SPECIAL PROGRAMME OF RESEARCH, DEVELOPMENT AND RESEARCH TRAINING IN HUMAN REPRODUCTION

# Reproductive health: a key to a brighter future

Biennial Report 1990 issues
Special 20th anniversary
Special 20th anniversary



WORLD HEALTH ORGANIZATION

# SPECIAL PROGRAMME OF RESEARCH, DEVELOPMENT AND RESEARCH TRAINING IN HUMAN REPRODUCTION

Co-sponsored by UNDP, UNFPA, WHO, and the World Bank

# Reproductive health: a key to a brighter future

Biennial Report 1990-1991

Special 20th anniversary issue

Edited by

J. Khanna P.F.A. Van Look P.D. Griffin



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#### **Foreword**

HO defines reproductive health as a condition in which reproduction is accomplished in a state of complete physical, mental, and social well-being, and not merely as the absence of disease or disorders of the reproductive process. The ability, particularly of women, to regulate and control fertility is an integral component of the reproductive health care package.

Fertility regulation is important for reducing the population growth rate which is vital for achieving sustainable development; population growth adds to pressures on resources and the carrying capacity of local ecosystems and the biosphere.

The picture of reproductive health in the world today appears to be gloomy. But being an optimist by nature, I am a strong believer in the energy, resilience and adaptability of human beings. Moreover, there is much ground for optimism about health development. For example, the monitoring and evaluation of implementation of the WHO Global Strategy for Health for All show that, even at low income levels, impressive advances in human development can be achieved. An even more important cause for optimism is the growing respect for human values and for human rights, coupled with the realization that improvement in the health of individuals, particularly of women, is an investment in overall human and socioeconomic development. Another source of encouragement is the increasing number of governments awakening to the urgency of devising new health development strategies to expedite the attainment of health for all. But our capacity for action depends not only on political commitment and financial resources, but also on technical knowledge and trained manpower.

Moreover, without international cooperation, global health targets will not be achieved. WHO initiated the Special Programme of Research, Development and Research Training in Human Reproduction in 1972 to strengthen international technical cooperation in reproductive health research, but in particular to address the expanding need for fertility regulation in developing countries. Today, after twenty years of success, the Programme is co-sponsored by the United Nations Development Programme, the United Nations Population Fund, the World Health Organization, and the World Bank, and has become the main instrument of reproductive health research in the United Nations system. Not only does it conduct, support, coordinate, and evaluate research, it has helped

(and continues to help) many developing countries to acquire the material and human resources needed for research in this area.

On the occasion of the twentieth anniversary of the Programme, WHO is pleased to issue this special report. As the report shows, with concern, commitment and international cooperation, we can look forward to a brighter future with regard to reproductive health.

Dr Hiroshi Nakajima Director-General World Health Organization

#### **Preface**

special programme is established in WHO when a special need is identified, necessitating a special effort beyond the regular WHO activities and for which the Member States are willing to make a special financial contribution, separate from their assessed dues to the Organization. The Special Programme of Research, Development and Research Training in Human Reproduction was the first special programme to be established in WHO.

The major and rapid expansion of fertility regulation, particularly in developing countries, emerged as a special need that required special efforts in terms of political commitment, mobilization of resources, and generation of the necessary knowledge and technology. The Programme was established in 1972 with the objective of mobilizing the scientific health community, in both developed and developing countries, in a global partnership to help developing countries meet the health needs of their populations, particularly in the field of fertility regulation. Several Member States in the developed and developing world made (and continue to make) special financial contributions to the Programme. Moreover, in 1988 the Programme was co-sponsored by the United Nations Development Programme, the United Nations Population Fund, the World Bank, and WHO, to become the research arm of the United Nations system in the field of human reproduction.

Over the past two decades, the Programme has evolved to respond to changing needs and scientific opportunities, capitalizing on its comparative advantages. Tremendous progress has been made but major challenges still lie ahead.

This issue of the Programme's Biennial Report is also *special* as it marks the 20th anniversary of the Programme. Part I reviews the status of reproductive health in the world over the last two decades. The progress made, particularly in fertility regulation, cannot be overestimated. Science, including the Programme's effort, is entitled to some of the credit. The unmet needs, however, are still great and a sense of urgency is now dictated by new environmental concerns related to population growth, together with continuing concerns for maternal and child health, the status of women, and human development.

Part II of the Report deals specifically with the Programme's twenty years and includes invited contributions. The two former directors of the Programme provide an historical perspective of the Programme's estab-

lishment and development. Another chapter gives an account of the findings of a major external evaluation of the impact of the Programme. Viewpoints are presented from Asia, Africa, and Latin America.

Part III of the Report highlights, in relatively non-technical language, the progress made by the Programme over the past biennium. For more detailed information on technical aspects, the reader is referred to the Programme's Annual Technical Reports.

Part IV contains the annexes which acknowledge the contributions made to the Programme by its donors, the collaborating centres, world scientists, and the current and former staff of the Programme.

The objective of this Report is not to relate the achievements or to boast about the progress made by the Programme. Rather, it aims to demonstrate that not only is it possible to mobilize scientists from developed and developing countries in a global partnership, but through it, it is also possible to work successfully on health problems relevant to the needs of developing countries. This approach still has a lot more to offer in this decade of major challenges.

M.F. Fathalla Director

# Message from the Executive Director of UNFPA for the Programme's 20th anniversary Report

wenty years ago, setting up the Special Programme of Research, Development and Research Training in Human Reproduction (HRP) was welcomed as a far-sighted move on the part of WHO. In the light of 20 years' experience, and a vastly increased demand for theoretical and practical knowledge about contraception, its wisdom is clearer than ever.

The Programme has, from the start, been a leader in contraceptive technology research, and a number of new products it has developed are now ready for introduction in countries. The Programme has also supported many developing countries in strengthening their research capability in biomedical and social sciences. Wherever feasible, HRP activities have been coordinated with UNFPA supported country programmes. UNFPA applauds the Programme's efforts to involve women in all aspects of its work, and to ensure that contraceptive research and development is particularly sensitive to gender concerns.

The Fund has been supporting the Programme since 1974, and since 1988 has been a co-sponsor with UNDP, WHO, and the World Bank. UNFPA welcomes the conclusion of the 1988-1989 external impact evaluation of the Programme:

"...that the Programme has had a major impact...(and it was)...firmly recommended that HRP be retained as a Special Programme within the UN system and that the co-sponsoring agencies and donors increase their financial contributions to the Programme".

We are delighted to welcome the Programme into its third decade, and look forward to the availability in the near future of a number of new products which are currently in the final stages of development. We are confident that the fruitful co-operation which has been built up in the past will continue for many years to come and lead to a wider choice of safe and effective contraceptive methods for women and men throughout the world.

Nafis Sadik Executive Director

# Message from the Administrator of UNDP for the Programme's 20th anniversary Report

uman development is about access to income and employment opportunities, education and health, and a clean and safe physical environment. Each individual should also have the opportunity to participate fully in community decisions and to enjoy human, economic, and political freedom. It also includes the ability to control fertility. For this, people need to have access to a wide range of methods of fertility regulation.

The Special Programme of Research, Development and Research Training in Human Reproduction has as a primary goal the expansion of the range of safe, effective, and affordable fertility regulation methods available to women and men, particularly in developing countries. Over the last 20 years the Programme has made tremendous progress through its research and research capability strengthening activities.

In 1988 UNDP joined UNFPA, WHO, and the World Bank as a cosponsor of the Programme. As an agency involved in human development, UNDP was pleased to be associated with a Programme that is engaged in research and training in this important aspect of human development. UNDP is committed to support this Programme and it is hoped that it will continue to benefit from the support of other collaborators in the years to come.

William H. Draper III Administrator

# Message from the President of the World Bank for the Programme's 20th anniversary Report

he Special Programme of Research, Development and Research Training in Human Reproduction has accomplished much in two decades. The Programme has provided an indispensable service for the hundreds of millions of people who choose to plan their families. It has sponsored research, collaborated with and trained thousands of scientists, and helped develop scientific consensus about the safety and efficacy of contraceptive methods, especially those suitable to conditions in the developing world. The Programme has gradually broadened its focus, and now also sponsors work in such important areas as sexual behavior, infertility, and AIDS.

The service the Programme provides is an important part of the World Bank's approach to human resources development and poverty alleviation, which depend on increasing income-earning opportunities for women and men, providing education, improving health and nutrition, and providing family planning services.

The Bank helped the Programme in an advisory capacity almost from the start and in 1988 joined with UNFPA, UNDP, and WHO as a co-sponsor. This collaboration has deepened our appreciation of the Programme's technical strength, its managerial soundness, and the commitment of its staff.

Substantial obstacles continue to stand in the way of reproductive choice for women and men in developing countries. Thus, the work of the Programme remains extremely valuable. We look forward to continuing to work together with others in this important endeavor.

Lewis T. Preston President

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# I. Global status of reproductive health



### Reproductive health in the world: two decades of progress and the challenge ahead

M. F. Fathalla

he past two decades have witnessed a considerable improvement in reproductive health in the world. However, progress has been uneven in different regions, countries, and even within countries. The agenda for action thus remains unfinished. This overview highlights the major areas of progress, current impediments in the way of better reproductive health, and challenges for the future.

### THE CONCEPT OF REPRODUCTIVE HEALTH

Traditionally, health aspects of human reproduction have been dealt with through the public health approach of "Maternal and Child Health" (MCH). Over the past two decades, however, important sociodemographic changes have taken place that have rendered the MCH approach too narrow to meet all the current concerns in this aspect of health. For example, family planning has increasingly become a way of life, with pregnancies fewer and farther between. Women are claiming their right to have their health needs addressed as women and not merely as mothers. Sexually transmitted bacterial and viral infections have assumed epidemic proportions. Adolescents—a rapidly growing population grouphave distinctive reproductive health needs which require special attention. Finally, the reproductive health needs of men also need to be considered.

In response to the changed (and changing) global situation, a new, broader concept of "reproductive health" has emerged, which offers a more comprehensive and integrated approach to the current health needs of all in human reproduction.

#### **Definition**

Health is defined in the Constitution of the World Health Organization (WHO) as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity". In the context of this positive definition, reproductive health is not merely the absence of disease or disorders of the reproductive process, rather it is a condition in which the reproductive process is accomplished in a state of complete physical, mental, and social well-being. This implies that people have the ability to reproduce, that women can go through pregnancy and childbirth safely, and that reproduction is carried to a successful outcome, i.e., infants survive and grow up healthy. It implies further that people are able to regulate their fertility without risks to their health and that they are safe in having sex.

## Reproductive health care: an integrated package

The various elements of reproductive health are strongly inter-related, and improvement of one can facilitate the improvement of others (as indeed can the deterioration of one lead to the deterioration of others). While all elements of reproductive health are individually important, given the current socioeconomic and environmental conditions in the world, particularly in developing countries, fertility regulation is central to all other aspects of reproductive health. It has a bearing on, for example, the prevention of sexually transmitted diseases (STDs), the consequences of unwanted pregnancy, infertility, sexuality, child survival, and safe motherhood.

The reproductive health care package covers the health needs of both women and men. But the burden of ill health associated with reproduction is divided very unequally between the two sexes, with women bearing the brunt of it. For instance, only women face the health hazards of pregnancy and childbirth. Most STDs have more serious sequelae in women than in men. Infertility is a problem for which both partners share responsibility, but in most societies the social and psychological burden is borne much more by the woman. In fact, even the burden related to the management of infertility (diagnosis as well as therapy) is much more on the woman. Contraceptive use worldwide is three times greater among women than men, and among all available methods, those used by women carry more potential health hazards. Even with regard to child survival, growth, and development, women make a comparatively much larger investment. In sexuality, great inequality between men and women still prevails in most parts of the world. The practice of female circumcision, the main aim of which is to prevent women from enjoying sex, is a stark reminder of continuing sexual discrimination against women in certain societies.

### GLOBAL STATUS OF REPRODUCTIVE HEALTH

#### Fertility regulation

The most significant development in reproductive health over the past few decades has been the major expansion in contraceptive use worldwide, with potential benefits to individuals, families, societies, and the world at large. The need to regulate fertility has been recognized by people living in the most varied social circumstances who have different needs and perspectives. These people live in the skyscrapers of Manhattan, New York, in the rural areas of the Indian subcontinent, and in the urban slums in Latin America. They include women and men from all socioeconomic strata. Some are adolescents trying to

postpone a first pregnancy. Others are mothers wishing to space births, and yet others are women wanting to put an end to their child-bearing career. They may hold widely different cultural values and religious beliefs, and they may be well served or under-served by their health care systems, but all are seeking better health and happiness (1).

Three major rationales account for the rapid expansion in contraceptive use: the human rights rationale, the demographic rationale, and the health rationale (2). All three have evolved separately, at different points in time, and with different objectives.

In historical terms, the human rights rationale was the first basis around which organized efforts to expand contraceptive use were undertaken. The evolution of this rationale began when women started to claim their rights as equals and as partners. After that, it was not long before women realized that without the ability to regulate fertility they would not be able to control and take charge of their lives. Without fertility regulation women's rights are mere words. A woman's control over her own fertility has been called "the freedom from which other freedoms flow". A woman who has no control over her fertility cannot complete her education, cannot maintain gainful employment, cannot make independent marital decisions, and has very few real choices open to her.

A recent UNDP report (3) defined human development as "a process of enlarging people's choices". For half of the world's population, i.e., women, the ability to regulate and control fertility is indispensable for human development.

The *demographic rationale* for family planning emerged in response to concerns about the negative effect of rapid population growth on socioeconomic development. The objective of this rationale is to reduce birth

#### Reproductive health in the world: bare facts

Over 100 million acts of sexual intercourse take place each day. These result in 910 000 conceptions and 356 000 sexually transmitted bacterial and viral infections. About 50% of the conceptions are unplanned, and about 25% are definitely unwanted.

About 150 000 unwanted pregnancies are terminated every day by induced abortion. One-third of these abortions are performed under unsafe conditions and in an adverse social and legal climate, resulting in some 500 deaths every day.

1370 women die every day in the course of their physiological and social duty of pregnancy and childbirth, and many times more this number have a narrow escape, though not without significant physical and psychological injuries.

Some 25 000 infants and 14 000 children aged 1-4 years die each day. One in 12 infants born this year will not see his/her first birthday, and one in eight will not see the fifth birthday.

Family planning not only prevents births, it also saves the lives of women and children. 300 million couples do not have access to family planning services.

rates and thus facilitate socioeconomic development.

In the context of the *health rationale*, contraceptives are used to delay pregnancies until the most appropriate and convenient time, and to prevent high-risk or unwanted pregnancies. The United Nations International Conference on Population in 1984 urged all governments "to support family planning as a health measure in maternal and child health programmes as a way of reducing birth occurring too early or too late in the mother's life, of increasing the interval between births and of diminishing higher birth orders, and by giving special consideration to the needs of those in the post-partum and/or breast-feeding period" (4).

#### Trends in fertility regulation

Over the past few decades there has been an unprecedented steep decline in fertility in developing countries as a whole, with a corresponding rise in contraceptive use. The total fertility rate—the average number of children per woman—in developing countries has declined from 6.1 in 1965–1970 to 3.9 in 1985–1990. The decline, however, has been uneven in different regions of the developing world, with the steepest decline occurring in East Asia and the smallest in Africa (5).

A recent study measured the time taken for fertility to decline from 6.5 to 3.5 in different countries. In USA it took 58 years, but in Indonesia only 27 years, Colombia 15 years, Thailand 8 years, and China merely 7 years (5).

In developing countries the prevalence of contraceptive use—defined as the percentage of married women of reproductive age (or their husbands) using any form of contraception—rose from 9% in 1965–1970 to 50% in

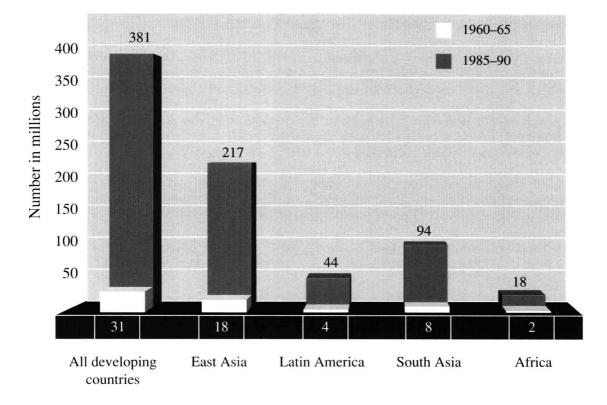


Fig. 1. Number of contraceptive users, by region

1985–1990. The most spectacular rise occurred in East Asia, where contraceptive prevalence has now even exceeded the average rate in developed countries. Even in Africa as a whole contraceptive prevalence almost trebled in the same period from 5% to 14% (5).

The total number of contraceptive users in developing countries is estimated to have risen from 31 million in 1960–1965 to 381 million in 1985–1990. However, in some regions the increase has been greater than in others (Fig. 1). For example, while in East Asia contraceptive users increased from 18 million to 217 million, in Africa the number increased from 2 million to 18 million (5).

The expanding demand for contraceptives

Meeting the ever growing demand for methods of fertility regulation will be a major challenge for the next decade. Even without any increase in contraceptive prevalence beyond the current level, the number of contraceptive users can be expected to increase by about 108 million by the year 2000 because of a rise in the number of married women of reproductive age (6).

However, according to current population projections, contraceptive prevalence in developing countries can be expected to increase to 59% (an increase of 9% above the current level) by the year 2000, with fertility declining to a rate of 3.3 children per woman. This would mean an increase of some 186 million contraceptive users, making a total of about 567 million (6). The family planning services in developing countries will have to be extended to meet the needs of these couples.

Prevalence of specific contraceptive methods

Voluntary surgical sterilization, intrauterine devices (IUDs), and oral contraceptive pills are the most widely used methods,