also supports that there is a great need for health education among women.
3. Wide health educational campaigns through the use of TV, Radio and mass media could greatly improve the “scarce informational situation” of the population on proper and effective use of EC as a means of avoiding unwanted pregnancies.
4. We should intensify our health education efforts to let our patients know more about EC, its effectiveness and efficiency, as well as, EC’s role in preserving women’s health through considerably decreasing the number of unwanted pregnancies.
5. We need to greatly improve our educational efforts in the field of EC and provide our patients with proper and accurate information, since only 18.2% of health providers were listed as sources of information.

**References**


**Georgy Okoev**

Director, WHO Collaborating Centre on Human Reproduction, Research Centre of Maternal and Child Health Protection, Yerevan, Republic of Armenia
goko@okoev.com

**Karine Arustamyan**

Deputy Director on Research, Head of Non Surgical Gynecologic Department, Research Centre of Maternal and Child Health Protection, Yerevan, Republic of Armenia
karustamyan@yahoo.com
TRENDS IN SEXUAL BEHAVIOUR AMONG SECONDARY-SCHOOL STUDENTS IN SLOVENIA

As a WHO Collaborating Centre part of our mandate has been to perform research on sexual behaviour among secondary school students in Slovenia. Pregnancy rates among adolescents in Slovenia declined from 61/1000 women aged 15-19 years in 1981 (delivery rate 37/1000, abortion rate 24/1000) to 12/1000 in 2006 (delivery rate 5/1000, abortion rate 7/1000) (1). Our representative studies in 1996 (2) and 2004 (3) revealed interesting changes in sexual behaviour and contraceptive use that occurred among secondary-school students in Slovenia in between.

**Results**

In the 2004 study, 2380 secondary-school students were enrolled: 1285 1st grade students (average age: 15.4 ± 0.7 years) and 1095 3rd grade students (average age 17.4 ± 0.7 years). The study revealed that 88% of 1st graders and 92% of 3rd graders had experienced falling in love; 66% of 1st graders and 82% of 3rd graders had been on a date; 76% of 1st graders and 87% of 3rd graders had been kissing; 62% of 1st graders and 78% of 3rd graders had experienced caressing; and 36% of 1st graders and 61% of 3rd graders had tried petting. Almost one quarter (23%) of 1st graders (24% of boys and 21% of girls) and 53% of 3rd graders (52% of boys and 54% of girls) had experienced sexual intercourse.

A comparison between the results of the studies on sexual activity of secondary-school students (3rd graders, aged 17 years) carried out in 1996 and in 2004 showed that some changes in intimate communication regarding sexual behaviour had occurred in between. In 1996 the students’ first fell in love, then went on a date, later started kissing and caressing; petting was the next step, and sexual intercourse the last (2). In 2004 they kissed before they went on a date and on that date they already started caressing; also petting and sexual intercourse started earlier (Figure 1).

We observed an increase in the percentage of sexually active students: in 1996 38% were sexually active and in 2004 53%. The age at which one half of Slovenian students experienced the first sexual intercourse decreased from 18.5 years to 17 years. This decline in age at sexual debut is reflected in the national abortion statistics, where the decline in abortion rates in the same period was obvious in 17-19 years old adolescents, but not in 15-16-year old adolescents, where, on the contrary, a slight increase of abortion rates was seen in the last years (3). This clearly shows that our adolescents, regarding early sexual debut, are not empowered enough to cope with the responsibility and consequences of early sexual debut. Early sexual debut and unwanted pregnancies could be a reflection of the lack of knowledge and skills regarding sexual behaviour and contraceptive use; unfortunately, sex education is not available or mandatory either in primary or in secondary-schools in Slovenia. However, in the last decade, teachers and gynaecologists have put much effort into integrating sex education into the school curriculum. Unfortunately, the issue has not yet been recognized to be of national importance or priority.

Regarding contraceptive use our study revealed that at the first sexual intercourse 74% of 1st graders and 76% of 3rd graders used a condom; 6% of 1st graders and 7% of 3rd graders used the pill; 4% of 1st graders and 2% of 3rd graders used a double method (condom and the pill); 3% of 1st graders and 4% of 3rd graders practiced withdrawal and 1% (both grades) used other methods. 1% (both grades) used emergency contraception and 8% of 1st graders and 7% of 3rd graders used no method at all.

A comparison of the contraceptive use at the last sexual intercourse among 3rd graders, aged 17 years, between 1996 and in 2004 showed a marked increase in pill use, and a marked decrease in unprotected intercourse (use of no methods) and in condom use (Figure 2).

Despite the increased early sexual activity among Slovenian secondary-school students, the increased use of reliable contraception is noticeable. In 1996 14% of sexually active 17-year-old students were using the pill and in 2004 32%. The main reason for the increased pill use among adolescents in Slovenia is, in our opinion, the rising awareness, increasing knowledge and a changed attitude of gynaecologists towards the pill, which is reflected in changing practice of pill prescription to adolescents. The pill is covered by the general health insurance for all insured women and the contraceptive service is accessible through outpatient gynaecology clinics. In addition, gynaecologists have been involved in intensified promotion of contraceptive use in journals and other lay public media.

It is also very important that the percentage of students practicing sex without use of any contraceptive decreased from 19% to 7%. Concomitantly, the use of a condom at the last sexual intercourse decreased from 60% in 1996 to 50% in 2004. Additionally, the study revealed a very low use of the double method among secondary-school students in Slovenia;
only 4% in 2004. Indeed, the low condom use and low double method use observed point to the necessity of more vigorous promotion of these two methods in Slovenia. Such a promotion could be easily reached by introducing sex education to primary and secondary schools.

**Conclusion**

With the aim to fill the gaps, to some extent, in the systemic lack of sex education the gynaecologists from our WHO Collaborating Centre, in 2004, published a handbook for teachers (4) on sex education and a booklet (5) for adolescents. These tools have since been distributed every year to all 1st grade students in Slovenia for free. The project was endorsed by The National Educational Institute of Slovenia and has, until now, been financed with the support from a pharmaceutical company. This year the printing costs will be partially covered by The National Educational Institute of Slovenia. We hope that in the near future the necessity of long-term and comprehensive sex education will finally be recognized by the Ministry of School and Sport and the Ministry of Health. Until such time we will continue to prioritize and advocate for research in sexual and reproductive health of adolescent populations in Slovenia, especially in the area of sex education.

**References**


Bojana Pinter, MD, PhD
Assistant Professor
Department of Obstetrics and Gynaecology
WHO Collaborating Centre for Research and Training in Reproductive Health
University Medical Centre Ljubljana
Ljubljana, Slovenia
bojana.pinter@guest.arnes.si
The scope of work of the CC has expanded its perspectives and capacities since its first designation. Originally started as a CC solely for family planning, over the years it has developed a more comprehensive approach to SRH. Currently, within the field of SRH, the CC focuses on research training and support activities across a broad range of topics: sexually transmitted infections, youth friendly health services and adolescent SRH, maternal health services, abortions, maternal mortality, contraception and many topics related to gender and health, such as integration of gender perspective into SRH policies, identification of gender sensitive health indicators and identification and prevention of gender discrimination in SRH. Mechanisms have been established for efficient and close collaboration in training and research activities on SRH and family planning with local, national and international health agencies (WHO, UNFPA, Population Council, AVSC, JHPIEGO, Gynuity), institutions and non-governmental organizations to achieve its goals and to use the resources effectively.

Research Activities
The CC mainly conducts research on priority SRH topics, many of which were mentioned above. The CC employs research strategically as an instrument to draw attention of relevant parties (such as the community, service providers, administrators and decision makers) to the significant SRH issues in Turkey. Thus, the CC uses research results as a means to inform policy makers about the current situation and advocate for improvements in SRH. The usual strategy of the CC is to move from research to practice, so that based on the research results, the CC designs and implements intervention programmes and follow-up of those programmes specific to the topic, region and context of Turkey.

The CC also carries out activities on advocacy for change in policy to remove the barriers and improve the provision and quality of SRH services. Research results in the forms of publications, kick-off meetings, expert meetings, and dissemination meetings are widely shared for advocacy purposes. Last but not least, the CC functions as a local, national and international reference center and conducts consultancy activities with different bodies to increase capacities mutually.

Impact
So far the CC has carried out several projects that have made significant impact on a national basis. Some of the examples are presented briefly below.

Unsafe abortion and family planning services
In order to prevent maternal deaths due to unsafe abortion and increase family planning practices in Turkey, a series of operational research were carried out by the CC with the collaboration of the WHO Health Research Programme. Based on the results, the old population
planning law was changed and non-physicians were authorized to insert intrauterine devices (IUD), abortion was legalized and general practitioners were authorized to terminate pregnancies. The impact of this change and new law was very significant; the prevalence of IUD use doubled in 5 years, maternal mortalities due to unsafe abortion almost disappeared and a substantial decrease in unmet needs in family planning occurred. Despite this success, the unmet need for abortion services is still high in Turkey. Thus, the CC has been actively involved in research which demonstrates the acceptability and safety of medical abortion. Two major studies, carried out in collaboration with the Gynuity Health Project, have been very encouraging. These result have been analysed and shared with the Ministry of Health to help move forward with the required policy changes and action.

**Improving medical education in SRH**

With the collaboration of the JHPIEGO the project “Strengthening Undergraduate Family Planning Education in Medical Schools in Turkey” was carried out. This project was revolutionary in Turkey from several aspects; by allowing pre-graduation certification of medical students, the burden on the Ministry of Health (which had limited resources) to train service providers has decreased; and the standardization of all service procedures, use of a humanistic approach and integration of STI screening and prevention greatly enhanced the quality of services in Turkey. This project also provided the basis for training skills curriculum development in several of the medical schools.

**Understanding SRH of adolescents**

The WHO Health Research Programme collaborative study on “The Influential Factors of Sexual and Reproductive Health of Adolescents/Young People in Turkey” has been a pioneer in understanding the SRH situation of adolescents and young people in Turkey. The research showed that young people do not have sufficient knowledge of SRH and a great majority had never used any SRH services, either from the university or from outside service units. It also provided important insight into the worlds of the young people in Turkey and the kinds of services that they wish for themselves. Based on the results of this study, a model “Youth Friendly SRH Services” was developed at the medico-social centres of the universities. At present this model is present in 13 universities in Turkey which increased the overall utilization of the University Health Centres by the students.

**Promoting new technologies for fertility regulation**

Presently and in the past, the CC has been a pioneer in introducing new technologies for fertility regulation in Turkey. Initial studies on efficacy and safety of manual vacuum aspiration as an atraumatic technique for pregnancy termination, the mini-laparotomy technique for tubal ligation and injectable and implantable contraceptives in Turkey have resulted in their introduction into the national family planning programmes and availability to the Turkish population.

**Conclusion**

It has been the Hacettepe CC experience that through their research, work and knowledge of national needs and the local situation, the WHO CC’s can impact significantly on the national SRH policies and practices. Given this impact at the country level, if they are used more effectively CC’s can and will contribute to the global and regional SRH objectives as well. However, to increase their effectiveness more communications and collaborations are needed across various disciplines, sectors and organizations.

**Prof. Dr. Ayse Akin**

Head of the WHO Collaborating Centre, Turkey
ayseakin@gmail.com
Germany’s Federal Centre for Health Education (BZgA) has been a WHO Collaborating Centre for Sexual and Reproductive Health since 2003. Within this field, BZgA supports the WHO programme to intensify co-operation with the countries of central and eastern Europe. The first phase of collaboration between the WHO and BZgA focuses on young people. Increasing mobility through the opening of national frontiers makes young people a particularly important target group in regional and national strategies for improving sexual and reproductive health. In this context the BZgA, together with the WHO Regional Office for Europe, held an international conference on the subject of “Sex education for Young People in a Multicultural Europe” in November 2006. Its aim was the promotion of learning processes, networking and co-operation in the European Region. Three main topics were considered: multiculturalism, the implementation of life-competence approaches in sex education, and quality management (1).

Sex education: a national responsibility

In the Federal Republic of Germany, sex education and family planning are seen as national responsibilities. Sex education in schools is legally regulated at the federal-state level, and is implemented in schools of all types. In 1992 the Pregnant Women and Family Assistance Law requested BZgA prepare and disseminate sex-education and family-planning media and measures on a nationwide basis. The BZgA develops quality-assured concepts and target-group-specific media and measures on sex education with the goal of preventing unplanned and unwanted pregnancy (2). In the process it works closely together with the federal state and other co-operation partners (specialist associations, NGOs and academic institutions). In addition to providing other services the BZgA develops and promotes print media, internet services and audio-visual media in the field of sex education for 14–17-year-olds and young adults. Other personal communication services include local conversation and discussion opportunities and the provision of training for those with contact to young people, such as school and kindergarten teachers, social workers and parents. This promotes curriculum development at school and university level, as well as, the out-of-school sphere.

The sex-education measures and media are scientifically based from the outset. Key concepts of sex education take into account gender, education and social situation, lifestyle, sexual orientation and cultural background.

The scientific foundation study: youth sexuality

A central study in the field of sex education in the Federal Republic of Germany is the representative survey of youth sexuality (3). For the past 25 years, this study has been analysing the attitudes and behaviours of German 14–17-year-olds of both sexes (n = 2500) studying, among other things, sex education in the family and at school, forms of sexual contact, knowledge of contraceptive methods and their contraceptive behaviour. The most recent survey, carried out in 2005, additionally included young people with a migration background (n = 674). The results of the study show clear trends, point to deficits in sex education, indicate how certain media and people can be used to access the young people, sketch their sexual and contraceptive behaviour, analyse their knowledge and use of BZgA sex-education materials, and describe areas of inadequate knowledge. The findings of the study are analysed with respect to the media and measures of the BZgA, and the results of continuous feedback will also be incorporated into the design of the next representative survey, due to be held in 2009.

Selected results of the 2005 survey: sex education at home and in the family

In 1980 according to the survey, less than half of German boys received any sex education at home, and of those who had, only a quarter received any more than a one time conversation. In 2005 65% of boys and 75% of girls had had some sex education from their parents. The situation is quite different among young people with a migration background. Of this group as a whole, only 41% of girls and 33% of boys said that sex or pregnancy were even mentioned at home. Amongst Turkish adolescents, these figures are one-third lower overall. Important reference people for all adolescents are friends of the same sex, and siblings. Sex education at home among all young people is dependent on the level of education.

Sex education in schools: widespread and well-received

School lessons are the source of knowledge on sex and contraception most frequently named by boys, and second-most frequently by girls. Teachers are of above-average importance in particular for young people with a migration background, who can only talk to their parents on sexual matters to a limited degree. In the Federal Republic of Germany, nine out of ten boys and girls come into contact with sex education at school between the ages of 14 and 17.

Inadequate information on sexual matters

In general, girls and boys from migrant families feel less well informed than young people with a German background, especially in the following areas of knowledge: the female body, contraception, tenderness and love.

First sexual intercourse

12% of girls and 10% of boys have sexual intercourse for the first time at the age of 14 or earlier. Overall, 39% of all German girls and 33% of all German boys between the ages of 14 and 17 report having had sexual intercourse at least once.

By comparison, a total of 26% of girls and 44% of boys with a migration background report experience of sexual intercourse between the ages of 14–17. 14–17 year old girls of Muslim background are far more reticent than others with sexual contacts of any kind. Among these girls, the argument “I don’t think sex before marriage is right” is the reason
most often given (60%) alongside the fear of their parents’ reaction. As a rule, they first have sexual intercourse with a steady partner. This is also true of German girls, German boys, and girls with a migration background. In the case of boys with a migration background more than one-third knew the girl with whom they first had sexual intercourse fleetingly, or not at all. This has an unfavourable effect on their contraceptive behaviour.

**Contraception for first intercourse: condom is option number one (Figures 1 and 2)**

The great majority of German youth behave very responsibly when they first have sexual intercourse: 71% of girls and 66% of boys said a condom was used and 35% and 37% said the pill was used (instead of, or additionally).

In 1980 32% of girls and 28% of boys said a condom was used the first time they had intercourse. By 2005 condom use had more than doubled. In the context of AIDS prevention and sex education campaigns the number of those using no contraception at first sexual intercourse has halved since 1980; it is now 9% of girls and 15% of boys.

Young people with a migration background are much more likely to not use contraception, or to use unsafe methods, when they first have intercourse. 34% of boys and 19% of girls with a migration background used no contraception the first time they had intercourse.

**Use of media**

In order to analyse and improve the young people’s access to sex-education media, the study asked particular questions about their media-use behaviour. In general it appears that girls prefer print media, while boys favour audio-visual media. The results also show that the popularity of the internet as a sex-education medium is not dependent on nationality.

For young people with a migration background there is, however, not much chance of using the internet at home. Older boys with a migration background compensate for the non-existent possibility at home by using the internet at school and in internet cafés. Girls with a migration background do not manage this to the same extent.

**Conclusions**

The study shows a clear relationship between sex-education at home and responsible contraceptive behaviour. Young people with a migration background have certain obvious deficits when it comes to sex and contraceptive education at home. There is thus a need to find other access routes for these youth. Alternative routes for all youth include: sex education in school (which in Germany has a high compensatory value), the internet (an important medium for young people where sex education is concerned according to the survey) and doctors and counselling centres (also often accepted by young people as sources of information).

Migration represents a particular challenge for those working in both sex education and family-planning. The growth of immigrant populations in many EU Member States requires ongoing consideration in research and practice. Research in and development of sex-education measures in future needs to include migration-sensitive questions and requirements. Such questions need to relate to not only the expectations of the different target groups, but also the differentiated access routes and methods.

**References**

1. BZga/WHO Conference on Youth Sex Education in a Multicultural Europe, Cologne, November 2006 Country Papers on Youth Sex Education in Europe. Available at order@bzga.de.

2. General Concept for Sex Education of the BZgA in cooperation with the Federal States Concept Sex Education for Youths. Available at order@bzga.de.


**Angelika Heßling**

BZgA, Cologne, Germany

WHO Collaborating Centre for Sexual and Reproductive Health

angelika.hessling@bzga.de
HOW RESEARCH ON SEXUAL AND GENDER BASED VIOLENCE (SGBV) CAN MAKE A DIFFERENCE

In 2007 staff from the International Centre for Reproductive Health (ICRH), a WHO Collaborating Centre, gathered in Belgium to discuss the impact of research on policy making, and how to bridge the gap between research and policy. This research is based on the principle that research needs to be applied and operational. The ICRH research unit is a multidisciplinary team of scientific collaborators who are actively involved in research, services delivery and training in the field of SGBV.

The objectives of ICRH include:
• to conduct multi-disciplinary research into SGBV, focusing on vulnerable groups, within the broader context of SRH and rights;
• to enhance national and international awareness raising and sensitization on SGBV;
• to contribute to the development of policies, guidelines and tools aimed at the prevention of SGBV and quality aid for victims;
• to train stakeholders involved in prevention of and response to SGBV;
• to support concrete interventions in the field aimed at prevention and aid;
• to build partnerships with research institutions, international agencies, public authorities and non-governmental organizations in the field of SGBV.

Case Studies
To illustrate the impact and challenges of our research on policies regarding SGBV, this paper highlights 3 case studies of our work: female genital mutilation (FGM) among migrant women in Europe, intimate partner violence (IPV) among pregnant women in Belgium and SGBV against refugees in Europe.

FGM: impact on policy making in Europe (1)
For over a decade ICRH has assessed the magnitude of FGM among migrant women in Europe. The kick-off project occurred in 1998, when the European Commission (EC) requested data on the problem of FGM in Europe, with funds from the first EC-Daphne Programme on Violence against Women and Children. The project led to practical recommendations for European policy makers on the eradication of FGM in Europe with regard to legislation, education and prevention, and health issues. ICRH also implemented several other projects between 2000-2007 including:
1. the development of frameworks for training of health professionals and guidelines for the care of women with FGM in the EU;
2. a research agenda with priorities for research on FGM in Europe;
3. the foundation of the European Network for the Prevention of Harmful Traditional Practices, in particular FGM (EuroNet-FGM, 2002) and;
4. an in-depth study on the implementation of laws regarding FGM in the EU (2004, 2007).

The impact of this research resulted in the following milestones:
1. The expert meeting in the European Parliament to develop a Joint Agenda for Action (2001). This Agenda was presented to the EC, European Parliament and UN bodies. That same year, ICRH also contributed to the so-called “Valencia Report” and ‘Resolution on FGM’ adopted in September 2001.
2. The creation of EuroNet-FGM; This European-wide network connects 32 member organizations (mostly NGOs and community based organizations) working on the prevention of FGM in more than 13 EU countries.
3. Invitation of ICRH to expert group meetings for developing a national plan of action to prevent FGM in Belgium.

These projects played an important role in placing FGM on the national and international agenda. However, critical issues with regard to the elimination of FGM in Europe remain:
• the apparent lack of coordination between the different EC budget lines that finance research and interventions on FGM;
• the lack of an integrated EU policy agenda on FGM (1);
• the lack of strong partnerships between different levels: policy level, research and community level;
• the inaccurate knowledge on the magnitude of the problem and;
• the limited funding available.

IPV and role of health care workers in Belgium: input for the development of national guidelines on prevention of violence among pregnant women
In 2004 the Belgian National Organization of Family Physicians developed a consensus document on the role of the family physician in detecting and dealing with IPV. This consensus is a good and practical tool; however there are no recommendations about pregnant women and IPV.

ICRH and the Department of Obstetrics and Gynaecology at Ghent University conducted 2 studies in the area of IPV. The first one was a cross-sectional survey study among pregnant women attending antenatal care (2). The other study was a Knowledge Attitude Practice study among gynaecologists to identify potential barriers to IPV screening in a context where no guidelines are in place (3).

These studies yielded the first data on IPV in pregnancy in Belgium. The most striking observation was that women rarely disclose abuse to the health care worker, unless directly asked about it. Routine screening was found to be largely acceptable to the women surveyed, while one of the main barriers against screening for gynaecologists was the fear of offending patients.

With these specific Belgian data, ICRH is involved in development of professional guidelines for Obstetricians-Gynaecologists in Belgium, especially for violence in pregnancy. The development of screening tools and formal referral systems will be part of this professional guideline.

Prevention of SGBV against refugees in Europe: the importance of a participatory approach in research to policy development
A recent study used a community-based participatory research approach to
Collaboration with community research in Europe.

The utmost majority of respondents and a large community advisory board and focuses on knowledge transfer, awareness raising and networking in nine languages. In addition policy, structural and service recommendations were formulated and presented to a European and national policy makers panel at the EU Seminar “Hidden Violence is a Silent Rape”, held February 14-15, 2008 in Ghent, Belgium. In the mean time EN-HERA! “the European Network for the Promotion of Sexual and Reproductive Health & Rights of Refugees and Asylum-Seekers in Europe and beyond” was founded and is now developing frameworks of good practices in policy development and service delivery of SRH for refugees and asylum seekers from a participatory approach.

**Recommendations and challenges**

To improve the impact of research on policies, stakeholders need to be carefully identified and involved from the beginning. However, it is not always easy to achieve this within the limited time available to complete the research. In order to have an impact at a specific level, the research needs to respond to an expressed need, for example by policy makers, as was the case with the research on FGM, or by the communities, as was demonstrated by the participatory research project on SGBV among refugees. Challenges that remain here are the need to develop joint agenda’s for action and the need for a thorough situation analysis before starting the research project.

To have an impact at a broader policy level research should be methodologically sound; credibility and visibility of the researcher or the research institution is needed.

Communicating research results to a broad public is another challenge; often neither time nor budget are available to disseminate the results at a larger scale. Researchers should define and include a dissemination strategy in the budget from the start of the research, in order to disseminate results and broaden the impact of their findings.

The impact at community level can be improved through collaboration between researchers and NGOs and community based organizations. Expectations from both sides have to be defined from the beginning.

Finally, research needs to acquire insight and skills on how policies are developed. There is a need for an increased communication between researchers and policy makers. Innovative, additional measures are needed to provide incentives for academic staff to communicate and collaborate with policy makers.

**References**


4. Digital version available on www.icrh.org
CeVEAS: DEVELOPING AND USING GUIDELINES TO PROMOTE SEXUAL AND REPRODUCTIVE HEALTH

Last February the National Health Service Centre for the Evaluation of Effectiveness of Health Care (CeVEAS) in Modena, Italy, was designated a WHO Collaborating Centre (WHO CC) for Evidence Based Research Synthesis and Guideline Development in Reproductive Health.

As the name suggests, the CeVEAS will contribute to WHO activities by producing and disseminating the best available evidence on effective interventions to increase and protect women’s sexual and reproductive health, with particular focus on women in the reproductive age group. The new WHO CC will focus on:

- collection and synthesis of the best evidence from scientific literature for the development of guidelines;
- development of models to facilitate the implementation of the guidelines in clinical practice, taking into consideration the different local settings;
- developing tools for sharing evidence based knowledge with health professionals, women and communities;
- supporting the drug evaluations for WHO Essential Medicines List, including specific drugs of interest in reproductive health.

A collaboration dating back a few years

Since the year 2000, CeVEAS has been working together with the WHO on projects concerning maternal and neonatal care. Specific collaborations with both the WHO headquarters in Geneva and the WHO Regional Office for Europe (Making Pregnancy Safer, Reproductive Health and Research, Health Evidence Network) have aimed at facilitating the development of practice guidelines and protocols and at organizing training courses for nurses, midwives, physicians and other health professionals. Examples of this collaborative work include the provision of methodological support to the revision of the “WHO Standards on Maternal and Neonatal Care” (1) the contribution of reviewing evidence to update the Health Evidence Network on effectiveness of antenatal care (2) and reviewing and grading the existing evidence for the WHO Guidelines on Prevention of Postpartum Haemorrhage (3) using the GRADE methodology (4, 5).

Evidence based guideline development: GRADE methodology

One of the pivotal roles of the Collaborating Centre is to provide methodological support in the development of recommendations based on systematic review of the evidence. This aspect of CeVEAS’ role was emphasized in 2007 via the collaboration with the working group for the definition of the minimal criteria for the production of guidelines at WHO to update the “WHO Handbook for guideline development”.

Such methodological support will include facing the challenge of introducing GRADE methodology to the development of guidelines for reproductive health (GRADE methodology has been already adopted by WHO for guidelines on other issues). Dr Quazi Monirul Islam, Director of the WHO Department of Making Pregnancy Safer, has recently underlined the importance of adopting a rigorous evidence based process for the production of the guideline on Prevention of Postpartum Haemorrhage (6).

Briefly, GRADE methodology uses a systematic evaluation of the methodological quality of the evidence and an estimate of the balance between benefits and harms of the health interventions assessed. This then helps authors of guidelines and protocols (researcher, clinician or policy maker) to base recommendations on evidence that has been rigorously assessed.

How to implement a set of recommendations

The difficulties in implementing scientific guidelines are a well known problem, and in the last ten years it has been at the centre of the scientific debate. In fact, very often moving from the best evidence to a better clinical practice is not easy; resistance is common and different strategies to overcome barriers to change need to be explored.

The implementation methodology adopted by CeVEAS, based on broad scientific literature, includes the following: the specification and analysis of the barriers and facilitators, the choice of specific interventions needed to remove or overcome barriers and/or to include the facilitating factors identified, and the evaluation of the results.

As an example of implementation, in 2005-2006, using the elements of the above described framework, our institution developed an implementation model for the guidelines for breastfeeding promotion in Italy. The project was carried on by a group of health professionals from Local Health Authorities of Emilia-Romagna region and from experts of CeVEAS, within a programme supported by the Emilia-Romagna Regional Health Authority (7).

Briefly, the project provided 3 tools (at the moment available only in Italian) to health professionals:

1. a manual with the recommendations on breastfeeding promotion based on the best available evidence;
2. software (HEAVyBASE) for collecting and analysing data of exclusive breastfeeding rates within the local context. A careful analysis of the local context is essential for identifying barriers and facilitators and for selecting the most appropriate recommendations to be implemented in the local context;
3. a second type of software, (PRIMA), that included a list of possible solutions that may be used (for every recommendation there is a list of possible barriers and hypothetical solutions) to help guide the production of the local implementation plan.
By using this specific type of framework, it was and is easier to define a local implementation plan for breastfeeding promotion in the Emilia-Romagna region. It is possible to apply this implementation model to other topics (such as caesarean section rate reduction) and also to other languages (it could easily be translated into English).

Knowledge transfer project
A communication project of knowledge sharing is also being implemented. The idea is based on the creation of a weekly on-line newsletter which includes the summary of new relevant and valid papers on reproductive health. The newsletter will be published on the website of SaPeRiDoc (http://www.saperidoc.it), an “evidence based” website developed with the support of Emilia-Romagna region. The website is written in Italian language for health professionals working in the field of women’s and infants’ health. The website, operative since 2001, provides a summary of updated evidence; every day about 2000 single users “surf” SaPeRiDoc. By June 2008 the SaPeRiDoc website will also have an English forum dedicated to the newsletter available on the website. In addition, there are web pages and leaflets addressing women’s and communities’ information needs. These sites contain the same information given to professionals but with a different language and editorial format.

Training courses in evidence based maternal health
As previously done, CeVEAS will continue to collaborate with specific WHO training courses in eastern European and African countries for midwives, physicians and obstetricians on data collection, basic epidemiology and evidence based information retrieval, and to promote research relevant for low and middle income countries. CeVEAS will also support the development of collaboration with Universities in eastern European countries to include contents of the effective perinatal care of Making Pregnancy Safer in pre-service training and curricula. A similar activity was developed in 2007 in Georgia with Tbilisi University. This partnership has been successful in helping to improve sexual and reproductive health, especially maternal and newborn health, through integration of evidence based guidelines into clinical work.

Conclusion
It is our belief that sound methodological assessment and evaluation of new or existing research, data and best practice is essential to the development of good evidence based guidelines, knowledge transfer and implementation of guidelines. By striving to share and produce the best available evidence on women’s health the Collaborating Centre, and its work, allows health professionals to access instruments and information to establish a better communication with their patients and to improve the overall quality of the care provided. In addition, this same information can provide policy makers with the tools and the knowledge needed to choose priorities and to increase the effectiveness of the organization within the health sector they are working in.

References
4. Schünemann HJ, Fretheim A, Oxman AD. Improving the use of research evidence in guideline development:

5. GRADE Working Group website. URL: http://www.gradeworking-group.org/index.htm

Vittorio Basevi
MD, PhD, Obstetrics and Gynaecology

Dante Baronciani
MD, Neonatology
Simona Di Mario, MD, MPH, Pediatrics

Giulio Formoso
MPHarm, MPH, Epidemiology
Gianfranco Gori, MD, Obstetrics and Gynaecology

Barbara Paltrinieri
MSC, PhD, Science Communication Expert

Daniela Spettoli
MD, Obstetrics and Gynaecology
Nicola Magrini, MD, Clinical pharmacist, Director
Correspondance contact v.basevi@ausl.mo.it
The Institute of Reproductive Medicine (IRM) in Münster is the only WHO Collaborating Centre for Male Reproduction and it broadcasts its research information to wider audiences by way of publications and presentations at international scientific meetings. Currently, far more attention is given to women’s reproductive health than that of men, but several gender mainstreaming policies and the increasingly large population of ageing men have prompted a positive attitude towards male reproductive health.

Two main reproductive issues concerning the male partner represent two sides of one coin: fertility and infertility. Whereas fertile men generally do not approach infertility clinics (except perhaps as semen donors before vasectomy), infertile men provide a wide spectrum of diseases (of the testes, the epididymides, the accessory sexual glands) that can be studied. However, providing a therapy is less assuring, as ~30% of men are classified as having idiopathic infertility (of no known cause) (1). This is frustrating for both the couple wishing to have a child naturally, and the doctor who can offer only assisted reproductive technologies (ART) that bypass the problem and do not cure the patient. It is also a challenge for the andrologist to determine the cause of the infertility and then suggest a rationale therapy.

The problems associated with overpopulation can reduce the quality of life of men, women and children the world over, since they often promote disease and hunger in cramped and unsanitary conditions. Voluntary population control, by means of family planning, can help reduce problems to all, especially to mother and child, and sensible family planning is an acceptable way for partners to show responsibility to their neighbourhood and other inhabitants of their ecosystem. Although the brunt of this task currently falls on women, for whom female methods are widespread, several methods rely on the male partner’s participation and there is evidence that, given a real opportunity, men within stable relationships would use a “male pill” (or injection) and thus share the contraceptive burden with their partners.

Activities
These problems set the stage for the activities of the WHO Collaborating Centre for Male Reproduction in Münster. These are related to male health issues, or andrology, the equivalent for men of gynaecology for women. Andrology deals with male reproductive function and dysfunction; the institute is a referral centre for male infertility and hypogonadism around Germany and its clinical staff deal with the male partners of infertile couples. Once a female factor has been excluded, the cause of infertility in the male is sought. Investigation primarily involves assessing semen quality and blood hormones. Related basic research carried out at the WHO Collaborating Centre examines ways of improving the diagnostic aspects of semen analysis and assessing testicular function, as well as, performing clinical trials on hormonal male contraceptives.

On the diagnostic front, the IRM has compared methods for measuring semen volume and developed new methods for quantifying low sperm numbers and sperm cell precursors in semen: important criteria for assessing the fertility potential of a man. The institute has been involved in the production of the fifth edition of the WHO laboratory handbook on semen analysis (2), which should be the “gold standard” for andrology laboratories worldwide. It is also involved in the generation, for the first time, of
true reference limits for the parameters of human semen. They are based on a reference group of men whose partners became pregnant within 12 months or less, and are being compiled from data submitted from competent laboratories using WHO-recommended methods of analysis. Such values are thus analogous to clinical reference values of serum variables and can be used in the same way. The IRM runs an external quality control programme for semen analysis in Germany, the results of which have shown an improvement in agreement in assessment between participating laboratories (3).

Studies of the pituitary peptide hormones (LH, FSH) that regulate sperm production in the testis have revealed different forms of these genes in infertile men, indicating a possible genetic cause of infertility. Other studies have shown that the action of androgens in a man depends not only on the steroid levels in his blood but the structure of the androgen receptor, which binds the hormone and initiates virilisation; another genetic cause of male infertility. Not only does diagnosis benefit from such observations, but the possibility is also raised of tailoring the hormonal therapy to a particular patient, depending on the phenotype of his androgen receptor. On the long-term therapeutic side, ambitious studies are in progress on the isolation and survival of spermatogonial stem cells in novel culture conditions and after transplantation. These could eventually provide a reserve of germ cells for men with severe testicular damage, or juvenile cancer patients whose testes have been damaged by chemo- or radio-therapy, who may wish to father children after their disease has been cured.

One approach to develop a male contraceptive is to follow the same principle as that of the female pill – steroidal feedback inhibition of the hypothalamus and pituitary. Interestingly, our research has shown that addition of female hormones (progestins) to the main ingredient of such a male pill, the male hormone testosterone, improves efficacy in both monkeys and men. The pull-out of major pharmaceutical companies previously supporting our research in this area will be a severe blow unless public funding can be attracted to it. Other contraceptive-directed studies examine the product of the testes: spermatozoa themselves. The osmotic challenges that face sperm in the female tract are only now being appreciated and spermatozoa must regulate their volume or fail to penetrate cervical mucus. We have demonstrated differences in the ability of sperm from fertile men and patients attending the institute to regulate volume; this test may become a novel diagnostic test of sperm function. Although tragic for the couple themselves, information on the cause of male infertility could be used in the design of contraceptives for men. For example, if the cause of failed volume regulation in some patients is discovered, mimicking the failed osmoregulatory state may be of contraceptive potential.

Conclusions
It is our goal at the IRM, through our ongoing research activities, to continue to address issues that are of importance to male sexual and reproductive health. By continuing to focus on issues such as fertility and infertility, quality assurance of semen analysis and male contraception, the IRM is helping to contribute to the overall well being of not only men and their sexual and reproductive health, but also that of their partners and society at large.

References

Dr. Trevor G. Cooper
Muenster Collaborative Centre
Institute of Reproductive Medicine
TrevorG.Cooper@ukmuenster.de

No.67 - 2008
The first joint training initiative between the Geneva Foundation for Medieval Education and Research (GFMER) and the Department of Reproductive Health and Research at the WHO dates back to 1991, with an early focus on European countries in transition. It was formally established in 2002. Since 2005 the course also covers the area of sexual health. Our current priorities include strengthening the integration of sexual health and reproductive health, making research training more widely available in resource constrained institutions, making research findings available to media professionals and in developing high quality e-learning tools for clinical specializations.

The interaction between the international research community and programme managers working on contraception, fertility or gender and sexuality and the promotion of equitable human relationships is a fundamental preoccupation of the GFMER.

For this reason, GFMER aims to flag key issues from the contemporary global SRH research agendas in the objectives of its training on research methodology. The full range of courses featured is at http://www.gfmer.ch/300_MedicalEducation_En.htm and course files are freely available. Application forms for the 2009 course can also be downloaded. Incidentally, if you are considering attending, you or your institution will be pleased to know that the course is immensely good value for money, tuition costing around 1500 Swiss francs while costs for living modestly in Geneva can be around 3500 Swiss francs for the duration of the course.

The five week course on research methodology is held in the English language at WHO headquarters and in Geneva University Medical Faculty. Both institutions support participants who are carefully selected health professionals involved in research, as well as, providing the lecturers. A scientific committee with additional membership from UNFPA, and research collaborators at the Universities of Bern and Lausanne, select participants based on their ability in research methodology and scientific writing. Candidates’ initial research proposals are used to assess the ability to identify and address research priorities and become future trainers; indeed the course sees itself as providing capacity building in research techniques and their application to most recent pressing needs, particularly in public health and reproductive health in global development.

GFMER works in collaboration with a private foundation at the University of Geneva in emerging fields in sexual health: the definitions of healthy sexualities; portrayals of conventional sexuality and of sexual minorities, youth, ageing and inter-generational relationships; gender-based violence; sex selection; economic influences on sexual behaviour; sexual violence and abuse; religion, culture and spirituality; and sex and
Main objectives

• To promote health through medical education and research that can be applied by developing countries, and countries in economic transition

Terms of Reference

• To provide postgraduate training in research methodology in reproductive and sexual health.
• To develop & conduct research & research synthesis activities.
• To assist partner institutions in the conduct of postgraduate medical education programmes.
• To collaborate with the WHO on e-learning activities as well as on the conduct of short postgraduate courses in epidemiology.
• To provide expertise to the WHO or to centres of the WHO’s network requesting collaboration in research, research training or clinical aspects in human sexuality and reproduction.

Common course

• Research methodology (2 weeks)
  – Study design, statistics, epidemiology, critical appraisal, research synthesis, strategies for data analysis; ethics and human rights in clinical research, Internet and Medline
• Common topics in reproductive health / sexual health (1 week)
  – Sexual and reproductive health work at WHO
  – STIs, HIV/AIDS, family planning, infertility, genetics, environment and reproduction, sexual function and dysfunction

Reproductive health parallel week:
pathophysiological principles, gynecologic endocrinology, menopause, genital infections/STIs cancer, obstetrics

Sexual health parallel week:
concepts, methods in sexual health research, sexual identity disorders, adolescent sexuality, STIs/HIV and sexuality, violence, child abuse, FGM, rights and ethics in sexual health research

Exams (last week)

• to obtain certificate, participants have to pass an exam, consisting of:
  – a scientific paper (defined as preparing a protocol for a research project, a grant proposal, a systematic review)
  – a 15 minutes oral presentation on the scientific paper
  – a multiple choice questionnaire

ethnicity. As a result of this collaboration, initial funding was made available from 2005, along with a small number of study grants, to launch a sexual health track alongside a reproductive health track creating the SRH research methodology course.

The course enhances participants’ skills not just in carrying out research but communicating on these issues accurately, with clarity, comprehensiveness and appropriate interpretation to the wider public health and development communities. A key part of the course examination consists of developing and defending the research proposal. The presentation of a proposal is in fact a skill closely related to resource mobilization and many participants appreciate the training in communication that is a feature of the session.

Few courses so actively facilitate networking between health professionals working on SRH from across the different regions of the world. Overviews of developmental, behavioural and clinical issues in human sexuality, reproductive health, as well as, key concepts in bio-medical and psychological models of sex and gender are presented in the course. They complement a global epidemiological review of sexually transmitted infections, pregnancy and delivery, dysfunctions and genital practices.

GFMER training is also delivered to staff of supporting institutions on developmental tasks in adolescence and the supportive role of peer education, the effects of abstinence-only programmes and management of risk-taking. There is also close involvement in the Partnership for Maternal, Newborn & Child Health, the Campaigns to End Fistulae and Female Genital Mutilation, the Y-Peer network and the Art for Health exhibition.

We encourage all participants to be aware of and share knowledge of current trends in research on a range of clinical and public health issues by publishing in the online journal http://www.reproductive-health-journal.com/home/, or simply by opening their own “member page” on gfmer.ch and uploading their very creative research proposals. This open access approach is of immense importance to four hundred or so past participants and the development agencies and public health bodies which support the course. Thus, by promoting good research design and methodology and encouraging knowledge sharing and best practice, GFMER is able to ensure that both new and past generations of researchers, programmers, clinicians and policy makers are able to help research in SRH move forward in a positive direction.

Robert Thomson,
Member, Geneva Foundation for Medical Education and Research
Thomson@gfmer.org
It is well known that Entre Nous was launched by Miss Wadad Haddad, the first Regional Adviser for Sexuality and Family Planning at the WHO Regional Office for Europe sometime in the mid-1980s. That time we collaborated in a UNFPA sponsored International Postgraduate Training Course Series in Family Planning, in which – as part of the handouts – we distributed copies among the participants. After the retirement of Miss Haddad, her successor Dr. Daniel Pierotti requested the Department of Obstetrics and Gynecology, University Medical School of Debrecen, Hungary to start publishing Entre Nous in Hungarian. We were glad to accept this proposal and the first introductory issue of the "Hungarian Entre Nous" appeared in 1989. The public interest rose immediately and we received many requests to send the next copies, which were planned to be published twice a year.

The first copies had a very simple format (similar to that of the original English/French version). Later, as Entre Nous became a real magazine we changed the format, however, due to limited funds we continued to use the desktop publishing technique with black-and-white printing.

At the beginning, the Hungarian edition was a "gleaning" version; only those articles were translated which were regarded as relevant/interesting for the Hungarian readers. This excerpt publication became, year by year, a more complete version of the original one and later issues were nearly translated in their entirety into Hungarian, with the exception of Resources (these attracted only those who could use the original documents/books/periodicals).

The limited funding, despite a slight increase in the mid-1990s, did not allow us to increase the number of copies (500) we published even though we had new subscription requests following every new issue. This limited number of publications limited our capability to strongly advertise the Hungarian Entre Nous. The 500 copies were distributed mostly among visiting nurses and doctors (mainly gynaecologists). The nurses formed the greatest part of the readers; according to feedback information this magazine was the only source for many of them to get up-to-date information on the related topics in those years.

Due to the increase of the postal charges, more and more copies were sent in bulk (30-50 copies) mainly to the visiting nurses, usually to the address of a chief nurse, who distributed them among the subscribers.

Some years ago, because of a drastic cut in financial resources, the WHO Regional Office for Europe was no longer able to provide funding for the Hungarian edition of Entre Nous. Fortunately at that time local funding sources were procured to sustain the publication of Entre Nous Hungarian. Unfortunately, these sources have also been exhausted, which means that we are no longer able to continue publishing this important sexual and reproductive health magazine. The corresponding text will disappear from the imprint of Entre Nous.

Entre Nous Hungarian was prepared at the Family Planning Centre of our Department for nearly two decades. The whole work – including translation, edition, reproduction and distribution – was done by the team of the Family Planning Centre and I owe my ex-colleagues from the Centre a very, very large thank you for all their hard work and time on this magazine. Yes, ex-colleagues because I have in the meantime retired.

I certainly hope that this unfavorable situation of ceasing to publish Entre Nous Hungarian may change in the future and that re-launching of this project for the benefit and pleasure of not only the Hungarian readers, but all of us, will be a possibility. In the meantime, fortunately more and more of my Hungarian colleagues are able to read English and thus will be able to continue to enjoy Entre Nous in its English format.

István Batár, MD, PhD, Dr. med. habil. Editor, Entre Nous Hungarian
RESEARCHES

WHO COLLABORATING CENTRES

WHO Collaborating Centre for Research on Reproductive Health
Research Centre of Maternal and Child Health Protection
22 Mashtots Avenue
370002 Yerevan, Armenia
Director/Head Prof. G.G. Okosov
Website: http://www.armobgyzn.com

WHO Collaborating Centre for Research on Sexual and Reproductive Health
International Centre for Reproductive Health (ICRH)
Faculty of Medicine
Ghent University
De Pintelaan 185, 3P3
B-9000 Ghent, Belgium
Director/Head Prof. Marleen Temmerman
Website: http://www.icrh.org

WHO Collaborating Centre for Perinatal Medicine and Reproductive Health
The Perinatal Centre, Department of Obstetrics/Gynaecology Institute for the Care of Mother and Child
Podolček nabrežje 157
CZ-147 10 Prague 4, Czech Republic
Director/Head Dr. Petr Velebil
Email address: velebil@isvznam.cz

WHO Collaborating Centre for Research on Reproductive Health
Research Centre for Molecular Endocrinology University of Oulu P.O. Box 5003
FIN-90014 Oulu, Finland
Director/Head: Prof. Pirkko Vihko
Website: http://www.who.oulu.fi

WHO Collaborating Centre for Research in Human Reproduction
Zhordania Institute of Human Reproduction (BzgA)
43, Kostava Street
01.09 Tbilisi, Georgia
Director/Head Prof. Archil Khomassuridze
Email address: ArchilK@list.ru

WHO Collaborating Centre for Sexual and Reproductive Health
Federal Centre for Health Education (BzgA)
Osternheimer Str 220
D-81109 Cologne, Germany
Director/Head Dr. Elisabeth Pott
Website: http://www.bzga.de

WHO Collaborating Centre for Research in Male Reproduction
Institute of Reproductive Medicine of the University
Domagkr. 11
D-48149 Münster, Germany
Director/Head Dr Eberhard Niesbichl
Email address: eberhard.niesbichl@ukmuenster.de

WHO Collaborating Centre for Research in Human Reproduction
Dept of Obstetrics and Gynaecology
Albert Szent-György Medical University
Semmelweis u/c.1
H-6725 Szeged, Hungary
Director/Head Prof. Attila Pal
Email address: palatilla@obgyzn.szote.u.szeged.hu

WHO Collaborating Centre for Evidence-Based Research Synthesis and Guidelines Development in Reproductive Health
CoE/EAS-Centre for the Evaluation of the Effectiveness of Health Care
Azienda USL Modena-NHS Local Health Authority
Via L.A. Muratori 201
I-41100 Modena, Italy
Director/Head Dr Nicola Magnini
Website: http://www.cceavi.it

WHO Collaborating Centre for Maternal and Child Health
Unit for Health Services Research and International Health
Istituto per l’Infanzia IRCCS Burlo Garofolo
Via dei Burlo 1
I-34123 Trieste, Italy
Director/Head Dr Adriano Cattaneo
Website: http://www.buro.trieste.it

WHO Collaborating Centre for Reproduction in Human Reproduction
Dr. gemzell-Danielsson
Karolinska hospital C1:05
SE-17176 Stockholm, Sweden
Director/Head: Prof. Karel Marsal
Website: http://www.who.int/reproductive-health/publications/rhgeneral.html

WHO Collaborating Centre for Research in Human Reproduction
Department of Women’s and Children’s Health Section for International Maternal and Child Health (IMCH)
Upplands University Hospital
SE-751 85 Uppsala, Sweden
Director/Head Prof. Gunilla Lindmark
Email address: Gunilla.Lindmark@khhi.uu.se

WHO Collaborating Centre for Development of Quality Indicators to Improve Perinatal Health
Systems Department of Obstetrics and Gynaecology
University Hospital of Lund
Lund University
SE-221 85 Lund, Sweden
Director/Head: Prof Karel Marsal
Website: http://www.gen.lu/se

WHO Collaborating Centre for Reproduction in Human Reproduction
Department of Woman and Child Health
Division for Obstetrics and Gynaecology
Karolinska Hospital C1:05
SE-17176 Stockholm, Sweden
Director/Head: Prof. Katarina Gemzell-Danielsson
Email address: karin.Auilen@med.lu.se

WHO Collaborating Centre for Education and Research in Human Reproduction
Geneva Foundation for Medical Education and Research (GFMEER)
5 Chemin Edouard Tannay
CH-1 206 Geneva, Switzerland
Director/Head: Prof. Alpo Campana
Website: http://www.gfmer.ch

WHO Collaborating Centre for Research & Training in Service Aspects of Family Planning
Department of Public Health
Hacettepe University Medical School
Sihhiye
TR-06100 Ankara, Turkey
Director/Head: Prof. Ayşe Akın
Website: http://www.holkoglugi.hacettepe.edu.tr

WHO Collaborating Centre for Research Synthesis in Reproductive Health
Department of Obstetrics and Gynaecology
Division of Reproductive and Child Health
University of Birmingham
Metchley Park Road, Edgbaston
Birmingham B15 2TQ, United Kingdom
Director/Head: Prof. Khalid S. Khan
Website: http://www.bham.ac.uk

WHO Collaborating Centre for Reproduction in Human Reproduction
Department of Obstetrics and Gynaecology
University of Birmingham
Metchley Park Road, Edgbaston
Birmingham B15 2TQ, United Kingdom
Director/Head: Prof. Khalid S. Khan
Website: http://www.bham.ac.uk


A valuable tool for those interested in conducting social science research in sexual and reproductive health. It provides an overview of research design options, methodology and analysis, ethical considerations and practical aspects of research planning and implementation. Available in English and Spanish at www.who.int/reproductive-health/publications/rhgeneral.html

Turning research into practice: suggested actions from case studies of sexual and reproductive health research, HRP, WHO, 2006.

This document looks at research utilization from the perspective of researchers and donors, as well as, policy makers and programmers. Its aim is to help enable increased utilization of research findings and monitoring of the extent to which research findings are used to improve sexual and reproductive health. Available in English at www.who.int/reproductive-health/hrp/index.htm


This document presents a framework to highlight the needs, gaps and priorities for research in sexual and reproductive health. Available in English and Spanish at www.who.int/reproductive-health/publications/rhgeneral.html

Reproductive Health Assessment Toolkit for Conflict Affected Women, CDC and USAID, 2007.

A great toolkit that was developed to meet the need for accurate reproductive health data among conflict affected populations. It contains sampling instructions, training manuals, questionnaires, data entry and analysis guides. Available in English at www.cdc.gov/reproductivehealth/productsandpubs

CDC Reproductive Health Epidemiology Series, CDC.

Consists of four modules that introduce the researcher to useful concepts such as public health surveillance, maternal health and reproductive tract infection epidemiology and questionnaire design. Available in English at www.cdc.gov/reproductive-health/productsandpubs

No.67 - 2008

Lisa Avery
Entre Nous

The European Magazine
for Sexual and Reproductive Health

WHO Regional Office for Europe
Country Policies and Systems Unit
Scherfigsvej 8
DK-2100 Copenhagen Ø
Denmark
Tel: (+45) 3917 1602 or 1451
Fax: (+45) 3917 1818
[entrenous@euro.who.int]
www.euro.who.int/entrenous