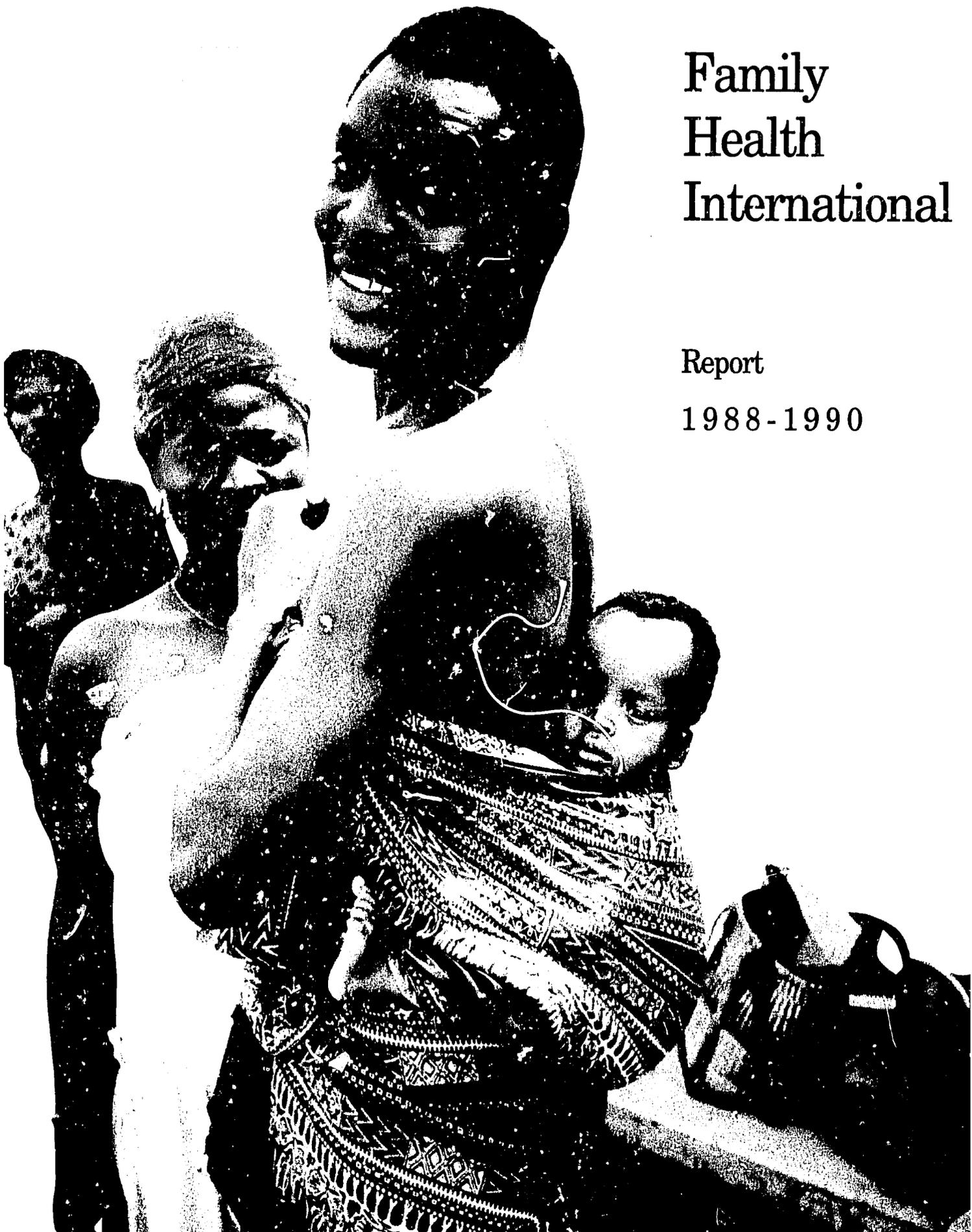


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# Family Health International

Report

1988-1990



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**Family Health International (FHI) is a nonprofit organization engaged in research and technical assistance for contraceptive development, reproductive health, family planning and AIDS prevention in developing countries.**

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**Fhi**

**A** pioneer in family planning and reproductive health, Malcolm Potts brought his leadership, passion, energy and vision to Family Health International twelve years ago. Now as FHI's President Emeritus, Malcolm Potts becomes a global ambassador to pursue his lifelong mission of improving health and alleviating human suffering.

FHI dedicates this report to Malcolm Potts, whose wisdom and wit led FHI for more than a decade.



## *Dear Friends,*

*In the last decade, and especially in the last three years, FHI has experienced unprecedented growth and program*

*diversification.*

*This has been in response to the enormous challenges confronting us all in the 1990s as we attempt to improve reproductive health, slow the increase in global population, improve the status of women, and combat AIDS and other sexually transmitted diseases. Meeting such challenges will require the commitment of*

*increased resources from international donors.*

*The need to expand family planning services around the world is more urgent than ever. Our ability to move towards a biologically sustainable global economy will be determined largely by the vigor and realism with which effective services are put in place in this decade.*

*Research shows that where family planning services are available, contraceptive use has increased rapidly and birth rates have de-*

*clined. There is also powerful evidence that couples all over the world want to limit the size of their families. Moreover, FHI's recent work analyzing the costs of family planning shows that governments and international donors have the capacity to raise the resources necessary to support the expansion of contraceptive and health services where they are wanted and needed. We believe that these services can be made available in a cost-effective manner.*

*We also believe that global problems demand global solutions. To this end, it is imperative that donors in Europe, the United States and elsewhere commit the resources needed to make a difference. Based on this conviction, Dr. Potts has taken on a new role. On January 1, 1991 he became President Emeritus of FHI in order to concentrate his efforts full time on the goal of increasing the participation of the donor community, especially in Europe, to finance better reproductive health in the world. Dr. Brown, who was named Chair of FHI's Board of Directors in September 1990, will serve as Acting President while FHI seeks a new president.*

*Over the last three years, FHI has grown as an organization. The activities highlighted in the following pages demonstrate FHI's evolution from a contract-funded fertility research program into a major international institution with a wide range of support. A key objective in all our work is to strengthen and*

Alan Dehmer



*Torrey C. Brown*

*transfer skills that will enable our colleagues in the developing world to provide research that supports programs in their own countries.*

*During 1988, 1989 and 1990 we participated in the development and testing of a number of innovative contraceptive devices, including new types of condoms designed to prevent pregnancy and sexually transmitted diseases, and long-acting contraceptive methods for women that deliver progesterin via injections and subdermal implants.*

*We are involved in other exciting research topics, including maternal mortality and morbidity, breast-feeding as a child-spacing method, the health benefits and risks associated with various contraceptive methods, and the consequences of incorrect use of oral contraceptives.*

*The need to expand family planning services around the world is more urgent than ever.*

*In order to disseminate research results, we have developed a unique program to improve reporting about reproductive health issues in developing countries.*

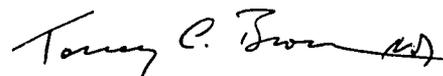
*As we have continued to encourage sustainable institutional development overseas, we have also bolstered our own institutional capacity by expanding our financial base and creating a sound internal structure that fosters cross-divisional cooperation.*

*The Office of Population at the U.S. Agency for International Development (A.I.D.) continues to provide the significant core funding that allows FHI to pursue its traditional research role in support of international population programming. However, half of our budget is now derived from other sources, including A.I.D.'s Office of Health, private foundations, multilateral government agencies, and individual donors, as well as Clinical Research International (CRI), a separate for-profit company founded by FHI in 1986.*

*FHI's successful evolution has not occurred in isolation. It is dependent on our collaborative ties with a network of investigators, universities, ministries of health, family planning programs, national AIDS committees, and private organizations in more than 70 countries. We are grateful to each of them for their partnership, as well as to the donor agencies that have supported our efforts.*

*We expect that FHI's growth and diversification in the 1980s will continue in the coming decade. FHI will soon have a new president, and our research and technical assistance agenda will continue to evolve. Our staff — together with a network of collaborating investigators and health care providers around the globe — will continue to strengthen our capacity to develop, test and introduce new contraceptive methods and to assist our colleagues overseas to expand and improve family planning services and to prevent the spread of AIDS and other STDs.*

*The challenges of the 1990s are significant. By working together with other international agencies, FHI will strive to meet them.*



Torrey C. Brown  
Chair and Acting President



Malcolm Potts  
President Emeritus

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## *Inside FHI*

**F**amily Health International (FHI) was founded in 1971 as the International Fertility Research Program, designed to conduct clinical trials on contraceptive methods. Over the years it has expanded into a major multidisciplinary organization engaged in research and technical assistance for contraceptive development, reproductive health, and AIDS prevention in developing countries.

Worldwide, FHI works in partnership with collegial organizations, bilateral and multilateral donors, private foundations, and a host of national nongovernmental organizations and government agencies.

As FHI has grown, we have created an organizational structure to maximize internal communication and draw effectively on the expertise of our 200-member staff

located at our North Carolina headquarters, a Washington, D.C., office and field sites in the developing world. During 1988, 1989 and 1990, FHI staff have worked in more than 70 countries, helping to meet the worldwide need for safe, acceptable and accessible family planning methods, reproductive health services, and AIDS prevention efforts.

To carry out this work, FHI is organized into six program divisions and three supporting divisions designed to allow specialized efforts while encouraging cross-divisional collaboration. For example, most of our work to introduce new contraceptives and to prevent the further spread of AIDS involves input from each division. Still, each division has its specific areas of expertise, as illustrated by the following highlights of recent activities.

### **Program divisions**

■ **AIDSTECH:** This division is engaged in vital AIDS prevention efforts in 45 developing countries. Programs include interventions with commercial sex workers, their clients and others engaged in behaviors that place them at risk of acquiring or transmitting the AIDS virus. AIDSTECH is also helping to develop programs to ensure safe and adequate blood supplies free of the AIDS virus.



Glenn Corley

■ **Clinical Trials:** CT is responsible for the development and testing of promising new contraceptive technologies, through large-scale clinical trials. Researchers have been engaged in testing long-acting injectables and subdermal implants designed to be more effective and easier to use than existing methods. This division also houses the worldwide database for all of the clinical trials for NORPLANT®, The Population Council's revolutionary long-acting contraceptive implant recently

through publications, conferences and a unique training program for journalists in the developing world. A new Contraceptive Introduction unit within FDT is helping to bridge the gap between the development and regulatory approval of contraceptive methods and their widespread use in areas where they are most needed.

■ **Materials Technology:** Established in 1989, the Materials Technology division is involved in the development of a new thermo-

plastic condom designed to provide effective protection from pregnancy, as well as AIDS and other STDs. Researchers are assisting A.I.D. in assuring the quality of latex condoms used in the developing world and improving methods and procedures for testing the quality of these condoms.

■ **Program Evaluation:** PE has been conducting consumer acceptability studies for a thicker male condom as well as for various

modifications of the male condom and a new female condom. The goal is to develop barrier methods for men and women that can provide protection against unwanted pregnancy as well as AIDS and other STDs. Researchers are also studying the factors that contribute to ineffective use of oral contraceptives. In addition, PE has played a leadership role in documenting the

role of breastfeeding as a child-spacing method and in studying the potential for introducing AIDS prevention efforts into existing family planning programs.

■ **Reproductive Epidemiology and Sexually Transmitted Diseases:** An important study area in this division is the examination of the relationships between contraception and HIV infection. Researchers are studying the effectiveness of spermicides against AIDS and other STDs, and the potential effects of prolonged and repeated use of spermicides. This division is also assessing the health benefits and risks of various contraceptive methods.

### Supporting divisions

■ **Biostatistics and Quality Assurance:** FHI's experienced biostatisticians provide statistical review and input for project design and analysis of our research efforts.

■ **Regulatory Affairs:** Created in 1988, this division enhances FHI's efforts to obtain regulatory approval for new contraceptive technologies. Division staff are experienced in interactions with the U.S. Food and Drug Administration.

■ **Scientific Support:** This division offers training and support for use of our extensive in-house computer network, as well as for FHI-sponsored investigators and programs overseas. Scientific Support also provides graphics for FHI publications.

Karen Hardee-Cleaveland



*A meeting of investigators for a NORPLANT® acceptability study in Egypt is chaired by Dr. Laila Kafafi, a consultant for the Egyptian Fertility Care Society.*

approved by the U.S. Food and Drug Administration and already being used by thousands of women overseas.

■ **Field Development and Training:** FDT is responsible for helping to develop and strengthen local Family Health Research Centers in developing countries and for disseminating research results

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## Profiles

Jerry Markatos



**William Schellstede,  
Executive Vice President**

Bill Schellstede has been involved in international work for 25 years. While working for CARE from 1965 to 1978, he helped generate income for leper colonies in Korea, set up farm loans in Belize, and constructed schools and roads in Liberia. He also worked for CARE in Costa Rica, India, Nicaragua, Sri Lanka and Vietnam.

After CARE, he worked for Population Services International, eventually becoming PSI's Executive Director. He spent four years with PSI in Dhaka, Bangladesh, where he planned and executed the largest private, subsidized contraceptive marketing operation in the world, bringing condoms and oral contraceptives to more than one million couples.

Mr. Schellstede has been with FHI since 1987. As Executive Vice President, he is in charge of day to day operations, and is responsible for seeing that FHI carries out its mission effectively and efficiently. One of his roles is to plan ahead and ensure that each new program fits into the overall objectives of the organization and its donors.

"The idea of working with a growing, comprehensive research organization really appeals to me," he says.

"Our collaborative relationships with other organizations and the unique synergy between our own divisions give us the capacity to help improve the quality of family planning programs from start to finish."

Greg Plachta



**Malcolm Potts,  
President Emeritus**

Malcolm Potts' dedication to family planning started nearly 30 years ago when he was a young medical doctor practicing obstetrics in England. "I got tired of getting up in the middle of the night, every other night, to treat women hemorrhaging from botched illegal abortions," he says. "It seemed to me that there must be a better way to plan a family."

So he went back to school to learn more about contraception and reproductive health. He studied reproductive anatomy at Cambridge University, adding a PhD to the medical degree and MA in Natural Sciences he had already earned. He also founded and organized a family planning clinic in Cambridge.

From 1968 to 1974 Dr. Potts served as Medical Director for the International Planned Parenthood Federation. During his travels to developing countries he frequently encountered women who were desperate for ways to prevent additional pregnancies. He realized then that it would take an enormous effort to provide safe and effective contraceptive methods everywhere they are needed.

Dr. Potts did not allow such a challenge to stop him. Instead he "declared war" on overpopulation and dedicated himself to finding ways to improve maternal and child health all over the world. In 1978 he became President of FHI, then known as the International Fertility Research Program. He served in that position until December 31, 1990. As President Emeritus, Dr. Potts maintains

an active role at FHI — continuing to serve on the Board of Directors and assisting the organization in identifying new opportunities for improving the reproductive health of men and women worldwide.

Over the years, Dr. Potts has led FHI into new areas of research and program development and fostered collaborative relationships with other organizations and researchers throughout the world. He has written and spoken on every facet of family planning — including its history, ethics and politics — as well as the physiology of reproduction and contraception. He has published nine books and over 300 articles and papers.

In his new role, Dr. Potts is concentrating his efforts on enlisting the assistance of the international donor community, especially in Europe. "We are on the front lines of an historic battle against unprecedented population growth and the global spread of AIDS," he says. "Unless there are rapid improvements in the allocation of resources to address these problems, it will be too late for the survival of the planet."

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## Contraceptive Technology

*FHI is developing and testing an array of methods for family planning and prevention of STDs, including AIDS*

One of FHI's highest priorities is to ensure the availability of a variety of safe and effective family planning methods wherever they are needed. Most recently our work has concentrated on the research and development of several new contraceptive options designed to provide continuous long-acting protection without daily vigilance. These include Annuelle™, a biodegradable subdermal implant, and NET-90, a three-month injectable. In addition, FHI is developing a plastic condom designed to provide protection against both unwanted pregnancy and sexually transmitted diseases, including AIDS.

FHI also has been assisting other research organizations to develop new products by testing them for efficacy and consumer acceptability. Our researchers have been studying long-acting hormonal methods including NORPLANT®, a five-year contraceptive implant developed by The Population Council and recently approved by the U.S. Food and Drug Administration (FDA) for marketing in the United States. We are also testing a female condom. Finally, we are examining simpler procedures for voluntary male and female sterilization, including the Filshie Clip, no-scalpel vasectomy and chemical compounds for non-surgical female sterilization.

### Long-acting steroid systems

Considerable progress has been made with the following promising long-acting, reversible steroid methods:

■ **NORPLANT®.** The first major new contraceptive technology to be developed since oral contraceptives were introduced 30 years ago, NORPLANT® consists of six match-size, Silastic® capsules implanted in a woman's forearm. The implants continuously deliver progesterin to the bloodstream, providing highly effective protection from unwanted pregnancy for up to five years.

FHI has sponsored preintroductory clinical trials of NORPLANT® involving nearly 8,000 women in 11 countries. Data from these studies were instrumental in NORPLANT® being approved for program use in Haiti, Sri Lanka, Nepal and Singapore.

FHI data were also used by The Population Council to support its application to the FDA for approval to market NORPLANT® in the United States.

FHI has also worked with the Program for Introduction and Adaptation of Contraceptive Technology (PIACT) to coordinate the development of user-oriented educational materials in several



countries in order to promote local knowledge and acceptance of NORPLANT®. In addition, we have conducted programmatic research to increase the acceptability of NORPLANT®, and helped to organize national information seminars targeted at physicians and policymakers in key government positions.

In collaboration with The Population Council, FHI has developed and maintains the NORPLANT® Worldwide Database. The database now contains information on nearly 16,000 women in 18 countries.

With funding from the Mellon Foundation, FHI is collaborating with The Population Council and the World Health Organization (WHO) to conduct long-term surveillance of NORPLANT®, assess user satisfaction and identify any problems associated with removal.

■ **NET implants (Annuelle™).** Developed by Endocon, Inc., of Boston, Mass., this method is designed to provide a high level of continuous contraceptive protection for about a year, through norethindrone (NET) pellets implanted in a woman's forearm. Unlike NORPLANT®, the NET implants are biodegradable and need not be removed.

■ **Injectable microspheres (NET-90).** Developed by Stolle Research and Development Corporation of Cincinnati, Ohio, NET-90 involves the injection of biodegradable microspheres to deliver progester-

one continuously to the bloodstream for 90 days. It is designed to provide highly effective protection against unwanted pregnancy, potentially ideal for women who do not wish longer-lasting contraception or permanent sterilization.

**Voluntary sterilization**  
Voluntary surgical contraception is

occluding the Fallopian tubes. Because it may cause less damage to the tubes than most other occlusion methods, this device holds promise as a potentially reversible sterilization procedure.

Clinical trials have been completed in 20 countries to determine the safety and efficacy of the Filshie

San Balogh



*Dr. K.P. Yadav of Janakpur, Nepal, completes a screening checklist and admission form for a new NORPLANT® acceptor as part of FHI's multicenter clinical research program.*

the most prevalent form of family planning worldwide. FHI continues to help improve procedures that will make it more appropriate and accessible for developing countries.

■ **Filshie Clip.** The Filshie Clip, developed by Femcare, Ltd., UK, is a new mechanical device used for

Clip. Data from more than 9,000 women suggest that the Clip is as effective as other occlusion methods and poses fewer surgical difficulties. FHI is responsible for preparing the application to the FDA for marketing approval.



*As Director of FHI's Clinical Trials division, Dr. Roberto Rivera is responsible for research assessing the safety and efficacy of a variety of new and existing contraceptive methods.*

■ **No-scalpel vasectomy.** FHI is helping to introduce “no-scalpel” vasectomy, a promising technique developed in China. Unlike a traditional vasectomy involving an incision and sutures, the no-scalpel procedure requires only a tiny puncture in the scrotum with a forceps-like instrument.

FHI has sponsored clinical trials of the no-scalpel procedure in Thailand and Sri Lanka. Studies also are underway in Guatemala. In addition, FHI provided support to the first international symposium on the no-scalpel vasectomy in Bangkok in 1989. The meeting drew physicians and family planning professionals from 14 countries.

■ **Nonsurgical methods.** To make sterilization available to larger numbers of women and at a lower cost, FHI is working to develop simple, safe and effective nonsurgical procedures that could be performed by paramedical

personnel. Recent efforts have focused on the development of iodine compounds that may have the ability to occlude the Fallopian tubes. The iodine is delivered through the cervix by means of a balloon-tipped device designed to deposit a measured amount of iodine on each tube. Testing continues to develop formulations that are both safe and effective in preventing unwanted pregnancy.

### **Barrier contraceptives**

The global spread of the AIDS virus has made it more important than ever to create effective contraceptive devices that can also provide protection against sexually transmitted diseases. In response, FHI has been developing a promising plastic condom and studying consumer acceptability and contraceptive efficacy for an innovative female condom.

■ **Plastic condom.** FHI is undertaking an intensive research and development program to produce a condom made of synthetic thermoplastic instead of natural latex. The plastic condom is expected to be stronger, better able to withstand the storage conditions in many developing countries, and compatible with many kinds of lubricants. The goal is to produce this product at a price that will make it affordable for widespread use in developing countries.

Researchers are now refining the manufacturing process and developing a process for packaging the device. Our studies with volunteers at several U.S. locations are con-

tinuing to help us assess the acceptability of various prototype condom designs. FHI plans to conduct similar studies overseas.

■ **Female condom.** Working in collaboration with CONRAD (Contraceptive Research and Development Project), FHI is evaluating a female condom, a new device developed by Wisconsin Pharmacal Company. Called Reality™, this device is a combination of a condom and a diaphragm, providing a sheath of protection for the vaginal tract.

The goal is to provide women with the ability to protect themselves against unwanted pregnancy — and potentially against AIDS and other STDs — particularly in situations when men refuse to wear condoms.

FHI research currently focuses on acceptability and contraceptive efficacy. Acceptability studies have been conducted in Thailand with women at high risk of STDs; responding to results from those studies, the manufacturer has redesigned the device to provide better comfort and performance. Safety and efficacy studies are also being conducted in the United States and Latin America to obtain information for FDA approval to market the device in the United States. Responding to growing interest in the female condom, FHI is also supporting acceptability studies in Kenya and Cameroon.

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## Contraceptive Introduction

**M**oving new contraceptives from clinical research into everyday use poses programmatic challenges for health officials, administrators and providers. In 1989 FHI consolidated its efforts to facilitate the introduction of new methods through the most appropriate service delivery systems. Working with other family planning agencies, our new Contraceptive

Introduction program provides technical assistance to national family planning programs, including the latest information and strategies for introducing a variety of new methods appropriate to local needs.

The Contraceptive Introduction program is focusing on technologies that have already demonstrated very high acceptability, such as NORPLANT® and an improved IUD called the TCU 380A (both developed by The Population Council), and the “no-scalpel” vasectomy procedure developed in China.

In addition, the program will concentrate on introducing new products now being developed and tested, such as NET-90 injectable

microspheres, Annuelle™ biodegradable implants and the plastic condom.

### Postpartum contraception

In many parts of the developing world, family planning services are not available to breastfeeding and postpartum women — that is women who have recently completed or terminated a pregnancy. As a result, these women may become pregnant again within a year, rather than have the opportunity to space their children at longer intervals.

In 1990, FHI initiated a major international effort to encourage the expansion of contraceptive services to such women, through prenatal, obstetric and other primary health care programs in urban and rural settings. As a first step, FHI cosponsored the International Conference on Postpartum Contraception in Mexico City, in conjunction with the Mexican Institute of Social Security and the Mexican Ministry of Health. The meeting was attended by more than 160 family planning professionals from 48 countries who heard expert presentations on medical and programmatic issues associated with postpartum contraception. Following the meeting, a smaller working group of family planning experts reached consensus on 30 medical and programmatic research priorities and began preparing proposals for funding.

*More than 160 family planning experts from 48 countries gathered in Mexico City in September 1990 for the International Conference on Postpartum Contraception. The meeting was sponsored by FHI in conjunction with the Mexican Institute of Social Security and the Mexican Ministry of Health.*



Juan López

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## *Improving Contraceptive Use*

*The greatest impact on population growth in the 1990s will be achieved through improved use of existing methods*

**A**n array of safe and effective contraceptive options already exists to help couples plan the size of their families, including many types of oral contraceptives, IUDs and condoms. The challenge is to match the varying needs of individual men and women with the most appropriate methods available. By evaluating proven contraceptives in new locations and under different conditions, FHI seeks to improve the acceptability and correct use of existing methods, and to identify the most efficient ways to deliver them where they are needed most in developing countries.

Improving the use of existing methods will contribute more to stabilizing global population growth in the near future than new contraceptive technologies that are still in the development stage.

### **Oral contraceptives**

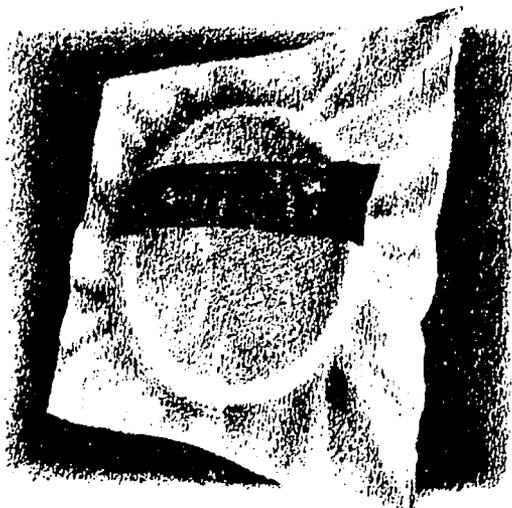
FHI is committed to improving the safe and effective use of oral contraceptives (OCs). The following are highlights of recent activities.

■ **Correct use of OCs.** Thirty years after OCs were first introduced, they are still considered one of the most effective reversible methods of birth control. However, recent studies suggest that 6 percent of unmarried OC users in the U.S., and as many as 15 to 20 percent of married users in some

developing countries, may be getting pregnant, largely because they do not take the pills correctly.

FHI is a leader in the study of correct OC use — known as pill user compliance. Research shows that many women receive confusing instructions — or no instructions at all — on when to start taking the pills, how many days they should take placebos (or no pills) between cycles, and what they should do if they forget to take one or more pills. In many countries, women's failure to use OCs properly may contribute to increased side effects, discontinuation and disappointingly high pregnancy rates.

FHI has collaborated with researchers in Colombia and Egypt on compliance and discontinuation studies of both users and providers. These studies revealed poor compliance as well as poor knowledge of correct OC use among both the women and their providers. The final report of the Colombia study was distributed in English and Spanish in 1989. As a result of the study, the Colombian Ministry of Health is revising its training program for rural health promoters. In Egypt, recommendations were made to improve both the training of providers and the instructions for users. We are planning additional OC compliance and discontinuation studies in Thailand, Niger, Zimbabwe, Brazil and the United States.



In July 1990 FHI convened a landmark meeting of international experts on correct pill use, to set priorities concerning future research on this subject. As a result of that meeting, the U.S. Food and Drug Administration scheduled a hearing for February 1991 to consider ways to improve OC label instructions in the United States.

■ **Removing service obstacles.**

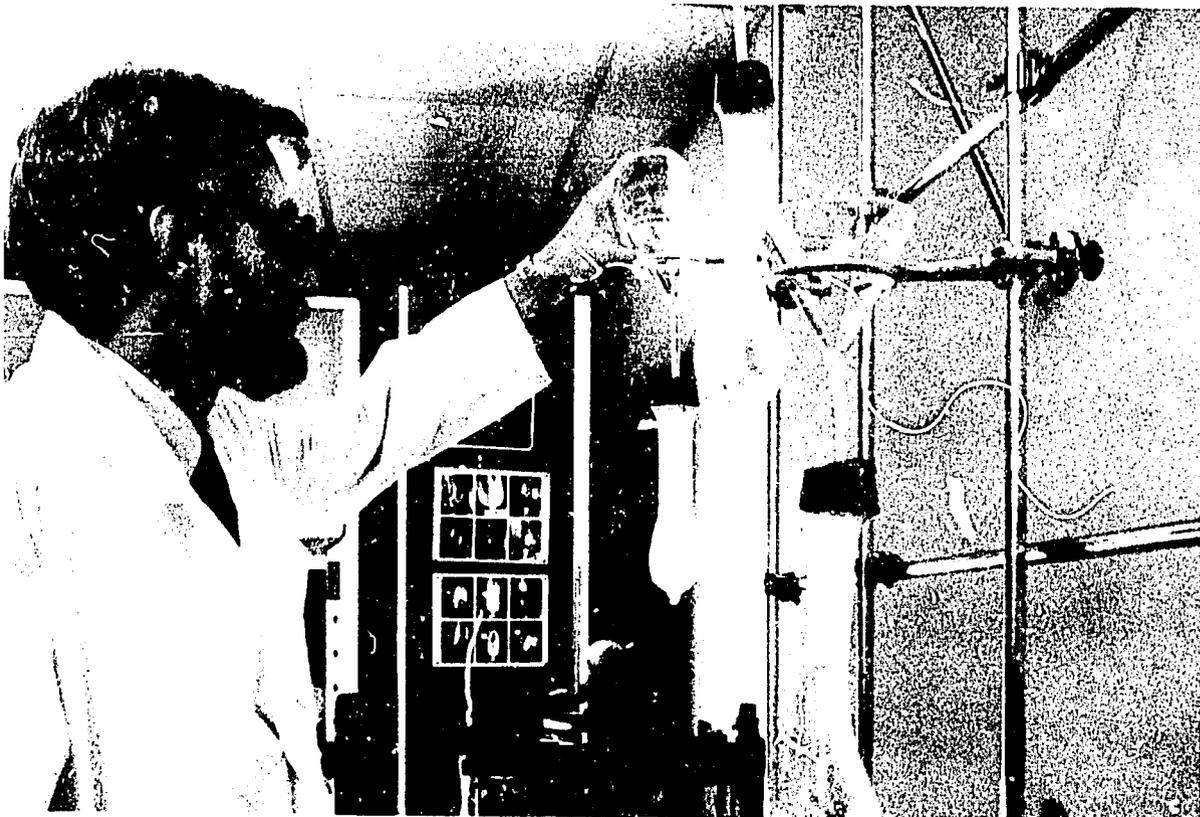
While there is a growing demand for OCs and other contraceptives in many developing countries, there are often obstacles to obtaining them. For example, until recently women in Senegal were required to undergo a series of laboratory tests before they could obtain OCs. The tests — designed to screen out

women at risk for adverse health effects — were expensive and inaccessible for many women, making it difficult for them to obtain OCs.

In February 1990, the Senegalese government agreed to revoke its laboratory test requirements, except for women whose medical histories indicate a high risk. The change came as a direct result of FHI research and an expert meeting funded by A.I.D. and supported by FHI, the University of Dakar, the International Science and Technology Institute (ISTI), and the Family Health and Population Project in Senegal. The research findings suggested that systematic laboratory testing was unnecessary and

*More condoms are being supplied to developing countries than ever before.*

Jerry Markatos



*Researchers in FHI's laboratory test the strength and durability of latex condoms.*

ineffective in identifying women at risk for using OCs.

■ **Mini-pills.** Progestin-only "mini-pills" are being provided increasingly by A.I.D. and other international donors because they do not inhibit lactation. FHI has sponsored clinical trials of mini-pills with more than 4,000 women at 26

sites in Latin America, the Caribbean and Africa. The trials confirmed that mini-pills are well accepted, do not have adverse effects on breastfeeding, and are highly effective in preventing unwanted pregnancy.

triphasic OCs. There is growing interest in studying the use of progestin-only OCs in the postpartum period.

**Promoting improved IUDs**  
Intrauterine devices (IUDs) are the contraceptive method of choice in many developing countries. One of the newest is a copper-bearing T-shaped IUD called the TCu 380A, developed by The Population Council. FHI has examined the performance of the TCu 380A in clinical trials with nearly 10,000 women in some 20 countries, comparing it with other IUDs available in those countries.

Data show that the TCu 380A achieved a lower pregnancy rate than the other IUDs, and was as good or better in terms of continuation, expulsion and removal rates. The results have encouraged several participating countries, including Mexico and Thailand, to join the growing number of countries that have approved the device for use in national family planning programs.

FHI is also planning to sponsor TCu 380A trials for postpartum women in several countries.

### **Condom quality and acceptability**

More condoms are being supplied to developing countries than ever before — for contraception as well as for protection against the AIDS virus and other sexually transmitted diseases (STDs). However, latex condoms stored under poor conditions can deteriorate rapidly, making them prone to breakage.

### ■ **Switching to low-dose pills.**

Through clinical trials conducted in Yugoslavia, the Philippines, Mexico and Thailand, FHI has been evaluating the acceptability and possible consequences of switching large numbers of OC users from a standard to a low-dose estrogen pill. Data analysis is still underway.

■ **Other comparative trials.** FHI continues to conduct comparative clinical trials on the efficacy, safety and acceptability of various oral contraceptive formulations. Recent emphasis has been on evaluating

Jerry Markatos



*Dr. I-cheng Chi, Associate Director of FHI's Clinical Trials division, has published nearly 100 scientific articles on IUDs, female sterilization and other aspects of family planning.*

FHI has established a testing laboratory for condoms and initiated a worldwide program to assure the quality of condoms provided by A.I.D.

We respond to requests to evaluate the condition of condoms and storage facilities in developing countries. In addition, FHI has developed a testing program on behalf of A.I.D. to evaluate condom quality at the point of manufacture as well as in storage prior to shipment overseas. Other studies are examining the shelf-life of condoms in different climates and correlating the results of standard laboratory methods for condom testing with performance of condoms during actual use.

■ **Condom acceptability.** FHI conducts acceptability studies of various latex condom designs to help guide development and procurement decisions. For example, we carried out a study in Ghana, Kenya and Mali to learn whether men would accept condoms that are slightly thicker and presumably stronger. More than 80 percent of the men liked the additional security of the stronger condom and 69 percent preferred it to their regular brand.

■ **Condom distribution and acceptance.** Efficient distribution of contraceptives is as crucial to successful family planning efforts as effective devices. In conjunction with the Centre Pour le Développement et la Santé, FHI has evaluated the operation of a condom distribution system in Port-au-

Prince, Haiti. The results revealed that nearly all the male partners of women receiving condoms from the clinic knew about condoms, but fewer than half had ever used them, and only 5 percent were current users. By clarifying reasons for use and non-use, the study can aid in the design of more effective delivery systems to increase the acceptance of condoms among Haitian couples facing unwanted pregnancy or the risk of infection with the AIDS virus.

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## *Regulatory Affairs*

**B**ecause of the reduced presence of the U.S. pharmaceutical industry in contraceptive development, FHI has devoted increasing effort to developing and introducing new contraceptive drugs and devices. As part of this initiative, we established the Regulatory Affairs division in September 1988, to help secure marketing approval of new contraceptive and sterilization products from the U.S. Food and Drug Administration (FDA).

The division's staff members have experience in interactions with regulatory agencies around the world. They coordinate all FHI communications with the FDA and ensure that our submissions comply with its complex requirements. The Regulatory Affairs staff ensures that the data needed for product marketing approval from FHI's clinical research are suitable for submission to regulatory agencies.

The Regulatory Affairs division assembles and coordinates the information to be submitted to the FDA. This involves trials of seven investigational drugs and three new devices, including NET 90-day injectable microspheres, NET pellet implants (Annuelle™), a spermicide, a postpartum IUD, a female condom, a low-dose oral contraceptive, a vaginal barrier device, a drug formulation for non-surgical sterilization and an IUD string retriever. These products are at various stages of clinical development.

Regulatory Affairs also provides training for other FHI staff members regarding their responsibilities in complying with FDA regulations, including correct clinical, laboratory and manufacturing practices, as well as in managing an FDA site inspection.

## Profiles

Jerry Markatos



**Thomas Petrick,  
Corporate Director of  
Medical Affairs**

His official title is Corporate Director of Medical Affairs. But unofficially, Tom Petrick is FHI's in-house troubleshooter. As Corporate Director of Medical Affairs, he reviews the clinical aspects of FHI's research directions. He was also instrumental in establishing our Regulatory Affairs division.

Dr. Petrick brings to FHI a blend of experiences in both clinical medical practice and pharmaceutical research. He graduated from Columbia University's Medical School in 1948, then went on to become the youngest senior resident at the University of Minnesota Department of Obstetrics and Gynecology. He spent 25 years as an obstetrician/gynecologist — including 10 years teaching at medical school — followed by 11 years in research for the pharmaceutical industry.

While working for Parke-Davis Research/Warner Lambert from 1975 to 1986, Dr. Petrick oversaw eight new drug applications to the U.S. Food and Drug Administration (FDA). His understanding of the intricacies of the FDA approval process became particularly relevant as FHI expanded into new contraceptive development.

Since coming to FHI, Dr. Petrick has also played the role of a traveling teacher. He has lectured on research methodologies, contraceptive technology and medical ethics in Guatemala, Kenya, Mexico, the Philippines, Sudan

and Thailand. He has evaluated research programs in Bangladesh and Indonesia and helped to set up computer systems in Kenya.

Dr. Petrick serves as a senior advisor. He is often called on to critique FHI's scientific papers and presentations. "I have a critical eye," he says, "and I am not afraid to speak the truth."

Julia Beamish



**Howard Miller,  
Vice President of  
Product Management**

The newest member of FHI's senior management team is Howard Miller. As Vice President of Product Management, he oversees all facets of FHI's contraceptive development program.

Dr. Miller, who holds advanced degrees in both medicine and biochemistry, has over 20 years of experience managing research and development for the pharmaceutical industry. He has been responsible for all stages of the drug development process, including a number of large-scale clinical trials.

Prior to joining FHI in 1990, he worked for nearly a decade at the Sandoz Pharmaceuticals Corp., where he served as Vice President of Medical Research. He has also worked for Riker Laboratories, Inc., and Mead Johnson & Co., where he oversaw the development of new drugs in the United States and

Europe. Before and during his earlier work in pharmaceuticals, Dr. Miller was a private practitioner for 15 years, specializing in internal medicine.

He learned about the opening at FHI for a Vice President of Product Management while he was contemplating early retirement. "This position was too enticing to pass up," he says. "FHI gives me an opportunity to apply my experience to the nonprofit sector, where I hope I can make a difference."

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## ***AIDS Prevention***

*FHI is combatting the spread of HIV and other STDs in the developing world*

**A**IDS has now reached every corner of the world. At least 700,000 people have AIDS, with an estimated 8 to 10 million believed to be carrying the human immunodeficiency virus (HIV) that causes it. In response to the growing AIDS crisis, FHI has launched a massive effort to help prevent the further spread of HIV in developing countries.

Through national AIDS programs, Ministries of Health and nongovernmental organizations, FHI has provided technical assistance, training, funding and other services to strengthen AIDS prevention efforts in 45 countries in Africa, Asia, Latin America and the Caribbean. These projects have focused on controlling sexual transmission of HIV, ensuring safe blood supplies, supporting critical research, analyzing the costs of prevention and treatment, and understanding how to integrate AIDS prevention and family planning/primary health care strategies.

FHI's AIDS prevention efforts began with private funding from the American Foundation for AIDS Research (AMFAR) and the USA for Africa Foundation. Then, in 1987, the United States Agency for International Development (A.I.D.) and FHI signed one of the largest single cooperative agreements between a government and a private organization to combat AIDS in the develop-

ing world. To accomplish this work, FHI established a new division, AIDSTECH. In addition to federal funding, FHI continues to commit private resources and seek other funding to extend AIDS prevention work beyond the scope of the A.I.D. cooperative agreement. Our latest efforts include a project conducted jointly with the International Planned Parenthood Federation with funding from the United Kingdom's Overseas Development Administration (ODA).

### **Controlling sexual transmission of HIV**

A top priority is to slow or prevent the sexual transmission of HIV. Hence, FHI's work focuses on persons engaged in behaviors that place them at high risk for acquiring or transmitting this infection — including commercial sex workers and their clients. This work has resulted in many significant accomplishments, including:

■ **Persuading policymakers to support interventions among commercial sex workers.** Governments in many developing countries are now officially supporting prevention projects involving commercial sex workers and their clients, through various programs which have used AIDSTECH funding and technical assistance. For example, the Nigerian Ministry of Health supported an AIDS-education and condom distribution project



involving sex workers and clients. The City Council in Bulawayo, Zimbabwe, has worked with FHI to undertake a major effort including condom distribution and new services to treat and prevent sexually transmitted diseases (STDs). In Zaire, a condom social marketing system has resulted in more than half a million condoms being distributed in 70 pharmacies and 40 bars/hotels during the first six months of the program.

Additionally, in 1989 FHI assisted the World Health Organization to convene the first international conference on HIV and prostitution, which called for governments to provide immediate support for AIDS intervention efforts for this high-risk population.

■ **Building on existing community programs.** AIDSTECH has funded and provided technical assistance to family planning and community health programs to add AIDS education, condom distribution, and related outreach efforts to existing service delivery systems. For example, in Juarez, Mexico, the Mexican Federation of Private Family Planning Associations (FEMAP) has used its existing community-based system to train commercial sex workers as "peer educators." At present, approximately 70 peer educators are active in one Juarez neighborhood. In Haiti, the Centers for Development and Health has added an AIDS education and prevention component to its community outreach programs in very low-income communities in a slum area of Port-au-Prince.

■ **Collaborating with International Planned Parenthood Federation (IPPF).** With funding from the United Kingdom's Overseas Development Administration, FHI is working with IPPF to strengthen nongovernmental organizations and support AIDS interventions with marginalized communities, including commercial sex workers and their clients, street children, and men having sex with men. Projects are underway in Brazil and India.

### Ensuring safe blood supplies

A second priority is to prevent the transmission of HIV through blood transfusions, by encouraging the testing of donated blood and the establishment of safe and adequate blood supplies. This effort has resulted in the following accomplishments:

■ **Establishing reliability of rapid blood tests.** AIDSTECH funded and provided technical assistance to 19 laboratories in Ghana, Kenya, Senegal and Zaire to test the reliability of rapid, affordable tests to screen for HIV in blood; the tests proved to be reliable in rural settings. Now AIDSTECH is assisting other countries to learn how to take advantage of these procedures and to establish training and quality control programs for the use of rapid blood screening tests.

■ **Establishing guidelines for blood transfusions.** Blood transfusions are sometimes used inappropriately in developing countries — for example, in treating anemia. At

Salvador Saenz Herrera



*A peer educator trained by FEMAP receives condoms from a bar distribution point in Mexico.*

a 1989 conference in Cameroon supported by FHI, a group of blood bank managers, Ministry of Health officials and others established national criteria for blood transfusions. This effort provided a model for other countries to develop such criteria.

### Supporting crucial research

AIDS has changed the way we view contraception, for the most effective contraceptive methods (pills, IUDs, sterilization) offer no protection from HIV and other sexually transmitted diseases (STDs). Condoms, on the other hand, can protect users against the AIDS virus and other STD infections. In addition to the efforts of AIDSTECH, researchers in FHI's division of Reproductive Epidemiology and Sexually Transmitted Diseases have been working to learn more about the associations between contraception and AIDS, including:

■ **Determining whether spermicides prevent HIV transmission.** Nonoxynol-9, the most widely used spermicide, has been found to inactivate HIV in laboratory tests, but it has not been determined whether it is also effective in actual use. FHI researchers are gathering data to find out whether spermicide users are less likely to contract HIV infection.

■ **Learning more about oral contraceptives and HIV.** In response to concern that pill users may be at increased risk for contracting HIV infection, FHI has launched a large collaborative pilot

study in Kenya. Working with researchers at the University of Nairobi, FHI is studying 1,500 women attending the family planning clinic at Kenyatta National Hospital. Researchers will follow the women for one year to evaluate the effects of OCs and other reversible contraceptive methods on their susceptibility to HIV.

Jane Perlez/New York Times



*A woman in Uganda cares for her 12 grandchildren orphaned by AIDS.*

■ **Studying whether spermicidal products can prevent other STDs in women.** While other sexually transmitted diseases are not as deadly as AIDS, they do pose serious health problems, including infertility, birth defects and increased risk of cancer.

STDs are among the most common contagious diseases in the world. Moreover, researchers believe that one or more STDs may be co-factors that increase the risk of HIV transmission.

In situations where women are not able to persuade their partners to use condoms, spermicides confer

some protection against a number of STDs.

■ **Studying the health effect of prolonged spermicide use.** Women with multiple sex partners may use spermicidal products to protect themselves from AIDS.

Maury Faggart



*Dr. Peter Lamptey, Director of AIDSTECH and a native of Ghana, oversees the largest U.S. government-funded effort for AIDS interventions in the developing world.*

However, one concern is that repeated and prolonged use of spermicides may irritate the vagina and cervix, resulting in lesions that could actually enhance the spread of HIV. FHI is working with investigators in Thailand and the U.S. to research this issue.

### **Analyzing the costs of AIDS**

The costs associated with AIDS prevention and treatment are more than many developing countries can bear. AIDSTECH provides health finance expertise to assist national AIDS programs in the developing world to determine the costs of AIDS, develop financial planning to create and sustain interventions, and promote cost-effectiveness analysis to evaluate programs.

In the last two years, AIDSTECH has tested and developed new approaches to cost-related issues. One study in Mexico, based on almost 800 AIDS patients treated at

10 hospitals, measured the burden both for the health care system and for the single individual. In the Dominican Republic, a new strategic planning model for the national blood system offers decision-makers a way to assess costs and benefits of alternative strategies for providing blood for transfusion.

AIDSTECH finance assistance activities are underway in six countries in the Caribbean, Latin America, Africa and Asia. In addition, AIDSTECH is developing a means of analyzing start-up and recurrent costs of various intervention efforts.

### **AIDS and family planning**

In developing countries, the AIDS virus is spreading increasingly to women through heterosexual contact and to their infants during pregnancy. By the end of 1992, about 4 million infants will have been born to women infected with HIV.

Hence it is more important than ever to educate women of child-bearing age about how to protect themselves and their families from HIV infection. One way to do this is by integrating AIDS prevention activities into existing family planning services. Family planning programs can identify, counsel and provide condoms to clients at risk of HIV infection.

During the summer of 1989, FHI hosted an international meeting sponsored by the World Health Organization to review draft guide-

lines on AIDS and family planning developed in conjunction with FHI, the U.S. Centers for Disease Control, International Planned Parenthood Federation, the United Nations Population Fund and the United Nations Children's Fund. WHO published the guidelines in May 1990.

More recently, FHI provided support to the Thailand Ministry of Public Health and the Thailand Fertility Research Association to hold the first nationwide conference anywhere in the world on AIDS and family planning. This landmark meeting drew over 200 family planning professionals and policy-makers from across Thailand, who have begun developing strategies for integrating AIDS prevention measures into family planning programs. Funding for the gathering came from A.I.D. and The William and Flora Hewlett Foundation.

### **Future challenges**

Despite worldwide efforts to slow the transmission of HIV, increasing numbers of people are at high risk of becoming infected, including the wives, husbands and children of those who engage in high-risk behavior. These secondary target groups pose special challenges for researchers, program managers and others — and serve as a grim reminder that much is still to be done to prevent the further spread of this deadly virus.

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## Profiles

Jerry Markatos



### **JoAnn Lewis, Vice President of Programs**

In 1968, JoAnn Lewis was trying to decide whether to go to medical school. Instead, she signed on with the Peace Corps in Niger. The experience changed her life.

"It was probably the single greatest influence on my future development and interests," Ms. Lewis says today.

After the Peace Corps, she went on to receive her MPH from the Johns Hopkins University School of Hygiene and Public Health. She has worked for the Office of Civil Rights in the U.S. Department of Health, Education and Welfare (HEW), as well as for an international health consulting firm and for Planned Parenthood of Metropolitan Washington.

Ms. Lewis came to FHI in 1978, when it was called the International Fertility Research Program. With more than a dozen years at FHI, she brings to the senior management team a first-hand understanding of the organization's growth and development. She started out at FHI as project leader for maternity care studies, went on to administer international projects, and later became Director of the Field Development and Training division. Now, her primary role as Vice President of Programs is to oversee three divisions, including Field Development and Training, Program Evaluation and AIDSTECH.

"It is interesting to have worked in research and in the field as well as in administration and management," she says. "Because I have been here a long time, I also have a good understanding of how things fit together, in terms of process — what people do, what their jobs really entail."

For JoAnn Lewis — and others like her at FHI — work is an extension of a deep personal concern for improving health care around the world. "There is an incredible level of commitment here, not just to the organization, but to the mission," she says.

"It's infectious. For most of us, it is not just a job."



Julia Beamish



### **Robert Hughes, Vice President of Administration**

Since Bob Hughes joined FHI eleven years ago, FHI has seen tremendous expansion. The number of staff has more than doubled, and FHI's work in AIDS prevention has brought corresponding growth in programs and budgets.

As Corporate Controller and as Contracts and Grants Administrator, Mr. Hughes oversees the organization's fiscal and personnel policies. As part of this work, he works cooperatively with

program monitors to develop new funding proposals. "My position here is to interpret the contracts we have and do what I can to administer them," Mr. Hughes says. "I work to satisfy the terms of our funding agreements and to ensure that we get further funding."

Mr. Hughes, a Certified Internal Auditor, joined FHI eleven years ago as Financial Services Manager, developing budgets and accounting policies. His duties since 1981 have included supervising the departments of Financial Services, Personnel, Purchasing, and Administrative Support Services.

After receiving a BBA in accounting from University of Miami, Mr. Hughes spent seven years as an auditor with the U.S. Air Force. He then earned an MS in Systems Management from Florida Institute of Technology and joined Duke University's financial administration office, where he conducted internal audits and managed accounting systems.

## Rediscovering Breastfeeding

*FHI research validates a traditional family planning practice*

**M**other's milk is more than just a good source of nutrition and protection against infection for a baby. Breastfeeding is also an effective birth-spacing method. In Africa, breastfeeding provides more contraceptive protection than all other contraceptive methods combined.

Despite this, family planning programs often exclude breastfeeding from their menu of contraceptive options. Such an omission has been due, in part, to the lack of an accepted and reliable way for women to determine when fertility returns.

Years of research showing both the health and contraceptive value of breastfeeding have led FHI to assume a leadership role in defining and promoting breastfeeding as a legitimate family planning option.

■ **The Bellagio Guidelines.** One landmark advance occurred in August 1988 when FHI organized and cosponsored an international conference to examine the contraceptive effect of breastfeeding, with support from A.I.D., the World Health Organization (WHO) and the Rockefeller Foundation. Held at the Rockefeller Foundation Bellagio Study and Conference Center in Italy, the meeting brought together a multidisciplinary group of 25 leading research scientists from around the world.

After reviewing research supported by FHI and others, the participants reached a consensus: During the first six months following childbirth, breastfeeding provides more than 98 percent protection from pregnancy if the mother is fully nursing and still amenorrheic. The experts agreed that breastfeeding under these conditions is just as effective as other reversible methods.

Participants at the gathering went on to recommend that all family planning programs in both developing and industrialized nations offer postpartum women the option of using breastfeeding as a method of contraception.

The Bellagio Guidelines — as the recommendations have come to be known — have been disseminated widely. An official summary was published in *The Lancet*, and a full report of the meeting was published in the international journal *Contraception*. The consensus statement has also been published in three languages in FHI's newsletter, *network*, as well as in publications circulated internationally by the World Health Organization, the International Planned Parenthood Federation, and the American Public Health Association, among many others. The guidelines are also being incorporated into a variety of training materials and are expected to have a dramatic impact on family planning programs and policies.



■ **Clinical trials.** As an outgrowth of the Bellagio meeting, breastfeeding is being put to the same sort of rigorous test that other contraceptives must endure — prospective clinical trials. FHI is undertaking two studies to measure the effectiveness of conscientious breastfeeding in preventing pregnancies in everyday practice. The trials — being conducted in Pakistan and the Philippines — will also provide insight into various practical aspects of using the method. Researchers will study whether women who follow the Bellagio Guidelines can recognize the duration of the protection they receive, and whether they will begin using another contraceptive method when that protection wanes with the return of ovulation.

■ **Education.** Education is key in promoting the use of breastfeeding for contraception. Indonesia's National Family Planning Coordinating Board (BKKBN) has launched a program to train family planning field workers, counselors and providers to educate women about the nutritional and contraceptive benefits of breastfeeding. FHI has assisted BKKBN in developing information materials, cooperating with the World Health Organization to translate an English-language WHO pamphlet into Bahasa Indonesia, and to produce a poster to be used in public advertising.

In the Philippines, FHI has supported research to examine whether education programs can encourage mothers to breastfeed longer and more fully, and whether this would

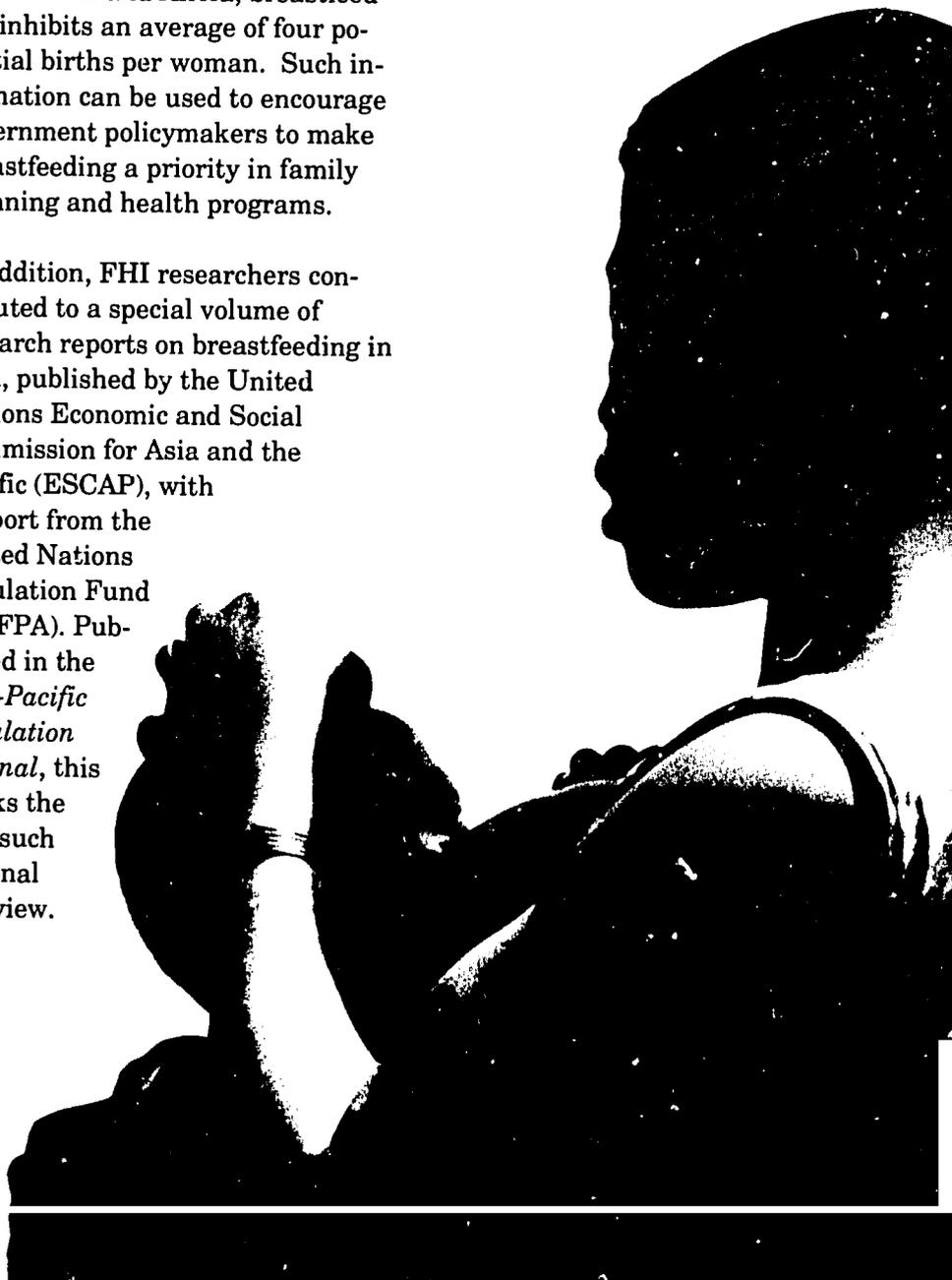
extend the length of contraceptive protection. The studies offer encouragement that maternal behavior can be modified considerably, and they provide insight into how and where educational programs might make the greatest impact.

FHI has also helped document trends and patterns in breastfeeding as a child-spacing method around the world. One finding was that in Asia and Africa, breastfeeding inhibits an average of four potential births per woman. Such information can be used to encourage government policymakers to make breastfeeding a priority in family planning and health programs.

In addition, FHI researchers contributed to a special volume of research reports on breastfeeding in Asia, published by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), with support from the United Nations Population Fund (UNFPA). Published in the *Asia-Pacific Population Journal*, this marks the first such regional overview.



*Kathy Kennedy, Research Associate with FHI's Program Evaluation division, is an internationally recognized expert on breastfeeding as a child-spacing method.*



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## ***Benefits and Risks of Contraceptives***

*FHI helps service providers  
and policymakers  
understand the overall  
health effects of  
contraception*

Jerry Markatos



*Dr. Judith Fortney,  
Director of FHI's  
division of Reproductive  
Epidemiology and  
Sexually Transmitted  
Diseases, has published  
many papers on the  
benefits and risks of  
contraception and has  
conducted landmark  
research on reproductive  
mortality.*

**C**ontraceptive methods do more than prevent unwanted pregnancy: They can increase or decrease the risk of contracting certain diseases, exacerbate or improve existing health conditions, and influence the possibility of future conception.

FHI studies these non-contraceptive consequences, to help policymakers compare the health impact of contraception and unwanted pregnancy. This is especially important in developing countries, where more than half a million women die each year from complications associated with pregnancy, childbirth or abortion.

Much of this research has focused on the role that contraception plays in preventing or enabling the spread of sexually transmitted diseases, including the AIDS virus (see the section entitled AIDS Prevention). In addition, FHI research examines the benefits and risks associated with the use of oral contraceptives, as well as the family planning needs of women with special health concerns. This includes the following research:

### **Oral contraceptives**

Oral contraceptives (OCs) can protect women against some diseases while placing them at higher risk for others. To assist policymakers in understanding the context of such health effects, FHI

has developed a computer model — the OCRISK program. It takes into account the reported effects of oral contraceptives on nearly a dozen diseases, and estimates the net impact of the Pill on such measures as life expectancy and number of premature deaths averted or caused. Researchers will use the program to evaluate the risk/benefit ratios for OCs in individual developing countries and provide the results to USAID missions and key local policymakers.

In a different project, FHI researchers have analyzed existing information on the reported impact of oral contraceptives on several reproductive cancers to determine, for example, if the risks of OC use in the developing world would be greater than the risks associated with pregnancy and childbirth. In each of five countries studied — Senegal, Colombia, Jamaica, Singapore and India — the data showed that OC users experienced fewer premature deaths than non-users.

### **Women with special needs**

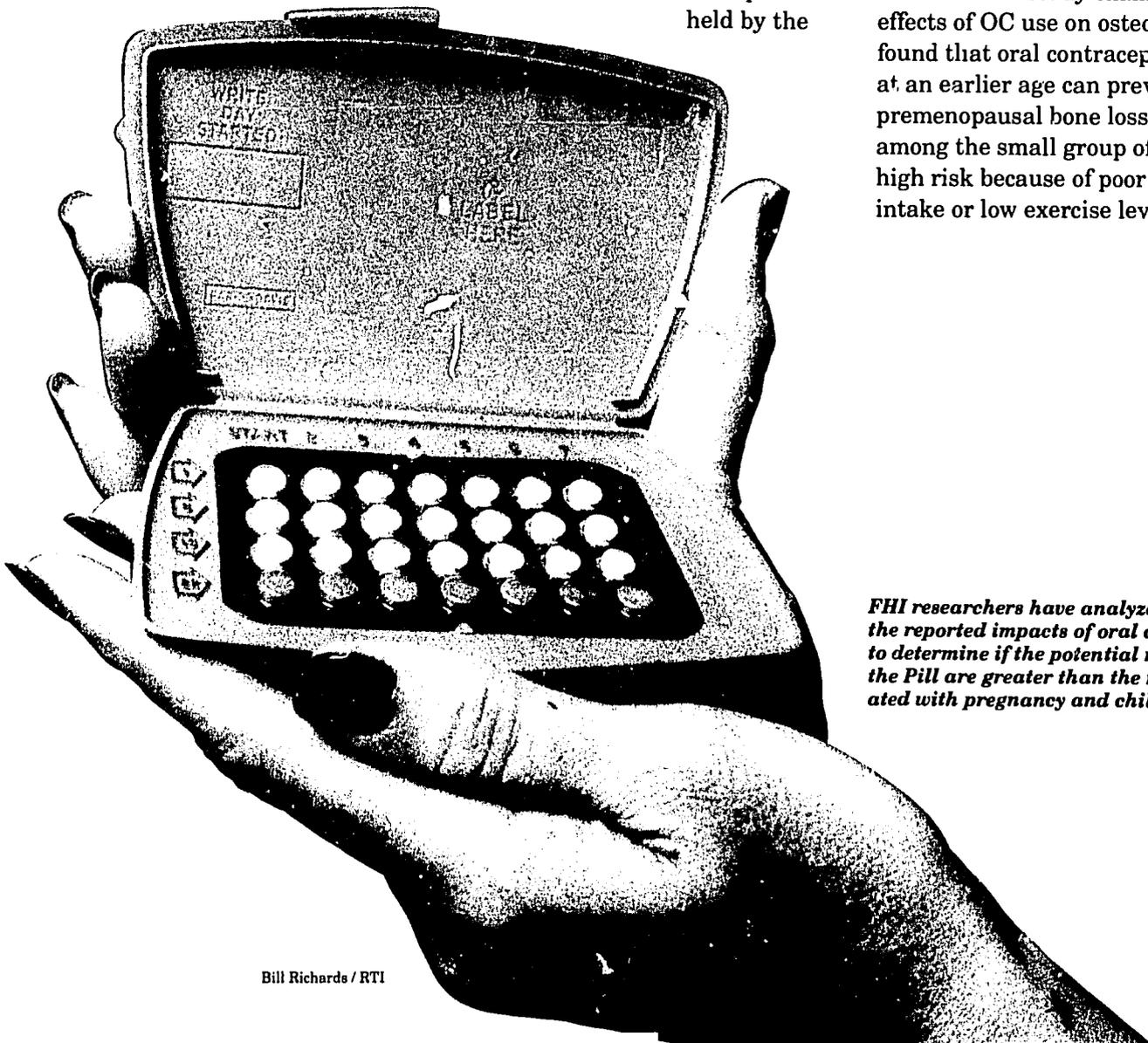
Despite advances in contraceptive safety, certain groups of women still lack adequate family planning options. These include teenagers, older women and women with chronic diseases. FHI has undertaken studies to address the contraceptive needs of the following:

■ **Women with sickle cell disease.** Many doctors consider oral contraceptives to be contraindicated for women with sickle cell disease. But in countries where the disease is prevalent, the hazards of childbirth are substantial and OCs are a highly reliable and popular method. Working with the University of the West Indies, FHI researchers are studying whether low-dose OCs can decrease a woman's frequency of sickling crises. In Nigeria, the same question is being studied in regard to NORPLANT®, the long-acting contraceptive implant.

■ **Women over 40.** Until recently, many physicians have not recommended OCs for women over 40. Yet, at this age, the risks associated with pregnancy increase rapidly. Based on current research, FHI considers the newer low-dose OCs to be safe for older women, and has taken steps to encourage their use. FHI was instrumental in persuading the National Institutes of Health to support the inclusion of older women in the next National Survey of Family Growth. In addition, FHI staff testified at hearings on oral contraceptives held by the

FDA in late 1989, after which the agency recommended that the upper age limit be removed from current U.S. prescribing guidelines for healthy women who do not smoke.

■ **Women with osteoporosis.** Osteoporosis, or bone loss, affects millions of older women each year, but begins well before menopause. A recent FHI study examining the effects of OC use on osteoporosis has found that oral contraceptives taken at an earlier age can prevent premenopausal bone loss, but only among the small group of women at high risk because of poor calcium intake or low exercise levels.



*FHI researchers have analyzed data on the reported impacts of oral contraceptives to determine if the potential risks of taking the Pill are greater than the risks associated with pregnancy and childbirth.*

## ***Maternal and Infant Health***

*FHI supports pioneering research on maternal and infant mortality and morbidity*

**F**HI is concerned not only with family planning, but also with improving the health of mothers and infants.

Complications of pregnancy and childbirth are the leading causes of death among women of childbearing age in the developing world, claiming at least half a million lives a year. Women in developing countries are 50 to 100 times more likely to die during pregnancy or delivery than their counterparts in industrialized countries, a larger disparity than for any other health indicator. Yet many of these deaths are preventable — especially those caused by women having pregnancies too early, too late or too close together.

FHI has been in the forefront of growing efforts to make motherhood safer. Since our pioneering Reproductive Age Mortality Survey (RAMOS) studies began in 1981, we have supported a variety of research projects on maternal and infant mortality and morbidity.

### **International collaboration**

FHI's early research, along with work by other organizations, provided impetus for the International Safe Motherhood Conference, held in Nairobi, Kenya, in 1987. The meeting galvanized concern about

maternal mortality and led the World Bank, the World Health Organization (WHO), the United Nations Development Program (UNDP) and the United Nations Population Fund (UNFPA) to launch the Safe Motherhood Initiative, which has a goal of reducing maternal mortality by at least half in the coming decade.

FHI cooperates by serving on the Steering Committee that oversees operations research in Safe Motherhood sponsored by WHO, and also by providing consultants for specific WHO-funded projects.

### **Improving maternity care**

In most countries of sub-Saharan Africa, hospitalization for pregnancy-related conditions accounts for the largest portion of health services received by women. During 1988, FHI researchers and in-country colleagues completed studies in Senegal, Côte d'Ivoire and Zaire. The studies addressed such issues as making better use of limited hospital facilities, medical personnel and traditional birth attendants (TBAs); strengthening family planning counseling and services to promote safer birth spacing; and improving prenatal screening. Results from the studies have been shared with government officials, health-care providers and international donor agencies.



For example, researchers in Zaire examined the role of TBAs in providing maternity care in the rural Karawa Health Zone. The study concluded that many maternal deaths in the region were avoidable, and pointed out improvements needed in the system for TBAs to refer pregnant women with health problems to the regional hospital.

A follow-up study funded by the International Center for Research on Women (ICRW) permitted a more detailed analysis of the TBA referral system in the Karawa region. This study, in which FHI collaborated with several Zairian groups, resulted in recommendations for a number of steps to improve the training and supervision of TBAs and to foster community involvement in maternal health care.

**Causes of maternal deaths**  
FHI has also worked with colleagues in Egypt to find ways to prevent maternal deaths. In collaboration with the Ministry of Health in Giza, the American University and the National Population Council in Cairo, and Duke University Medical Center in the U.S., FHI collected data on all maternal deaths occurring in the Governorate of Giza during a one-year period. The goal was to identify which

*Almost 10 million children under one year of age die each year in developing countries.*

deaths were preventable, determine the multiple factors that led to each maternal death, and create a profile of high-risk women. Results were presented to Egyptian physicians, researchers and policymakers at a meeting in March 1989. Plans are under way to use the information in designing public health measures that will reduce the frequency of maternal deaths occurring in homes and hospitals throughout the country.

Building on the Giza findings, FHI and our Egyptian colleagues have examined the practices of traditional birth attendants — called *dayas* — and followed the health outcomes of the mothers whose babies they delivered. Information from this study can be used in developing training programs to help the *dayas* provide better care and improve their skill in referring women with problems to a hospital. The study also identified gaps in the knowledge and practices of mothers and their families, as well as in the formal health system, that may contribute to maternal mortality and morbidity.

Most recently, FHI is collaborating with in-country colleagues to study, for the first time, the extent of maternal morbidity in Bangladesh, Egypt and India. With funding from the Ford Foundation and the USAID Mission in India, the study will also begin to identify appropriate interventions.

### **Infant health**

**Almost 10 million children under one year of age die each year in**

developing countries (excluding China). FHI has provided technical and financial support for several studies to address this tragic situation. In Brazil and Thailand, researchers have reviewed the causes of infant deaths and examined the role of nonmedical health workers, such as TBAs and village health workers, in identifying high-risk pregnancies and infants, and referring them to medical centers for care. These completed projects continue to be rich sources of information for helping developing countries improve maternal and infant care in areas where formal medical care is limited.

In a recently completed study in Honduras, FHI worked with the Honduran Ministry of Health to follow up about 2,000 women and infants identified in the 1987 Honduran Epidemiology and Family Health Survey. Researchers confirmed that infant mortality in Honduras has declined dramatically in recent years, dropping by nearly half since the beginning of the decade. The study also revealed that among the 1,075 women who stated in 1987 that they did not want another child, one in five was pregnant or had delivered another baby by the time of the second interview — a clear indication of the need for expanded family planning services.

## *Sustainable Programs*

One of FHI's primary missions is to improve contraceptive choices and reproductive health for people all over the world. One way to accomplish this is to enhance the skills and capabilities of the institutions and individuals with whom we collaborate. This is done through training researchers and service providers, and through programs to strengthen institutions.

Patsy Bailey



*A traditional birth attendant (TBA) in Brazil holds a child at whose birth she assisted.*

The cornerstone of FHI's institutional development program is the long-term support provided to Family Health Research Centers (FHRCs) in developing countries. Our strategy is comprehensive and integrated, involving financial and technical assistance to strengthen the research and program skills of the staff, to develop the necessary program support infrastructure, and to improve management and fiscal expertise.

We currently work with FHRCs in nine countries: Bangladesh, Egypt, Indonesia, Kenya, Mali, Mexico, Niger, Sri Lanka and Thailand. The organizations vary considerably in their scope of work, ranging from biomedical and programmatic research organizations (in Bangladesh, Egypt and Indonesia) to a university department (in Kenya) and family planning associations (in Mali, Niger and Sri Lanka). All FHRCs operate at a national level and have the capability to influence government decisions concerning

family planning programs and policy. The following are some examples of recent accomplishments.

### **Indonesia**

One recent milestone has been the "graduation" of the Coordinating Board of Indonesian Fertility Research (BKS PENFIN): The Indonesian program no longer receives "core support" from FHI to cover general operating costs, such as salaries, rent and communications. FHI now funds specific projects that match our priority areas, and also provides technical assistance to meet identified needs. Reflecting its increased research and training capacity, BKS PENFIN also has obtained research and program support from Indonesia's National Family Planning Coordinating Board (BKKBN), the World Health Organization (WHO), the United Nations Population Fund (UNFPA) and several private pharmaceutical companies.

### **Bangladesh**

The Bangladesh Fertility Research Programme (BFRP) has established itself as a well-managed organization capable of sophisticated field research and information dissemination. The BFRP has greatly diversified its base of financial support. Since 1988, the organization had 12 projects under way, and the number of international donors grew from three to eight, including

the World Health Organization (WHO), the Ford Foundation, the United Nations Population Fund (UNFPA) and Schering AG.

Building on its earlier concentration on contraceptive clinical trials, the BFRP now also conducts a range of family planning and reproductive health surveys and provides several types of training.

Julia Beamish



*Josephat Nyagero learns about EPI INFO, a data entry and analysis software package, from FHI Research Analyst Marcus Steiner. Mr. Nyagero is an Assistant Research Fellow at the University of Nairobi's Ob/Gyn Department, one of ten Family Health Research Centers supported by FHI.*

**Kenya**  
FHI is collaborating with the University of Nairobi's Department of Obstetrics and Gynaecology (Ob/Gyn) to implement an institutional development plan in contraceptive research. The program — the newest and largest FHRC

in Africa — is funded primarily by the USAID Mission to Kenya. In fact, such bilateral funding is becoming an increasingly significant source of support for FHI's institutional development efforts, reflecting the high priority A.I.D. places on local capacity-building within developing countries.

The Kenya program has already initiated a range of activities. A Contraceptive Technology Update Workshop brought together more than 100 Kenyan family planning providers and policymakers to

review the country's family planning program and discuss the benefits and risks of various contraceptive methods. The Ob/Gyn Department has also completed an inventory of past family planning research in Kenya, as an aid to researchers in identifying research needs and guiding future project development. In addition, work is well under way on a number of planned research projects, including a survey reaching 400 physicians throughout Kenya to determine their knowledge, attitudes and practices about family planning.

### **The importance of training**

One of the keys to FHI's institutional development program is training — to transfer research skills and knowledge to individuals and groups in other countries. FHI has supported approximately 70 training seminars and workshops during the past three years. Overall, about 3,500 health professionals from the developing world attended these events, most of them held in-country. Participants are expected to share their new skills and knowledge with a widening network of colleagues.

FHI's training has focused on meeting three general needs:

■ **Research methods and data analysis** related to clinical trials, epidemiology and programmatic research;

■ **Medical knowledge and skills** regarding various contraceptive methods, AIDS and other sexually transmitted diseases and reproductive health;

■ **Management training** including computer use, data analysis and quality control, and accounting and financial planning.

FHI has developed training manuals on the basics of randomized clinical trials research, with an emphasis on contraceptive research. So far, researchers in nine developing countries have learned design methods and analysis techniques from workshops based on the FHI manuals, available in English, Spanish, French and Portuguese. The Family Health Research Centers in Egypt, Sri Lanka and Indonesia are now able to use these manuals to conduct their own training workshops with minimal technical assistance from FHI.

Other training workshops focus on applied research methodologies to enhance the skills of investigators in FHI's international network, as well as to add new investigators to the network. One workshop in Haiti, co-sponsored by the Haitian Child Health Institute, brought together 10 physicians and nurses from both the public and private sectors. Another workshop for Francophone Africa was held in collaboration with WHO and the University of Yaounde in Cameroon; it was attended by 18 medical professionals from seven countries.

FHI is one of the few organizations conducting management training for research programs in developing countries. We collaborated with WHO to sponsor a research management seminar in Mali, and we

continue to offer management training to the FHRCs.

FHI also emphasizes equipping the FHRCs with up-to-date computers and software. We have conducted a variety of training efforts to reach both researchers and program managers. For example, FHI and BKS PENFIN jointly conducted an

intensive 10-day course on personal computers for physicians from seven of the BKS PENFIN research centers, providing hands-on training in word processing, spreadsheets and statistical analysis. The course was well received, and BKS PENFIN may conduct similar training for other individuals and organizations in Indonesia.

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## ***Family Health Research Centers***

■ Bangladesh Fertility Research Programme (BFRP)

■ Coordinating Board of Indonesian Fertility Research (BKS PENFIN)

■ Egyptian Fertility Care Society (EFCS)

■ Family Planning Association of Sri Lanka (FPA/SL)

■ Malian Association for Family Planning (AMPPF)

■ Mexican Interuniversity Group for Epidemiologic Research in Reproductive Health (GIMIESAR)

■ National Center for Family Health of Niger (CNSF)

■ National Population Council of Egypt (NPC/Egypt)

■ Thailand Fertility Research Association (TFRA)

■ University of Nairobi, Department of Obstetrics and Gynaecology (UON/Kenya)

## ***Egyptian Fertility Care Society***



*From left, Dr. Ezzeldin Osman Hassan,  
EFCS Executive Director, and Naglaa  
El Nahal, EFCS Program Officer*

**T**he Egyptian Fertility Care Society (EFCS) was founded in 1974 as a voluntary organization of medical specialists affiliated with the Egyptian Medical Association. FHI has been associated with EFCS, one of FHI's oldest collaborating Family Health Research Centers, since 1980. This program currently coordinates and manages research through a network of research institutions throughout Egypt, mostly university teaching hospitals.

EFCS has become the country's pre-eminent biomedical research organization. It has served to support the overall family planning effort in Egypt, coordinated by the National Population Council (NPC).

Under the broad guidance of the National Population Council headed by Dr. Maher Mahran, and the leadership of EFCS Director Dr. Ezzeldin Osman Hassan, the Egyptian Fertility Care Society has steadily expanded the number and variety of its projects. Its program consists of three interrelated areas of activity: coordination of research on contraceptive technology, family planning and reproductive health; training in research methods to improve research quality; and information dissemination to assure that research results are used to strengthen Egypt's family planning program.

Recent highlights include:

■ **NORPLANT® studies.** The EFCS has conducted training activities and studies designed to provide data for national regulatory approval and to help introduce NORPLANT® contraceptive implants into the national family planning program. Based on these studies, Egypt's drug regulatory agency has recently taken the first step in approving NORPLANT® for general program use.

■ **Safe motherhood.** Building on its participation in FHI's maternity care monitoring studies and repro-

ductive age mortality studies, the EFCS sponsored a national conference on safe motherhood, with support from the Ford Foundation. Hosted by Mrs. Susan Mubarak, the wife of the President of Egypt, the conference was attended by over 100 professionals representing all major health and family planning organizations in both the public and private sectors.

■ **Education.** The EFCS has produced an easy-to-read booklet describing all methods of family planning, for use in training and counseling. The Ministry of Health is using 2,000 copies in its programs.

■ **Setting research priorities.** A workshop, hosted by the EFCS and sponsored by the World Health Organization (WHO), brought together senior Egyptian experts and international donors to develop an agenda of national research needs in family planning and reproductive health.

Reflecting its increasing ability to design and conduct research and training activities independently, the EFCS has now gained support from a number of international organizations, including WHO, A.I.D./ Cairo, the United Nations Population Fund (UNFPA) and the Ford Foundation.

## Communication Strategies

*FHI's information program disseminates research findings to providers, policymakers, the media and the public*



The goal of FHI's information dissemination program is to expand the use of research by presenting results clearly and effectively to appropriate audiences. Our efforts include publishing journal articles, sponsoring international meetings, training journalists in developing countries, assisting in the development of national information networks, placing news releases and feature articles in the international press, and producing a series of bulletins, articles and special publications in English, French and Spanish.

### Scientific communications

At the core of FHI's information dissemination strategy is the publication of our research results in scientific and medical journals. Each year, FHI staff members and research collaborators publish numerous articles in U.S. and foreign journals.

To help investigators develop their capacity to publish their research in major English-language journals, FHI has developed a training program in scientific writing skills. The first workshop was held in 1989, attended by four researchers from Family Health Research Centers in Bangladesh, Sri Lanka and Thailand. Participants in the 10-day program acquired technical skills in preparing a scientific article from data they collected in clinical trials. Three articles written

by the workshop participants were published subsequently in national and international medical journals.

### Training journalists

The media hold great potential for providing private citizens and public officials with up-to-date information on family planning and reproductive health. However, journalists in many countries lack access to the scientific community and have limited experience in translating technical matters into everyday language. In response, FHI has developed a competency-based training program to increase developing country journalists' knowledge of reproductive health issues and improve their professional skills.

The first workshop was held in Senegal in September, 1988, for health journalists from the print media in nine Francophone African countries. Co-sponsored by Senegal's *Projet Santé Familiale et Population* and the International Science and Technology Institute, the two-week program resulted in improved frequency and accuracy of reporting on health and population topics in major newspapers and magazines. Within six months the leading Moslem magazine in Francophone West Africa, *Wal Fadjiri*, published lengthy articles on family planning, AIDS and the effect of sexually transmitted diseases on health — issues that

had not been covered in any depth for several years. Workshop participants created a Pan-African journalists' network, sharing reprints of articles they have written on family health issues.

Building on this success, FHI in 1990 coordinated a regional health journalists' workshop in Kenya in conjunction with the African Council on Communication Education. We also co-sponsored a country-specific workshop in Indonesia with BKS PENFIN, the Indonesian Fertility Research Coordinating Board; other workshops and technical assistance in health journalism training are planned.

### Information outreach

Each year FHI receives more than 1,500 requests for information from researchers, family planning providers, USAID missions, national health ministries, collegial health organizations, and the media. The requests are for both technical and non-technical background information on reproductive health, for help in formulating appropriate health policies or responding to questions about new contraceptive methods. Propelled by this growing demand, FHI has steadily expanded its information dissemination program. Among recent highlights:

■ **network newsletter.** Published in English, French and Spanish, *network* has reached a circulation of over 12,000, quadruple the mailing in 1985. Covering a variety of reproductive health issues, the award-winning bulletin

is distributed worldwide to research collaborators, family planning workers, government policymakers, journalists and many others.

■ **Translation of scientific articles.** In 1988, FHI began providing key journal articles in French and Spanish to colleagues in the developing world. By mid 1990 about two dozen articles had been translated and distributed.

■ **AIDS information packets.** FHI mails 1,000 bimonthly information packets on AIDS to USAID missions, health organizations and individuals in the medical profession in developing countries.

■ **Feature articles.** After identifying important topics addressed in recent research — such as postpartum contraception or sexually transmitted diseases — FHI staff prepare news and feature articles and place them in our publications and in major print and broadcast outlets in the United States, Asia, Africa and Latin America. Articles appearing in newspapers and magazines are then distributed to various target audiences, including journalists in the United States and in developing countries.

■ **Briefing papers.** FHI also provides in-depth information on topics of interest to health care

Alan Dehmer



*Prof. Souleiman Mboup, virologist at the Université de Dakar, discusses AIDS with West African health journalists at a workshop organized by FHI in Senegal.*

professionals, policymakers and the media. For example in 1989 when the U.S. Food and Drug Administration held hearings on potential links between oral contraceptives and breast cancer, FHI prepared briefing papers on the relative cancer risks. This information helped USAID Mission staff, collaborating researchers and others answer questions from their counterparts, physicians and media in developing countries.

### International meetings

To foster greater communication and use of scientific research, FHI also helps to organize or support regional and international gatherings each year. In March 1988, for example, FHI sponsored a meeting in The Gambia at which researchers reported the results of a reproductive health survey of young adults. This information has helped local health-care providers and policymakers design programs to meet the needs of young adults for information and services in reproductive health and family planning.

Other recent conferences supported by FHI include the First Brazilian Congress on Family Planning, the International Conference on AIDS and Associated Cancers in Africa, the Annual Meeting of the

Mexican Academy of Research in Reproductive Biology, and the International Meeting of the Society for the Advancement of Contraception in Singapore. In November 1989, FHI organized a major meeting at the World Bank on the socioeconomic benefits of family planning. In addition, FHI has sponsored the attendance of many collaborating scientists from developing countries at key health conferences worldwide.

*FHI distributes research findings about family planning and AIDS prevention through articles in newspapers and magazines all over the world.*



## *The Economics of Family Planning*

*FHI's cost analyses show that solving the global population crisis is achievable and affordable*

**W**hile the global population continues to grow at an unprecedented rate, resources provided for family planning worldwide have leveled off in recent years. At the same time, demand for family planning is increasing; recent surveys show that in many developing countries 75 to 80 percent of couples who have three or more children want to limit the size of their families. One of the challenges of the 1990s is how to meet this demand, given the scarcity of resources allocated for family planning.

To respond to this challenge, FHI has embarked on an initiative to examine the economics of family planning, with funding from the William and Flora Hewlett Foundation, the Buffett Foundation, FHI corporate resources, and A.I.D. The goal is to determine how resources might be expanded to provide additional family planning services and how available resources could be used more efficiently.

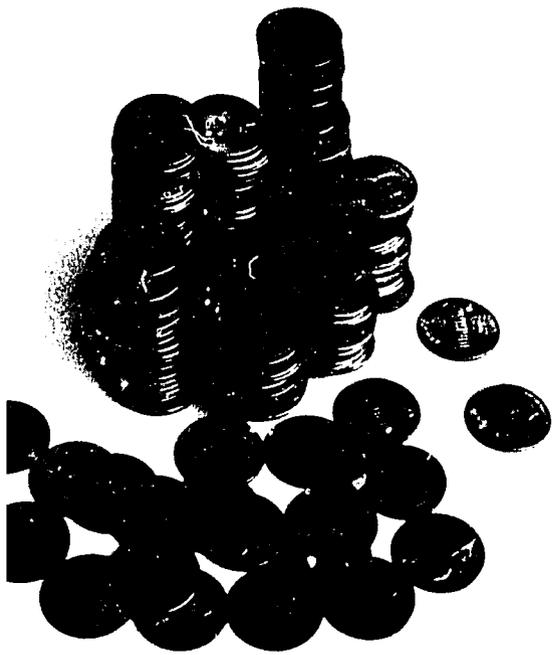
FHI has produced a major study entitled "Investing in the Future" to answer the question: "What will it cost to reduce population growth to manageable levels by the year 2000?" Researchers developed a methodology for estimating the actual cost of providing family planning services in both the public and nonprofit sectors of developing

countries, and for forecasting the cost to donors and developing countries to achieve the medium-level global population projection made by the United Nations for the year 2000 (6.25 billion). The research team estimated the total annual cost of family planning for the developing world (excluding China) in 1988 at US\$1.6 billion, and projected it would increase to US\$2.6 billion by the turn of the century.

Reports on the study's findings and methodology have been presented widely, including an FHI-organized briefing on family planning at the World Bank.

FHI has also used data from a variety of sources to produce a booklet called "A Penny a Day," which concludes that the United States and other industrialized nations could help reduce the rate of global population growth to a manageable level by the year 2000 by spending about US\$1 billion annually — less than one cent per day per taxpayer — to expand family planning options for developing countries. Nearly 2,000 booklets have been distributed to legislators and to family planning groups, donor organizations, media, and policymakers worldwide.

FHI also plans to conduct the following studies:

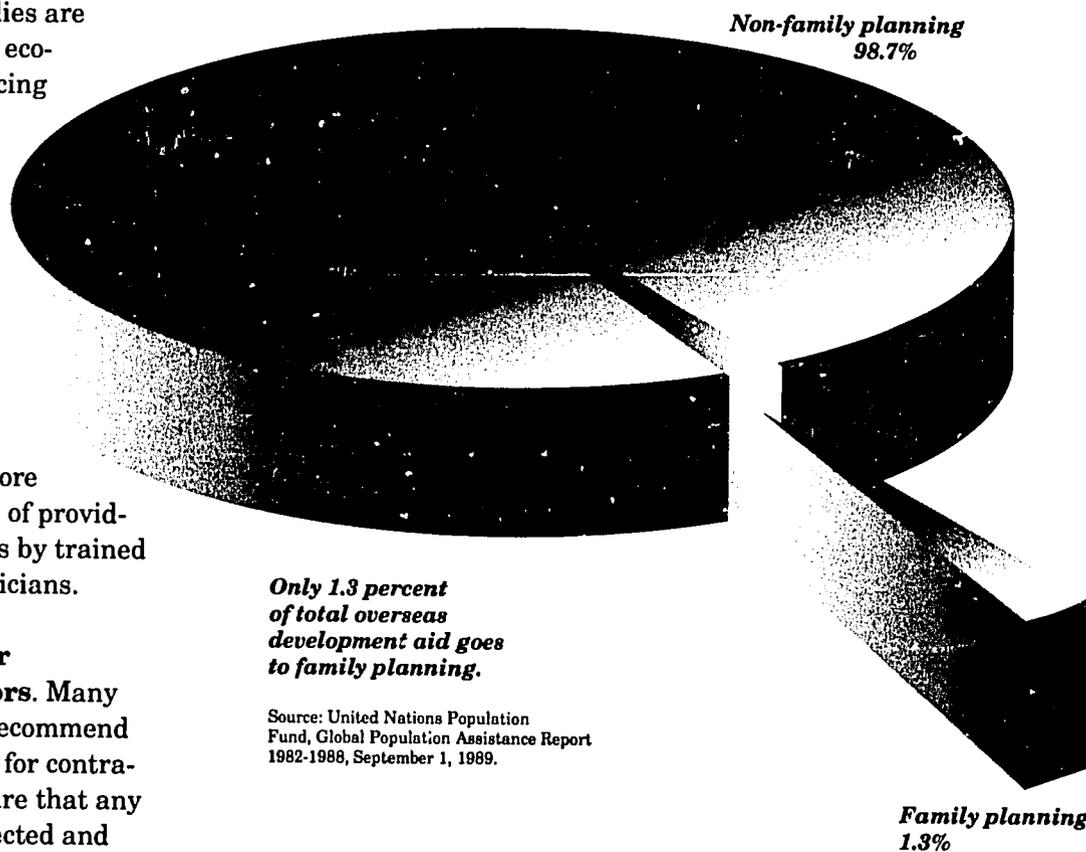


■ **The Dominican Republic.** At the request of the USAID Mission in the Dominican Republic, FHI researchers have begun a collaborative study with PROFAMILIA (the local family planning services agency) to determine the full cost of current services and to help project future resource needs in the context of the country's continuing inflation and exchange-rate pressures.

*Total donor development aid from industrialized nations to developing countries*

■ **NORPLANT®.** Studies are planned to examine the economic effects of introducing NORPLANT®, the long-lasting contraceptive implant, into family planning programs. Working in Thailand, researchers will gauge the cost of providing NORPLANT®, estimate its potential impact on use of other contraceptives, and explore safe but less costly ways of providing the implants, such as by trained nurses rather than physicians.

■ **Follow-up visits for contraceptive acceptors.** Many Latin American clinics recommend frequent follow-up visits for contraceptive acceptors to ensure that any health problems are detected and treated. FHI and The Population Council will work together in Ecuador and Mexico to evaluate the effect of less-frequent follow-up visits on costs of providing services and on the risks of missing problems and side effects that should be treated.



*Only 1.3 percent of total overseas development aid goes to family planning.*

Source: United Nations Population Fund, Global Population Assistance Report 1982-1988, September 1, 1989.

## Board of Directors

**A**long with Malcolm Potts, President Emeritus, FHI's Board of Directors is composed of a multidisciplinary group of individuals with distinguished corporate, academic and public-service experience. The Board meets semi-annually to review FHI programs and oversee the budget and staffing. The following are brief profiles of board members, including officers named in 1990, new members, and recently retired members.



FHI's new Chairman of the Board is **Torrey C. Brown, MD**, Secretary of the Department of Natural Resources for the State of Maryland. Dr. Brown served in the Maryland House of Delegates from 1971 to 1983. Prior to that he was Director of the Office of Health Care Programs and Director of Outpatient Services at The Johns Hopkins (University) Hospital. He also served as Associate Professor of Medicine, Assistant Professor of Health Care Organization and Assistant Dean for Clinical Programs at The Johns Hopkins University School of Medicine. An FHI board member since 1979, Dr. Brown served as Vice Chair from 1986 to September 1990.



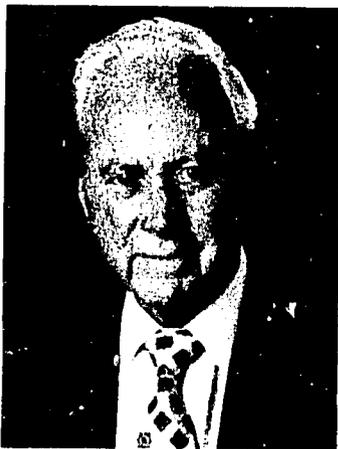
Dr. Brown succeeds **Roger V. Short, BVsc, MSc, PhD, ScD**, who had chaired the FHI board from 1982 to September 1990. Dr. Short, who remains on the board, is Professor of Reproductive Biology at Monash University in Australia and a distinguished reproductive physiologist. A Fellow of the prestigious Royal Society, he is known for his research on the hormonal control of reproduction in a wide variety of animals.



The Board's new Vice Chair is **Pramilla Senanayake, MBBS, DTPH, PhD**, Assistant Secretary-General of the International Planned Parenthood Federation (IPPF) in London. Dr. Senanayake, an FHI board member since 1985, serves on committees and task forces for the World Health Organization, the International Federation of Family Health Associations, Planned Parenthood Federation of America and others.

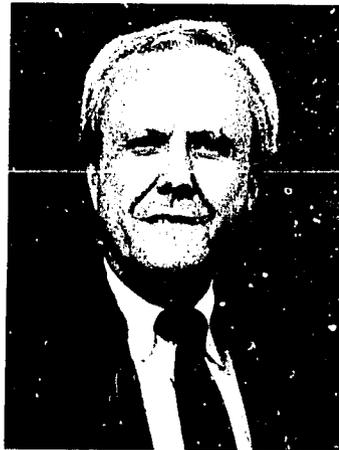


*FHI's new Board Secretary is **Arthur C. Christakos, MD.** Dr. Christakos is Professor of Obstetrics and Gynecology — and the former Dean of Undergraduate Medical Education — at Duke University. He is also an examiner of the American Board of Obstetrics and Gynecology.*



*Dr. Christakos succeeds Brigadier General **Alex B. Andrews, JD,** U.S. Air Force (retired), who served as Board Secretary from*

*1982 to September 1990. Gen. Andrews, who remains on the board, is an attorney associated with Jordan, Price, Wall, Gray & Jones of Raleigh, N.C., as well as the founder of nine businesses including A.B. Andrews and Associates, Business Telecom, Inc., the North Carolina Natural Gas Corporation, and National Trust Life Insurance Company.*



*FHI Board Treasurer remains **R. Peyton Woodson, III, MBA,** President of Woodson Associates. Treasurer of the FHI board since 1987, Mr. Woodson is also the former Board Chair of the McM Corporation, the Occidental Life Insurance Company of North Carolina, and the Peninsular*

*Life Insurance Company, as well as the former Board Chair and President of the British-American Insurance Company.*



*One of FHI's new board members is **David W. Barry, MD.** Dr. Barry is Vice President of Research, Development and Medical Affairs at Burroughs Wellcome Company. Prior to joining Burroughs Wellcome in 1977, Dr. Barry was Director of the Influenza Vaccine Task Force for the U.S. Food and Drug Administration (FDA).*



*Board member and former Board Chair **Sharon L. Camp, MA, PhD,** is a leading public-interest lobbyist in Washington, D.C., and a leader in health, population and women's issues. As a Vice President of the Population Crisis Committee she has overall responsibility for that organization's public education, media and policy advocacy work.*



**Donald A. Collins, MBA,** is President of Donald A. Collins Associates and the International Services Assistance Fund, which provide consultant services to organizations engaged in conservation, population, education and other issues. He is a charter member of at least six boards of nonprofit organizations involved in these issues, including FHI, the Alan Guttmacher Institute, the Center for Population Options, and the International Projects Assistance Services.



**King K. Holmes, MD, PhD,** is a widely published expert in sexually transmitted diseases. Dr. Holmes is Professor and Vice Chair of the Department of Medicine at the University of Washington, as well as Chief of Medicine at Harborview Medical Center in Seattle. He chairs the National Institutes of Health's Study Group for Research on STDs and has served on various committees for the World Health Organization, the U.S. Public Health Service and other health care institutions.



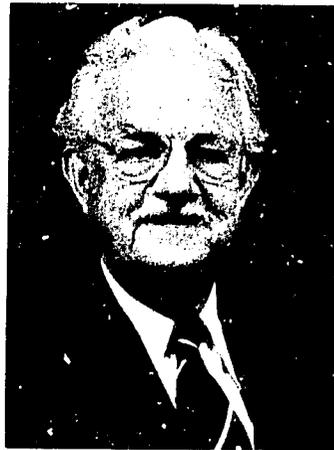
**Luella V. Klein, MD,** is Professor and Chair of the Gynecology and Obstetrics Department at Emory University School of Medicine, Chief of Obstetrics Services at Grady Memorial Hospital in Atlanta, and Director of the American Board of Obstetrics and Gynecology. In 1984 she became the first woman President of the American College of Obstetricians and Gynecologists.



**Viveca L. Odling, MD, PhD,** is an Associate Professor for the Department of Obstetrics / Gynaecology at the University of Uppsala in Sweden, and serves as a clinician of the Family Planning Section at the University Hospital. Dr. Odling has done considerable research on IUDs and steroidal contraceptives, including NORPLANT<sup>®</sup> implants.



**Donald R. Seawell, JD**, is an attorney, publisher and Tony-Award-winning producer. He is Chair of the Board, Chief Executive Officer and founder of The Denver Center for the Performing Arts; the former Chair, President and Publisher of The Denver Post; and an attorney associated with the New York law firm of Bernstein, Seawell, Kove & Maltin. He is also a director of the Population Crisis Committee.



### **Retired Members**

**William N. Hubbard, Jr., MD**, served on FHI's Board for nine years, until he stepped down in September 1990. He has served as President of The Upjohn Company as well as Dean of the Medical School, Director of the Medical Center and Professor of Internal Medicine at the University of Michigan. Dr. Hubbard serves on the Board of Trustees of the W.K. Kellogg Foundation as well as on specialized committees of the National Academy of Sciences, Morehouse College Medical School and the Pharmaceutical Manufacturers Association.



**Halfdan Mahler, MD**, Secretary-General of the International Planned Parenthood Federation and Director-General Emeritus of the World Health Organization (WHO), served on FHI's Board of Directors from September 1988 through April 1990. Dr. Mahler is internationally noted for his leadership of WHO and his work in tuberculosis.



Ambassador **Nancy Ostrander**, a new board member, served as U.S. Ambassador to Suriname from 1978 to 1980. She has also been a consultant to the U.S. State Department's Iranian Asylum Program, and a diplomat-in-residence at Purdue University in Indianapolis. Prior to her retirement in 1989, she served for four years as the State Department's Coordinator for Population Affairs.

## *Operating Results 1990*

### *Comparative Balance Sheet*

	September 30	
	1990	1989
<b>Current Assets</b>		
Cash	\$1,624,634	\$1,331,067
Short-term Investments	654,261	913,800
Receivable from Federal Government—		
Unreimbursed Costs Incurred	-0-	353,921
Accounts Receivable	550,919	317,438
Dividends Receivable	-0-	-0-
Prepaid Expenses	259,977	134,020
Pension Forfeitures	140,754	91,289
<b>Total Current Assets</b>	<b>3,230,545</b>	<b>3,141,535</b>
<b>Investment in Subsidiary</b>	<b>1,711,311</b>	<b>798,013</b>
<b>Property and Equipment</b>		
Promotional Material	20,599	20,599
Medical and Office Equipment	246,097	90,825
Leasehold Improvements	156,562	100,900
Electronic Data Processing	641,018	520,095
Automobile	5,604	5,604
Software	85,975	-0-
	1,155,855	738,023
<b>Accumulated Depreciation and Amortization</b>	(536,384)	(368,442)
<b>Net Value of Property and Equipment</b>	<b>619,471</b>	<b>369,581</b>
<b>Total Assets</b>	<b>\$5,561,327</b>	<b>\$4,307,129</b>
<b>Current Liabilities</b>		
Accounts Payable	\$ 528,149	\$ 370,578
Federal Letter of Credit Payable	55,225	-0-
Accrued Salaries, Payroll Taxes and Fringe Benefits	643,260	516,273
Unearned Income	846,114	591,421
<b>Total Current Liabilities</b>	<b>2,072,748</b>	<b>1,478,272</b>
<b>Fund Balance</b>	<b>3,488,579</b>	<b>2,828,857</b>
<b>Total Liabilities and Fund Balance</b>	<b>\$5,561,327</b>	<b>\$4,307,129</b>

**Statements of Revenues, Expenses and Changes in Fund Balance**

	Contracts & Grants		Other	Year Ended	Year Ended
	Government	Non-Government	Supported Activities	September 30, 1990 Total	September 30, 1989 Total
<b>Revenues</b>					
Contract Income					
Agency for International Development	\$17,440,854	\$ -0-	\$ -0-	\$17,440,854	\$12,604,048
National Institutes of Health	9,663	-0-	-0-	9,663	56,551
	17,450,517	-0-	-0-	17,450,517	12,660,599
Contributions	-0-	-0-	90,037	90,037	96,938
Dividend Income from Subsidiary	-0-	-0-	1,389,298	1,389,298	1,214,894
Income from Services	-0-	1,942,337	4,338	1,946,675	2,240,782
Interest Income	-0-	23,890	110,233	134,123	147,114
Rental Income	-0-	-0-	303,996	303,996	188,958
Gain (Loss) on Sale of Investments	-0-	-0-	-0-	-0-	(238,577)
Other Income	-0-	34,520	60,329	94,849	134,976
<b>Total Revenues</b>	<b>17,450,517</b>	<b>2,000,747</b>	<b>1,958,231</b>	<b>21,409,495</b>	<b>16,445,684</b>
<b>Expenses</b>					
Program Services:					
Research & Evaluation	13,572,445	1,048,876	1,036,882	15,658,203	11,488,688
Supporting Services:					
Service Centers	454,475	467,566	28,245	950,286	725,352
General & Administrative	3,423,597	481,526	236,161	4,141,284	3,559,111
<b>Total Expenses</b>	<b>17,450,517</b>	<b>1,997,968</b>	<b>1,301,288</b>	<b>20,749,773</b>	<b>15,773,151</b>
<b>Excess (Deficiency) of Revenues over Expenses</b>	<b>\$ -0-</b>	<b>\$ 2,779</b>	<b>\$ 656,943</b>	<b>\$ 659,722</b>	<b>\$ 672,533</b>
Fund Balance at Beginning of Year				2,828,857	2,156,324
<b>Fund Balance at End of Year</b>				<b>\$ 3,488,579</b>	<b>\$ 2,828,857</b>

The above financial statements have been audited by Ernst & Young and an unqualified opinion was rendered.

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Since its founding, Family Health International has received financial support and in-kind donations from a wide variety of public and private organizations as well as from interested and committed individuals in the United States and overseas. We thank these generous supporters.

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