

Family Planning: A Growing Gap

While population growth continues to boom in developing countries, costs of providing family planning services are rising, international donations are stagnant, and private sector participation has declined, according to speakers at a recent symposium on contraceptive innovations held at the National Academy of Sciences.

Shortages of technology do not appear to be the problem. "We are at the dawn of a new era of contraceptive technology," said Sheldon Segal of the Rockefeller Foundation. A variety of promising new approaches and improvements on old ones are either available or in the late stages of development.

But speakers at the meeting, which was sponsored by the Committee on Population of the Commission on Behavioral and Social Sciences and Education, made it clear that no technology, however cheap, safe, and effective, can achieve widespread adoption without well-designed and accessible services, well trained personnel, and extensive

public education.

Continued expansion of family planning programs in the next 20 years will require more than a tripling of annual expenditures—from \$3 billion to well over \$9 billion in 1988 dollars, based on a very low estimate of \$18 per couple per year, according to Duff Gillespie of the Agency for International Development (AID). This assumes that the proportion of married women in developing countries using contraception will rise from 40% to 57% by 2010. The number of women "at risk" for pregnancy will double, to 1.3 billion, during that time.

Unfortunately, according to Gillespie, the donor share of costs is expected to decline, as it has been doing (in constant dollars) for some years. It is estimated that 80% of the needed increases will have to come from local governments and the private sector. More costs will have to be borne by users, and financial incentives will be needed to make the market more attractive to the

private sector and encourage local production of contraceptives.

At present, only three developing countries—China, Indonesia, and Mexico—are supplying most of their own needs, even though 20 countries have use rates that would justify local production, according to Gordon Perkin of the Program for Appropriate Technology in Health. Some countries, such as Bangladesh, would like to manufacture condoms, but so long as they are getting free supplies from international agencies there is little incentive to do so.

Moreover, investments in contraceptive research by private companies in the United States have plummeted because of inhibitory federal regulations and skyrocketing costs of liability insurance. International expenditures in reproductive research total only about \$200 million, with \$50 million devoted to applied research on contraception. Segal said it is difficult for new scientists to enter the field, and the number of researchers is so small that "many decisions are made on the basis of a single scientific report."

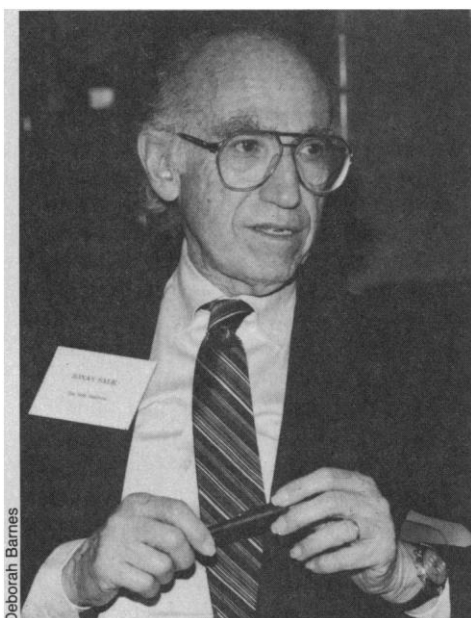
In spite of these difficulties, there is now a great array of contraceptive technologies available. The biggest new development has been the introduction 5 years ago of the implant Norplant, developed by the Population Council. The highly reliable implant, which is based on progestin and lasts 5 years, is now used by about 250,000 women. The main drawback, as with most new devices for women, is irregular bleeding. Planned improvements include development of a biodegradable implant.

Segal reported that several other technologies are nearing readiness for application. One is the abortifacient RU486 (mifepristone) which, when administered with a prostaglandin, is almost 100% effective in preventing implantation of a fertilized egg if taken within 2 weeks after a missed period. So far, it has been approved in China and France.

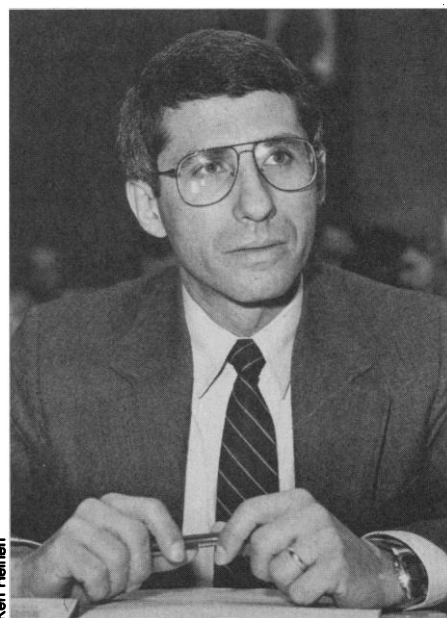
Under development is a 90-day vaccine that interrupts the action of human chorionic gonadotropin. This is now the subject of several clinical trials, including a large one in India, and could be ready in the next decade, said Segal. (Scientists recently reported success with guinea pigs using a vaccine based on antigens instead of hormones; but this is many years away from possible human application.)

Things are not going well, however, on the male contraceptive front, where the condom remains the only proven reversible method. The most promising is Gossypol, which inhibits sperm production. It can now only be administered as an injection or

Candidates' Heroes



Deborah Barnes



Ken Heinen

Asked during last week's presidential debate to name some contemporary American "heroes" who should inspire young people today, both candidates named a scientist, among others. Michael Dukakis chose Jonas Salk (left) while George Bush named Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases. Said Dukakis: "I can think of doctors and scientists—Jonas Salk who, for example, discovered a vaccine which cured one of the most dread diseases we ever had, and he's a hero." George Bush said "I think of Dr. Fauci, probably never heard of him. You did? He's a very fine researcher, top doctor at the National Institutes of Health, working hard on doing something about research on this disease of AIDS."