# regulation of human fertility



# Regulation of Human Fertility

Proceedings of a Symposium
on Advances in Fertility Regulation
organized by
the World Health Organization
in collaboration with
the Ministry of Health of the USSR
held at the WHO Collaborating Centre for Research and Training
in Human Reproduction at the All-Union Scientific Research Institute
of Obstetrics and Gynaecology, Moscow
on 16–19 November 1976

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### PREFACE

by

H. Mahler, M.D.
Director General
World Health Organization

The papers presented at this Symposium bring out in a concrete way the truth of a statement made at the recent World Health Assembly that "there is no health programme whose development does not depend upon research" They show clearly that research is no longer an "ivory tower" pursuit but one which stems from the needs felt at the service level and which is directed specially to the solving of these problems.

This Symposium, dealing as it does with many aspects of reproduction, with the technology of contraception, with infertility, addresses itself to questions affecting a large proportion of mankind. The issues that remain unresolved hinder the proper provision of services.

While research is still needed, much can, however, be achieved with the knowledge already available. We must make sure that the results of research are widely and rapidly disseminated. This is the main objective of symposia such as this and one of the important activities in WHO's research programme.

In the past ten years, in the area of human reproduction, WHO has organized about 30 meetings that have led to publications, as well as convening discussion meetings at the international, regional and national levels. This symposium, as well as other recent meetings, gives increasing recognition to the productivity of collaborative research efforts involving scientists from many countries working on a common theme. One of the purposes of WHO, as exemplified in its Expanded Programme of Research, Development and Research Training in Human Reproduction, has been to facilitate this collaboration.

May 1977

# WHO SYMPOSIUM ON ADVANCES IN FERTILITY REGULATION Moscow USSR, 16-19 November 1976

### WELCOMING ADDRESS

By

## Academician L. S. Persianinov

On behalf of the WHO Collaborating Centre on Research and Training in Human Reproduction in Moscow and of the All-Union Society of Obstetricians and Gynaecologists I would like to extend a most hearty welcome to all participants of this Symposium.

Four years ago the All-Union Scientific Institute of Obstetrics and Gynaecology of the USSR was designated by WHO as one of the Research and Training Centres in Human Reproduction. This designation enables us to participate in the study of such important areas of research as prostaglandins in fertility regulation and different methods of steroidal and intrauterine contraception. The collaboration of the WHO Expanded Programme of Research in Human Reproduction and of its Research and Training Centre in Stockholm made it possible for us to introduce new analytical techniques, such as radioimmunoassay methods for various pituitary and steroid hormones and cytochemical and histochemical procedures for the study of the human endometrium at the cellular level. Since 1976 the WHO Centre in Moscow has been expanded and now it also includes the Institute of Endocrinology and Chemistry of Hormones of the Academy of Medical Sciences of the USSR. This collaboration within the expanded Centre gives us access to such modern analytical techniques as gas chromatography - mass spectrometry and radioimmunoassay techniques for the natural prostaglandins and their metabolites.

Participation in the WHO Programme also allows us to take part in its programme of standardization and quality control of laboratory techniques, especially radioimmunoassay procedures. The use of common protocols by the various WHO Centres in the clinical study of prostaglandins and hormonal contraceptives is especially important, since in this way representative information can be obtained in the shortest possible time. The importance of the WHO Expanded Programme can be illustrated by recalling that by 1976 more than 500 scientists from 62 countries participated in planning and conducting research on improved and new fertility regulating methods. This is not the

first WHO Symposium in which our Institute plays the role of the host. Two years ago we had the privilege to host another WHO Symposium, on Prostaglandins, which proved to be of great value in our country in providing guidelines for the proper use of this new group of potent compounds. The use of prostaglandins could replace surgical termination of pregnancy in many women.

The present Symposium, as the previous one, is attended by many obstetricians and gynaecologists from different parts of our country and I am convinced that the discussions and exchange of opinions during this Symposium will greatly contribute to progress in the field of fertility regulation.

May I wish you all success in your work during this Symposium.

# WHO SYMPOSIUM ON ADVANCES IN FERTILITY REGULATION Moscow USSR, 16-19 November 1976

Human Reproduction Unit, World Health Organization, Geneva

# THE WHO PROGRAMME OF RESEARCH IN FERTILITY REGULATION

Ву

A. Kessler, Chief C. C. Standley, Scientist

The whole area of fertility regulation has seen great changes during the past twenty five years: progress in biological and clinical research is leading to a better understanding of the intricate processes involved in reproduction and of the relationship between reproductive and general health. Several new methods of birth control have become available, such as the pill and intrauterine devices; research is continuing to improve these and develop other kinds of methods. The problem of infertility is being broken down into a number of sub-areas, each with its own diagnostic and therapeutic approaches; some progress has been made, but much still requires to be done. Provision of care for fertility regulation has increasingly become part of health services in many countries in all parts of the world.

It is the recognition of the newness and importance of the whole field that led the World Health Assembly ten years ago to request the World Health Organization to give high priority to research in this field. The Programme which has developed since then addresses itself to all aspects of human reproduction, but with major emphasis on fertility regulation. It also aims at strengthening, at the national level, resources for such research.

The Programme is essentially an international collaborative effort involving scientists from over 60 countries. It brings together, in both planning and im-

plementation of research, scientists from a wide range of disciplines (for instance, obstetrics and gynaecology, pharmacology, toxicology, embryology, andrology, biochemistry, immunology, bio-engineering, biostatistics, medical sociology, epidemiology and operations research) and also from very different types of institutions (for instance, university departments, specialized research institutes, clinics and the pharmaceutical industry). The research is carried out, under WHO coordination, in these institutions, the collaborating scientists meeting at intervals to plan their research and discuss results.

This is the first time that a large international effort in this field has been attempted. The rationale for it is that its international and multidisciplinary character would bring together in a coherent effort many research activities that are at present going on in a scattered fashion and would accelerate dissemination of knowledge. This would hopefully speed-up progress; lead, through its multi-disciplinary character, to more imaginative approaches; and make the most of what are, at present, on a world wide scale, very limited manpower and financial resources.

### OBJECTIVES OF THE PROGRAMME

The Programme has the following major objectives: to make available a variety of safe, effective and acceptable fertility regulating methods to meet differing needs and different situations, particularly those encountered in developing countries; to assist national authorities in devising the best ways of providing these methods on a continuing basis; and to strengthen the resources for research in this field.

Why is a variety of methods required? Family planning is one of the areas of therapeutics in which the preferences of the individual play a very important role. Some women are prepared to make the effort to take a pill every day to assure that they do not have an unwanted pregnancy, others prefer an intrauterine device which gives nearly as good protection against pregnancy and requires essentially no further action on their part after insertion. Some couples may prefer not to use drugs or devices, and rely on one of the methods based on periodic abstinence. Some individuals, having had as many children as they want, request sterilization as an irreversible method of fertility regulation.

Such preferences vary greatly within any given community and also often between populations that differ culturally and economically. Different service settings and levels of development of education and health services affect the ease with which methods can be provided.

There are still other reasons for aiming for a variety of methods: one is that there are contraindications to the use of some of the methods in certain