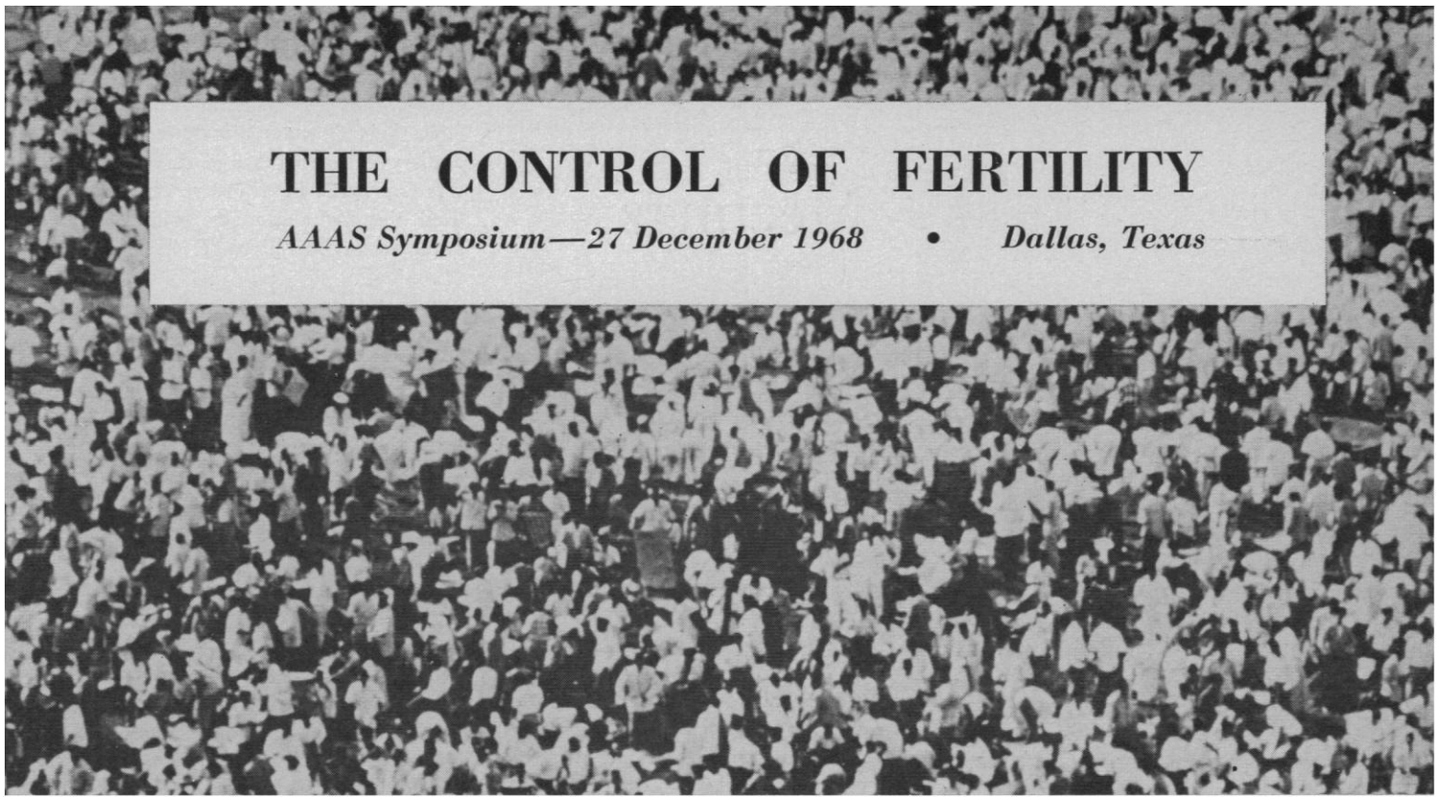

THE CONTROL OF FERTILITY

AAAS Symposium—27 December 1968 • Dallas, Texas

It is generally recognized by informed people that rapidly increasing populations in the economically very poor countries is a major threat to world stability. In many countries one finds that it is the poorest families who produce the most children and it is predicted that within a decade widespread starvation may be common in many areas. While birth rates are low in the industrial countries of Europe, they are very high in India, Pakistan, the United Arab Republic, and Latin American countries where the per capita income is less than $100 per year compared to a per capita income in the United States of well over $2000.

Nothing like this massive upsurge of population growth has occurred in the past; the primary reason for it has been the very recent application of modern medicine and public health measures to people in the developing countries. Thus, since World War II, the use of insecticides, antibiotics, mass vaccinations, and inoculations have drastically reduced death rates, leaving the birth rates, always large in these agricultural countries, either unchanged or somewhat enhanced as a result of improved health and longevity. Since population growth is the difference between birth rate and death rate, this has resulted in a population explosion in countries least able to afford it.

Against this social background, a symposium on "The Control of Fertility" will be held 27 December 1968 during the annual meeting of the American Association for the Advancement of Science, Dallas, Texas. Five speakers will discuss major aspects of the control of fertility. Hudson Hoagland (Worcester Foundation for Experimental Biology) will consider animal populations and their mechanisms of control in relation to the organization of their societies and the degree to which these matters may be relevant to human population control.

The biology of mammalian eggs and sperm is obviously basic to problems of population control. M. C. Chang and Michael Harper (Worcester Foundation for Experimental Biology) will describe physiological processes involved in fertility at the cellular level.

Practical fertility control involves the interruption of some step in the complex sequence of events ranging from egg and sperm production through fertilization, implantation, and early embryonic development. These various steps are susceptible to modification or blockade by endocrine factors. Indeed, the successful production of a neonate is dependent upon a remarkable interplay of hormones from pituitary and gonads, and the present effective oral contraceptives are steroidal materials that interrupt or modify the complex sequence of reproductive events.

Roy O. Greep (Department of Anatomy of the Harvard Medical School) will discuss the basic endocrinology of fertility. He will be followed by Sheldon Segal (Population Council) who will describe recent advances in fertility control involving hormonal agents, intrauterine devices, and other procedures. Such procedures have been under investigation in animals, but have not yet been applied to human studies.

Finally, Margaret Mead (Columbia University and the Natural History Museum of New York) will consider the very important problems of cultural factors involved in the acceptance of fertility control. These factors are of great practical importance since the most ideal contraceptive procedures are worthless if they are rejected by a population. The significance of the role of religion, tradition, and attitudes toward sex and toward large versus small families is of utmost importance to the practical control of population growth by family planning.

The symposium should be of interest to both laymen and scientists—especially to sociologists and biologists.

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See Science, *30 August 1968, for details about registration and hotel reservations for the AAAS Annual Meeting. An additional report on a symposium taking place at the Meeting appears in the 13 September issue of* Science.