Sexual and reproductive health work at WHO

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World Health Organization
Geneva, 21 March 2007
How it began...

Billions

WHA 18.49

1804

1927

1960

1974

1987

1999

2013

1600 1700 1800 1900 2000 2100

0 1 2 3 4 5 6 7

World Health Organization

Reproductive Health and Research

UNDP • UNFPA • WHO • World Bank
Special Programme of Research, Development
and Research Training in Human Reproduction
HRP’s history [1]

“REQUESTS the Director-General to develop further the programme proposed:

(a) in the fields of reference services, studies on medical aspects of sterility and fertility control methods and health aspects of population dynamics; …”

(WHA Resolution 18.49; 1965)
HRP’s history [2]

1965: Human Reproduction Unit within existing Division of Family Health
(WHA Resolution 18.49; 1965)


1988-present: UNDP/UNFPA/WHO/World Bank cosponsored Special Programme
(WHA Resolution 41.9; 1988)
Department of Reproductive Health and Research (RHR)

- Created in November 1998
- Composed of two pre-existing entities
  - UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP)
  - WHO Division of Reproductive Health (Technical Support) (RHT)

RHR = RHT (PDRH) + HRP
The International Conference on Population and Development (Cairo, 1994)

The new conceptual framework

“Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes…”

(ICPD Programme of Action, paragraph 7.2)
“All countries should strive to make accessible through the primary health-care systems, reproductive health to all individuals of appropriate ages as soon as possible and no later than the year 2015.”

*(ICPD Programme of Action, para. 7.6)*
Reproductive ill-health accounts for substantial portions of global burden of disease

Reproductive ill-health as proportion of global burden of disease shows no sign of declining

Millennium Development Goals

I. Eradicate extreme poverty and hunger
II. Achieve universal primary education
III. Promote gender equity and empowerment of women
IV. Reduce child mortality
V. Improve maternal health
VI. Combat HIV/AIDS, malaria and other diseases
VII. Ensure environmental sustainability
VIII. Develop a global partnership for development
"Sexual and reproductive health — essential for reaching the Goals"

(pages 82-84)
"To this end we commit ourselves to:

... 

(g) Achieving universal access to reproductive health by 2015, as set out at the International Conference on Population and Development, integrating this goal in strategies to attain the internationally agreed development goals, including those contained in the Millennium Declaration, ..."
The final recognition of the role of sexual and reproductive health in achieving MDGs

“...I am therefore recommending the incorporation of these commitments [i.e. those agreed at the 2005 World Summit] into the set of targets used to follow up on the Millennium Declaration. This includes: ... a new target under Goal 5: to achieve universal access to reproductive health by 2015; ...”

Report of the Secretary-General on the work of the Organization, General Assembly Sixty-first Session, 2 October 2006
The WHO global reproductive health strategy was adopted by WHO's Member States in May 2004.
An overview of the strategy paper

Guiding principle: human rights
Core aspects of reproductive and sexual health services

1. Improving antenatal, perinatal, postpartum and newborn care
2. Providing high-quality services for family planning, including infertility services
3. Eliminating unsafe abortion
4. Combating sexually transmitted infections including HIV, reproductive tract infections, and cervical cancer
5. Promoting sexual health
Maternal and perinatal health today

- 529,000 women die each year during pregnancy, childbirth and postpartum period (> 99% in developing countries)
- over 300 million women suffer from short-term or long-term illness brought about by pregnancy and childbirth
- lifetime risk of maternal death in Africa is 1 in 16
- each year nearly 3.3 million babies are stillborn
- 4 million babies die during first 28 days of life (three quarters in the first 7 days)
Causes of maternal death

- Severe bleeding (haemorrhage) 25%
- Infections 15%
- Eclampsia 12%
- Obstructed labour 8%
- Unsafe abortion 13%
- Other direct causes 8%
- Indirect causes 20%
- Other direct causes 8%


a Total is more than 100% due to rounding.
## Maternal and perinatal health research completed during 1995-2005 with leading participation of WHO

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Countries</th>
<th>Women</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenatal care</td>
<td>5</td>
<td>24,678</td>
<td>Published (2001)</td>
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<tr>
<td>Prevention of postpartum haemorrhage</td>
<td>9</td>
<td>18,530</td>
<td>Published (2001)</td>
</tr>
<tr>
<td>Treatment of pre-eclampsia (MAGPIE trial)</td>
<td>28</td>
<td>10,141</td>
<td>Published (2002)</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>5</td>
<td>149,206</td>
<td>Published (2004)</td>
</tr>
<tr>
<td>Epidemiology of preterm delivery and IUGR</td>
<td>4</td>
<td>38,319</td>
<td>Published (2004)</td>
</tr>
<tr>
<td>Prevention of pre-eclampsia (calcium supplementation)</td>
<td>6</td>
<td>8,325</td>
<td>Published (2006)</td>
</tr>
<tr>
<td>WHO Reproductive Health Library</td>
<td>2</td>
<td>77,765</td>
<td>Published (2007)</td>
</tr>
</tbody>
</table>

### Long term follow-up of infants:

- Calcium trial I: 1, 591, Published (1997)
- Magpie trial: 19, 3,283, Published (2007)
- Calcium trial II: 2, 800, Submitted

- Total: 25 * 331,638

* Some countries have been involved in more than one study
# Maternal and perinatal health research ongoing with leading participation of WHO

| Prevention of preeclampsia (anti oxidants) | 4 | 1365 | Data analysis |
| Treatment of asymptomatic bacteriuria | 4 | 1500 | Ongoing |
| Treatment of postpartum haemorrhage | 4 | 900 | Ongoing |
| Prevention of preeclampsia (treatment of hypertension) | 6 | 2000 | Initiated |
| WHO Global Survey of Maternal and Perinatal Health | | | |
| - Latin America | 8 | 97 184 | Published and further analysis ongoing |
| - Africa | 7 | 81 961 | Data analysis |
2005 Global Survey results – Latin America (n= 97095 deliveries)
## Relationship between caesarean delivery and intrapartum fetal death according to fetal presentation

<table>
<thead>
<tr>
<th></th>
<th>n / N</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cephalic Presentation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal delivery (Reference level)</td>
<td>242/61870</td>
<td>1.0 (1)</td>
</tr>
<tr>
<td>Elective CD vs. Vaginal delivery</td>
<td>35/11300</td>
<td>0.7 (0.4 – 1.0)</td>
</tr>
<tr>
<td>Intrapartum CD vs. Vaginal delivery</td>
<td>73/16543</td>
<td>1.3 (0.9 – 1.7)</td>
</tr>
<tr>
<td><strong>Breech and Other Presentations</strong></td>
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<td></td>
</tr>
<tr>
<td>Vaginal delivery (Reference level)</td>
<td>53/547</td>
<td>1.0 (2)</td>
</tr>
<tr>
<td>Elective CD vs. Vaginal delivery</td>
<td>18/1874</td>
<td>0.3 (0.1 – 0.5)</td>
</tr>
<tr>
<td>Intrapartum CD vs. Vaginal delivery</td>
<td>14/2043</td>
<td>0.2 (0.1 – 0.4)</td>
</tr>
</tbody>
</table>

(1) odds ratios adjusted by gestational age, maternal age, education, previous stillbirth or neonatal death, vaginal bleeding in 2nd half of pregnancy, other medical conditions, type of onset of labour (induced/not induced) and country.
(2) odds ratios adjusted by gestational age and type of onset of labour (induced/not induced).
### Relationship between caesarean delivery and neonatal death according to fetal presentation at delivery

<table>
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<tr>
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<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cephalic Presentation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal delivery (Reference level)</td>
<td>231/61299</td>
<td>1.0 (1)</td>
</tr>
<tr>
<td>Elective CD vs. Vaginal delivery</td>
<td>87/11237</td>
<td>1.7 (1.3 – 2.2)</td>
</tr>
<tr>
<td>Intrapartum CD vs. Vaginal delivery</td>
<td>107/16434</td>
<td>2.0 (1.5 – 2.6)</td>
</tr>
<tr>
<td><strong>Breech and Other Presentations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal delivery (Reference level)</td>
<td>36/421</td>
<td>1.0 (2)</td>
</tr>
<tr>
<td>Elective CD vs. Vaginal delivery</td>
<td>33/1846</td>
<td>0.7 (0.4 – 1.3)</td>
</tr>
<tr>
<td>Intrapartum CD vs. Vaginal delivery</td>
<td>33/2021</td>
<td>0.6 (0.3 – 1.0)</td>
</tr>
</tbody>
</table>

(1) Odds ratios adjusted by gestational age, hypertensive disorders, any anaesthesia during labour and type of facility. (2) Odds ratios adjusted by gestational age.
Estimated annual numbers of unsafe abortion, around the year 2000

Total number of unsafe abortions = 19 million
(Total number of abortions = 46 million)

Asia: 10.5 million
Africa: 4.2 million
Latin America and Caribbean: 3.7 million
Europe: 0.5 million

(Source: WHO, 2004)
Estimated proportions of unsafe abortions among 15-24 year olds, around the year 2000

Total number of unsafe abortions = 19 million

(Source: WHO, 2004)
Preventing unsafe abortion

- Estimating incidence of abortion (jointly with Guttmacher Institute) and public health impact of unsafe abortion (mortality and morbidity)
- Providing guidance on management of complications of unsafe abortion, including guidance on post-abortion contraception
- Improving technologies and interventions for provision of safe abortion
- Assisting implementation of technical and policy guidance on safe abortion for health systems
- Supporting countries in the development of policies and programmes to reduce unsafe abortion and improve access to safe abortion and quality post-abortion care
Getting research into practice

Frequently asked clinical questions about medical abortion

Combipack of Mifepristone Tablets and Misoprostol Tablets

MEDABON

Each blister pack contains:
(A) Yellow uncoated tablet containing mifepristone 200 mg
(B) White uncoated tablet containing misoprostol 200 mcg

Dosage and Administration:
(200 mg of Mifepristone (4x200mg Tablets) in a single oral dose, followed by 800 mcg of misoprostol (4x200 mcg Tablets) in a single dose given vaginally. This dosing is independent of body weight. If the patient vomits shortly after administration of the mifepristone, she should inform the doctor.

Warning: Keep out of reach of children.

FOR CLINICAL TRIAL USE ONLY

Storage: Store at or below 25°C (77°F) in a dry area.

GU/DURUGS/25769

Risk an empty packaging and unused products.

Trade mark

Manufactured by
Sun Pharmaceutical Industries Limited
Nashik-Dahavdi Highway,
Nashik - 422 009, Gujarat, INDIA.
"It is estimated that up to 100,000 maternal deaths could be avoided each year if women who did not want children used effective contraception."

Unmet needs in contraceptive hardware

- Methods for dual protection (including improved barrier methods)
- Reversible methods for men
- Postcoital methods for repeated use during the cycle
- Improved hormonal methods for women
- Long-acting, non-hormonal methods for women
Towards a male hormonal contraceptive

Testosterone undecanoate (Phase III trial)

1045 couples recruited

Data collection completed in mid-2006 (data analysis ongoing)
Important new knowledge about safety/efficacy of hormonal fertility-regulating methods

- Oral contraceptives and cancer (benefits and risks)
- Oral contraceptives and cardiovascular disease
- Oral contraceptives and breast cancer
- DMPA and breast cancer
- Safety and efficacy of mifepriste
- Third-generation oral contraceptives and venous thromboembolism
- Long-term safety and efficacy of contraceptive implants (Norplant®, Jadelle® and Implanon®)
The epidemic of sexually transmitted diseases

- 340 million new cases of curable STIs annually
- more than 186 million ever-married women (15-49 years) in developing countries are infertile
- over 500,000 deaths (fetal and neonatal) due to syphilis each year
- 4.1 million [3.4 million - 6.2 million] people became newly infected with HIV in 2006 (more than half of them were young people, 15-24 years; progressive "feminisation" of epidemic)
- 2.8 million [2.4 million - 3.3 million] people died of AIDS in 2006
- cervical cancer is most common cause of cancer deaths among women in developing countries (some 200,000 deaths each year)
Research on the prevention of sexually transmitted infections — Selected examples

- Female condoms: comparative effectiveness for pregnancy prevention with male condoms (China, Nigeria, Panama, South Africa)

- Microbicides:
  - product development (identification of potential new products; safety monitoring of trials of potential microbicides)
  - capacity building for microbicide research and for regulatory decision-making

- Mother-to-child transmission of HIV
Our commitment to research capacity strengthening

US$ 2
Research and development

US$ 1
Research capacity strengthening
Distribution of research capacity strengthening grants awarded since 1990
Countries collaborating with the Programme
2006, n=107 countries
Bridging the know-do gap

Turning Research Into Practice
“Female genital mutilation remains a pressing human rights issue and reliable evidence about its harmful effects, especially on reproductive outcomes, should contribute to the abandonment of the practice.”
"The internet is an effective means of providing sex and reproductive health education to young people in China"
Widely acclaimed guidance materials in high demand
Authoritative responses to concerns of Member States

WHO Statement
Carcinogenicity of combined hormonal contraceptives and combined menopausal treatment

September 2005

In June 2005, the International Agency for Research on Cancer (IARC) convened a meeting of experts to review the scientific evidence on the carcinogenic risks to humans posed by combined estrogen-progestogen contraceptives (COCs) and combined menopausal hormones (CMHs). The final IARC report will be an IARC monograph to be published in 2006.

This was an update of a similar monograph that the IARC published in 1997 on the cancer threat posed by combined estrogen-progestogen contraceptives (COCs) and combined menopausal hormone therapy (CMHT) (Group 3: Not classified as to carcinogenicity to humans). In the light of the new evidence, the IARC has concluded that COCs and oral contraceptives (OCs) (Group 3: Not classified as to carcinogenicity to humans) are not likely to be carcinogenic to humans (Group 1).

A summary of the key findings is as follows:

- For COCs, the evidence is not sufficient to be able to classify them as carcinogenic to humans.
- For OCs, the evidence is not sufficient to be able to classify them as carcinogenic to humans.
- For CMHT, the evidence is not sufficient to be able to classify them as carcinogenic to humans.

The IARC report also includes a discussion of the potential risks and benefits of COCs and OCs, as well as recommendations for future research.

WHO Statement on Hormonal Contraception and Bone Health

July 2005

General hormonal contraceptives, including contraceptive steroids, menopausal hormones, and highly effective injectable methods, have been shown to adversely affect bone health, including contraception and non-conception effects, and bone health risks are normal for a woman. These effects have been reviewed by the European Medicines Agency (EMA) and other regulatory bodies. Each woman should be informed of the risks and benefits associated with the use of contraceptive hormones and bone health.

Bone health may be influenced by many factors, including dietary habits, physical activity, and hormonal contraceptives. Contraceptive hormones can affect bone health in at least two ways: one effect is seen in women who use contraception and the other is seen in women who do not use contraception. The risk of osteoporosis is increased by smoking, obesity, and lack of physical activity. Contraceptive hormones can also affect bone health in women who use contraception.

The use of contraceptive hormones has negative impacts on bone health, including increased risk of osteoporosis. Studies have shown that women who use contraceptive hormones have a higher risk of osteoporosis and fractures than women who do not use contraception. The use of contraceptive hormones can also affect bone health in women who do not use contraception.

Public health professionals should be aware of the potential risks and benefits associated with the use of contraceptive hormones and bone health.

Reference:
### Reproductive Health

#### Sexual and Reproductive Health

- **Health topics**
  - Adolescence
  - Aids
  - Cancer
  - Family planning
  - FGM/Harmful practices
  - Infertility
  - Maternal/perinatal health
  - RTIs, STIs, HIV/AIDS
  - Unsafe abortion
  - Contraceptive choice
  - Economics and finance
  - Emergency situations
  - Ethics
  - Gender
  - Linkages between sexual and reproductive health and HIV
  - Monitoring & evaluation
  - Working with countries
- **HRP Special Programme**
  - UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP)
  - HRP is the main instrument within the United Nations system for research in human reproduction. HRP brings together health care providers, policy-makers, scientists, clinicians and consumer and community representatives to identify and address priorities for research aimed at improving sexual and reproductive health.
- **International meeting**
  - Celebrating the 10th anniversary of the WHO Reproductive Health Library (RHL)
  - 27-29 April 2007
  - Under the auspices of Khon Kaen University and the Thai Cochare Network, this international meeting will provide an opportunity for exchange of ideas between international and Thai experts on sexual and reproductive health, research synthesis, utilization of research findings and innovative approaches to capacity-building including e-learning.

### WHO website

- [www.who.int/reproductive-health/](http://www.who.int/reproductive-health/)
Strategic Partnership Programme

Goal

to improve support to countries through the implementation of evidence-based norms and tools for reproductive health

Overall objective

to promote sexual and reproductive health through the application of evidence-based practices and informed policy and decision-making in health interventions

What the partnership should achieve

1. Introduce systematically selected practice guides to improve sexual and reproductive health (SRH), including family planning and sexually transmitted and reproductive tract infections (STIs/RTIs) support disseminations, adaptation and adoption of guidelines within countries through UNFPA Country Technical Services Teams (CTSTs) and Country Offices, WHO Regional Offices and Country Offices

2. Strengthen technical capacity through orientation and backstopping in SRH, including maternal health enhance linkages between creation of evidence-based tools and implementation to improve programmes and service delivery

Expected outcomes

1. Adoption of tools and updating of evidence-based practices

2. Improved quality of reproductive health care services, particularly in family planning, STIs/RTIs and maternal health

Evidence-based tools

Family planning

Maternal and newborn health

STI/RTI control

Further information on SRH guidelines including online electronic versions:

www.who.int/reproductivehealth - Further information on SRP activities mplus@who.int