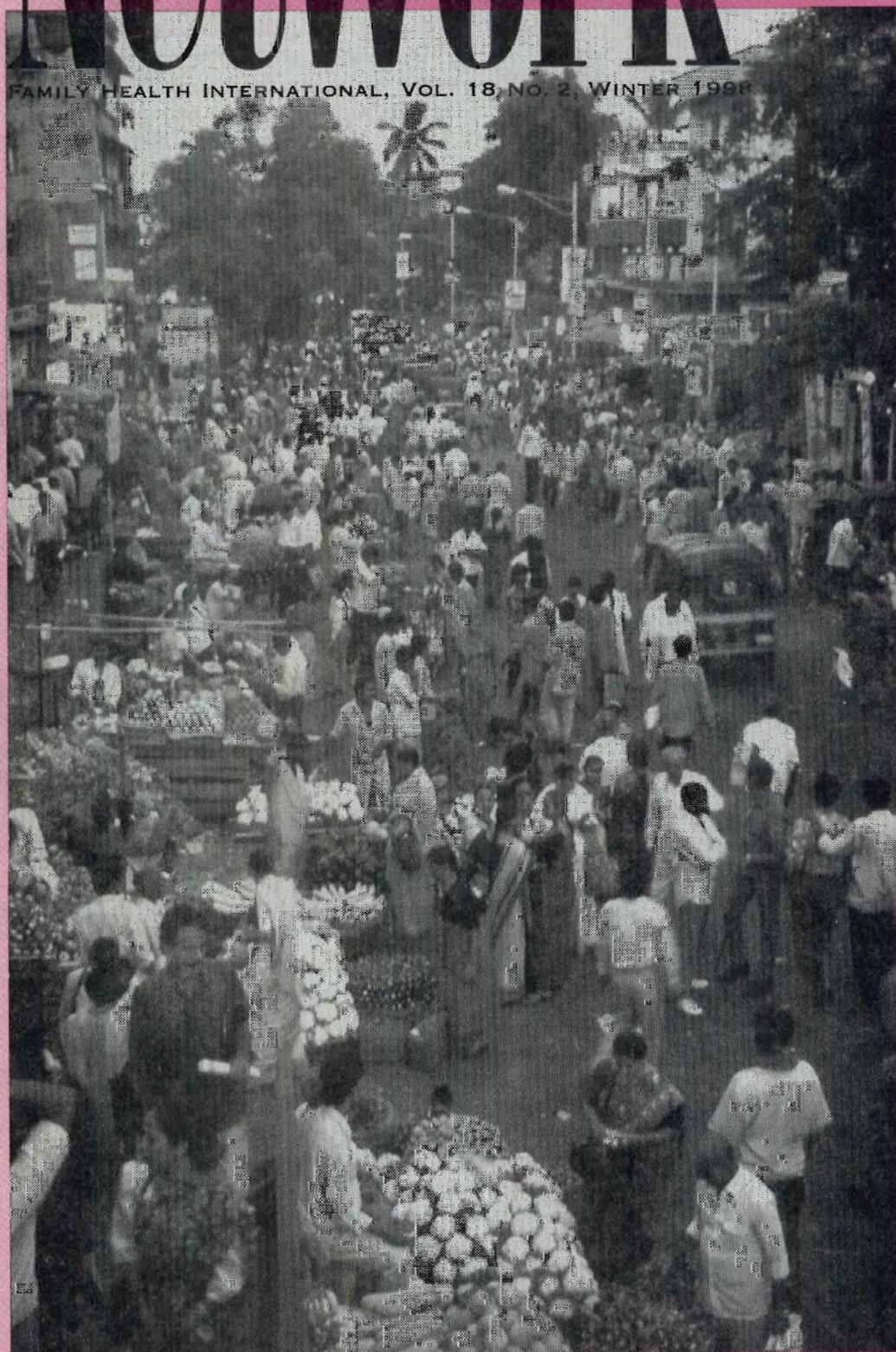


# Network

FAMILY HEALTH INTERNATIONAL, VOL. 18, NO. 2, WINTER 1998



Evaluating  
Family  
Planning  
Costs

# News Briefs

## HIV INFECTS 30 MILLION

A new report by the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) shows that infection by HIV, the virus that causes AIDS, is more common than previously thought.

Worldwide, over 30 million adults and children are now believed to be living with HIV infection. UNAIDS estimates that 5.8 million people became infected during 1997, at a rate of 16,000 new infections every day, nearly twice the 8,200 daily infection rate previously estimated. By the year 2000, infections worldwide could total 40 million people.

"We are now realizing that rates of HIV transmission have been grossly underestimated, particularly in sub-Saharan

Africa, where the bulk of infections have been concentrated to date," says Dr. Peter Piot, UNAIDS executive director, who released the findings in November.

In a related development, the U.S. Agency for International Development (USAID) and U.S. Census Bureau recently predicted the AIDS epidemic would create a "lost generation" of children at risk of exploitation and disease.

"More than 40 million children in 23 developing nations will likely have lost one or both parents by 2010. Most of these deaths will be the result of the HIV/AIDS pandemic and complicated illnesses," says Brian Atwood, USAID administrator.

"In countries across Africa, Asia and Latin America, HIV/AIDS is unraveling years of progress in economic and social development," he adds. "Life

expectancy — which has been steadily on the rise for the last three decades — will drop to 40 years or less in nine sub-Saharan countries by the year 2010."

Atwood believes serious work to help stop infants from dying in developing countries is being compromised. Many children will be left without protection, love and care. "We cannot begin the 21st century with a generation of children lost to abandonment, despair and hopelessness."

## STUDY INDICATES EARLY HIV SYMPTOMS

A study in India suggests that fever, joint pain and night sweats are early clinical symptoms of recent HIV infections. These symptoms could be used in developing countries to diagnose infections much sooner as part of new prevention strategies.

After infection with HIV, it takes three to six months before antibodies show up in the

bloodstream. But early clinical symptoms can appear within three to four weeks, says the study published in the December 17, 1997 *Journal of the American Medical Association*. Familiarity with the symptoms could be useful in countries where expensive diagnostic methods are not available, the scientists say. People in the very early stages of HIV are highly infectious yet are unaware they have the virus. Prevention strategies that identify new infections sooner may help reduce risky behavior that spreads the disease to others.

Scientists from the National AIDS Research Institute (NARI) in Pune, India, Johns Hopkins University School of Hygiene and Public Health in Baltimore, USA, and the U.S. National Institute of Allergy and Infectious Diseases (NIAID) examined 3,874 people at clinics in Pune who were being treated for other sexually transmitted diseases and tested negative for

*Continued on page 19*

## CEO AND PRESIDENT NAMED AT FHI

Albert J. Siemens, PhD, and Willard Cates Jr., MD, MPH, have been named to key leadership positions at Family Health International.

Dr. Siemens, executive vice president at ClinTrials Research, Inc., a U.S.-based clinical research organization, joined FHI as chief executive officer and vice chair of the board. Dr. Cates, who was FHI's senior vice president of biomedical affairs, became president. The appointments in January follow a decision by Theodore M. King, PhD, MD, to retire. Dr. King, 66, had been president and chief operating officer since 1991.

"Al Siemens has substantial corporate management experience, especially in pharmaceutical research and development," said Torrey C. Brown, MD, FHI's board chair, who announced the appointments. "Ward Cates' internationally recognized scientific reputation and his long experience with government agencies have already contributed to our recent successes. These two extraordinary talents complement each other and will be of considerable value to FHI."

Dr. King will serve as an advisor to FHI's board. "He has had an outstanding impact on FHI, leading staff in the development and application of the highest scientific standards to our work," Dr. Brown said.

Dr. Siemens was vice president for research at FHI in 1987, when he joined Clinical Research International, Inc., which later was acquired by ClinTrials. Before his previous tenure at FHI, he was involved in clinical product development in New York at Pfizer, Inc., a pharmaceutical company.

Dr. Cates joined FHI in 1995 after serving for more than 20 years at the U.S. Centers for Disease Control and Prevention in Atlanta, where he was director of the Division of Sexually Transmitted Diseases, then director of the Division of Training. He currently chairs a National Institutes of Health steering committee that guides research on new HIV prevention strategies at a network of institutions. He has authored or co-authored more than 400 scientific publications, and is co-editor of two widely used textbooks on reproductive health, *Sexually Transmitted Diseases* and *Contraceptive Technology*.

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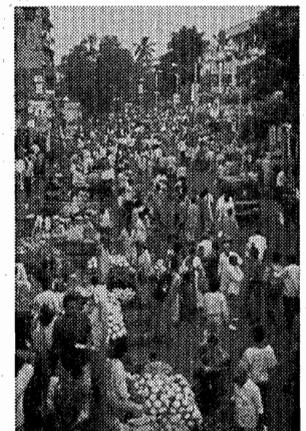
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*Cover photograph by Peter Armenia captures a typical day at a Mumbai, India street market. Like any careful shopper, family planning managers use limited financial resources to make important decisions about competing priorities.*



# Evaluating Family Planning Costs

**B**ecause financial resources are limited, those who manage family planning services must often face difficult choices about competing priorities. If a new contraceptive option is added, how will its introduction affect resources available for other methods? If counseling services are expanded, will staff have enough time for other duties? If other reproductive health services are offered, do family planning services suffer?

These decisions about use of resources require careful comparison of costs for each service, and these costs may be influenced by a variety of factors.

For example, a program may offer a contraceptive method through different channels — in clinics, through community-based distribution posts, and by using outreach workers who visit clients in their homes. Moreover, many family planning programs offer a range of other reproductive health services, including prenatal check-ups, gynecological examinations, screening for sexually transmitted diseases, pediatric visits and general consultations. Consequently, the cost of providing one family planning service is influenced by such factors.

Funding sources are also considerations. Recovering costs through client-paid fees is one way that may help programs to

improve financial sustainability. However, fees that are too high will discourage use of services.

Above all, decisions about allocating resources must be made with the clients' best interests in mind. Good programs must provide quality services for their clients. Clients should be able to select a contraceptive method from a range of choices, and they should receive thorough and accurate counseling. Clients should be able to obtain services that are safe, effective and affordable, and they should have contraceptive choices that are convenient for them both to obtain and to use.

INTER-AMERICAN DEVELOPMENT BANK/DAVID MANGURIAN



AN ESTIMATED 350 MILLION COUPLES WORLDWIDE DO NOT HAVE ACCESS TO A FULL RANGE OF MODERN FAMILY PLANNING METHODS, AND THEIR NUMBERS ARE GROWING.

## GROWING NEEDS, UNCERTAIN SUPPORT

Increasing efficiency is becoming even more imperative due to the unfortunate pressures of growing needs and uncertain financial support. The worldwide gap between family planning needs and services is already immense. An estimated 350 million couples do not have access to a full range of modern family planning information and services, and their numbers are growing.<sup>1</sup> Many of the countries where the need for services is greatest are also those least able to bear the financial burden.

At the 1994 International Conference on Population and Development in Cairo, a program of action endorsed by 180 nations called for universal access to family planning by the year 2015. The United Nations Population Fund has estimated that today's current spending of about \$5 billion annually for family planning services in developing countries would need nearly to triple to \$14 billion by the year 2015 to reach this goal. Another \$8 billion annually would be necessary by that year for related reproductive health-care services, such as maternal care and sexually transmitted disease treatment.<sup>2</sup>

Donor nations and developing country governments cannot absorb this additional cost alone. Other sources of revenue and ways to continue quality services at lower costs must be found. Even maintaining the current level of financial contributions from industrialized countries to the developing world is far from assured. Public support in donor countries for foreign aid is often tenuous, and this aid must be used for many purposes. In 1993, the 19 countries providing the bulk of population assistance devoted an average of under 2 percent of their total development aid to population programs.<sup>3</sup>

Ways of reducing the gap between limited resources and growing needs are explored in this issue of *Network*. These include other sources of revenue, reducing the numbers served through public-sector programs by expanding services in the private sector, as well as ways to provide quality services at lower cost:



GOOD PROGRAMS MUST PROVIDE QUALITY SERVICES FOR CLIENTS. A MOTHER AND CHILD VISIT A CLINIC IN DAKAR, SENEGAL.

**Client fees** are one source of revenue. People who obtain services at public and nongovernmental organization family planning clinics may be willing and able to pay a higher share of the costs of those services. However, experts say that this strategy should be used with caution, since instituting fees or increasing them may discourage use. Organizations can also generate additional funds by selling other health-related services at prices that are high enough to subsidize family planning services.

**Private sector services** offer another approach. By supporting free or low-cost family planning services, governments and donors have, in effect, limited the incentives for commercial involvement in family planning and other reproductive health services. Strategies to address this concern include revolving loan funds to assist commercial providers, social marketing projects, and better training for private doctors and midwives.

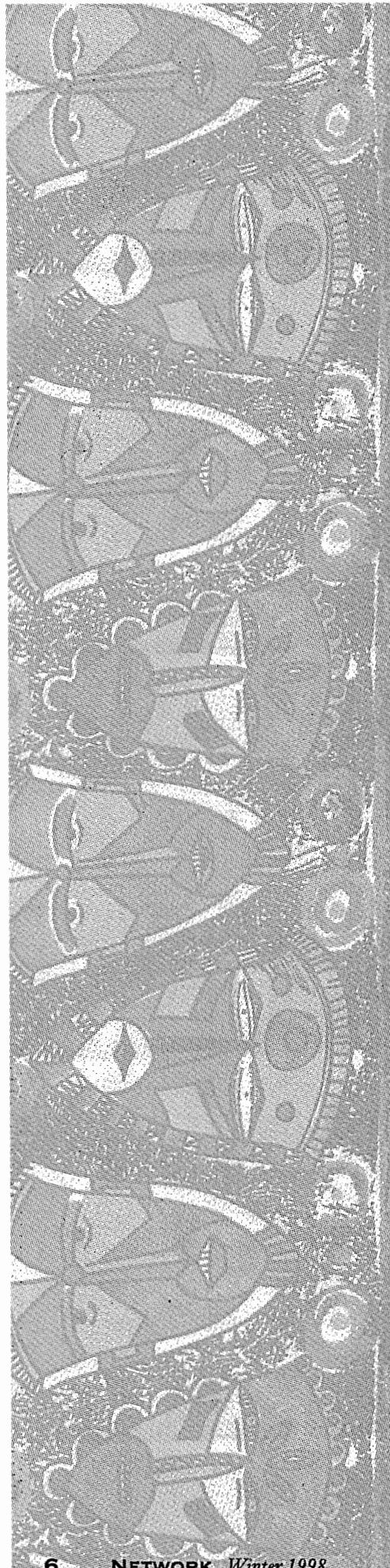
**Reducing costs** can be achieved in a number of ways. Reducing excess capacity in delivery systems, minimizing or reducing

unnecessary procedures, and introducing or emphasizing certain lower-cost contraceptive methods are among ways that have been used successfully.

**Integration of services**, such as providing care for sexually transmitted diseases at family planning clinics, involves many important questions, especially how much integrated services may cost. Cost analysis can guide policy-makers in deciding whether to integrate services.

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# Do Client Fees Help or Hurt?

Charging a fee for family planning services helps recover costs but may discourage use.

**F**ree or fee? Should family planning programs charge clients for contraceptives and services? For decades, programs have expanded access to contraceptives in developing countries by offering no-cost or low-cost services, often subsidized by government or international donor agencies. Developing country governments currently pay 75 percent of the costs of family planning programs, while donors contribute 15 percent and clients pay 10 percent, according to the United Nations Population Fund.<sup>1</sup>

In recent years, these programs have faced increasing demands, which have boosted costs. Managers are being asked to broaden services from family planning to other reproductive health needs, improve quality, serve the poor, and provide a wider array of contraceptive methods. Meanwhile, the number of women of reproductive age has been increasing worldwide at the same time that funding from international donor agencies has been declining.

Programs that depend mostly on international donor funds, typically those that are operated by nongovernmental organizations (NGOs), have few options for increasing revenue. Charging a fee to family planning clients is one strategy for recovering costs. Other approaches include charging clients for related health services, such as laboratory tests, or selling program services, such as training or education, and using a portion of that money to subsidize family planning programs.

“One of the issues for family planning programs is how to keep up with the increasing demand for services,” says Dr. Barbara Janowitz, an economist and director of FHI’s Division of Service Delivery Research. “A ministry of health within the public sector has the potential to replace donor funds with tax revenues, but NGOs do not have that potential. They have to collect revenues by selling services.”

## AVAILABLE TO EVERYONE

Many opponents of fees argue that family planning is a basic human right and an essential health service. “There’s a strong belief among NGOs that what they are doing should be free or low-cost and available to everyone,” says Dr. James Foreit, who has studied financial sustainability in his role as director of the Population Council’s *Investigación Operativa y Asistencia Técnica en Planificación Familiar y Salud Materno-infantil en América Latina y el Caribe (INOPAL) III Project*. “There’s a very basic philosophical belief among some that it is wrong to make money.”

Charging for services may also further limit access to contraception at a time when so many people do not have access to the services they need. Fee collection may be too costly for clinics already struggling to balance resources and demand. Couples who pay for family planning may have to make other sacrifices within the home — reduce

food consumption or increase their working hours. Or couples may rely on less-effective traditional contraceptives.<sup>2</sup>

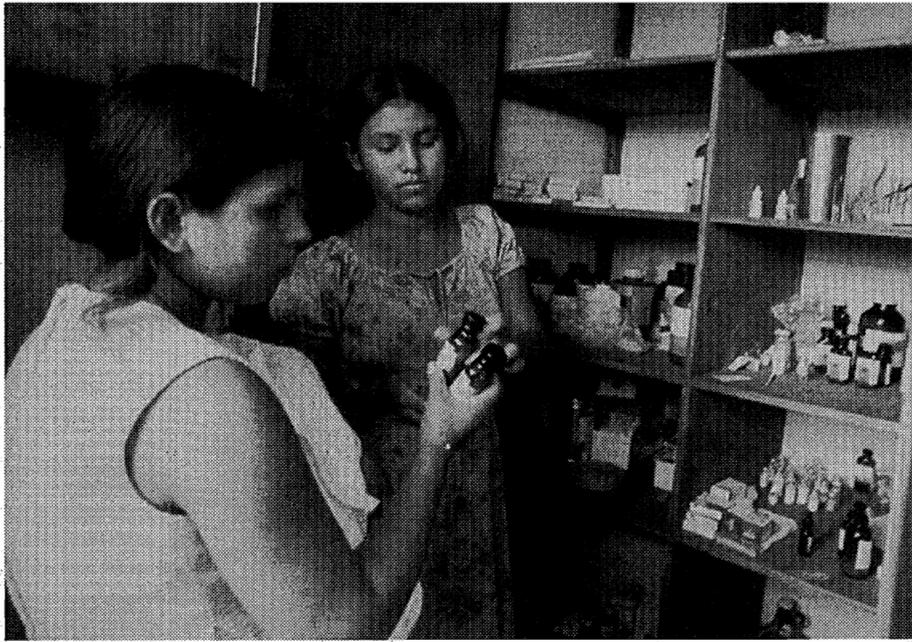
However, revenues generated by fees may also lead to improvements in quality of care, decreased dependence on donor agencies, and increased financial sustainability for individual family planning programs. Fees can be used to broaden access to services, proponents say. Within the public sector, fees can guide clients to low-cost service delivery points (pharmacies instead of clinics, health centers instead of hospitals). Revenues can give program managers greater flexibility in planning clinic activities and more control over clinic policies and services. Fees charged to middle-income clients can subsidize services for the poor and can improve efficiency of services by encouraging competition between the public and private sector.<sup>3</sup>

When setting prices for family planning services, program managers must strike a balance. They must consider the program's need for funds and the client's willingness and ability to pay. Managers must also take into account "elasticity." "Elasticity" is an economic concept that relates demand to price changes. If demand drops sharply following price increases, the relationship is said to be "elastic." If demand is not greatly affected, the relationship is not very elastic.

Some social marketing studies suggest that couples are willing to pay about 1 percent of their income for contraception.<sup>4</sup> In establishing a fee system, Management Sciences for Health (MSH), a U.S.-based organization that provides technical assistance to developing country health programs, recommends that contraceptive prices mirror those of other household items. In the Democratic Republic of Congo (formerly Zaire), a family planning program decided to charge a monthly membership fee that would not exceed the price of two kilos of soybeans. The Responsible Parenthood Associate of Suriname based its annual membership fee on the cost of 12 soft drinks.<sup>5</sup> Others recommend that a clinic charge an entrance fee that is equivalent to a bus fare or charge the same price for a cycle of oral contraceptives as the cost of a liter of soft drink.<sup>6</sup>

One of the central concerns in implementing a fee system or in raising fees is that contraceptive use will decline. AVSC International conducted research in

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CHARGING FEES FOR SOME SERVICES MAY LEAD TO IMPROVEMENTS IN QUALITY OF CARE AND BETTER FINANCIAL STABILITY FOR FAMILY PLANNING PROGRAMS. A WOMAN RECEIVES SUPPLIES FROM A SMALL HEALTH CLINIC IN NICARAGUA.

Mexico, Brazil and the Dominican Republic to examine the relationship between price increases and client use of sterilization.<sup>7</sup> In Mexico, family planning clinics in the cities of Celeya, Juárez and Irapuato raised fees to compensate for a decline in donor funding. The fee for sterilization increased from U.S. \$43 to U.S. \$55, then to U.S. \$60 several months later. The average monthly case load fell 10 percent after the first increase, then dropped 58 percent after the second increase. Some staff members noted that fewer low-income clients seemed to ask for sterilizations.

To determine the impact of price increases on client use of contraceptives, the Centro Médico de Orientación y Planificación Familiar (CEMOPLAF) in Ecuador has conducted a unique study that compared what clients said they would do with what actually happened when prices were increased. The study was done with assistance from the Population Council's INOPAL III Project, The Futures Group International and FHI.

Approximately 7,000 clients at 15 CEMOPLAF clinics were questioned about their ability to pay increased prices through a survey on income, household expenditures and education. The clients also were asked how they would respond if prices for a service were increased by a certain percentage. If a woman said she would continue to pay for the services, she was asked the maximum amount she would pay. If the woman

said she could not pay, she was asked where she would go to seek less expensive family planning services.

Following the interviews, clinics were randomly assigned to one of three groups. For one group, prices of services such as prenatal care, obstetrical-gynecological care and follow-up visits for insertion of intrauterine devices were raised 20 percent. In a second group prices were raised 40 percent, and in a third group prices were raised 60 percent.

For one year, CEMOPLAF monitored visits to its clinics to determine whether increased prices caused a decline in the number of clients seeking services. In addition, CEMOPLAF monitored the economic mix of clients to determine how higher prices affected use by low-income clients.

Preliminary results show there was a decline in the number of clinic visits but no significant change in the client economic mix. The percentage of decline was relatively similar for all three groups of clinics. For the group in which fees increased by 20 percent, client visits declined about 20 percent. For the group in which fees increased 40 percent, the decline was only slightly more, about 26 percent. (No information was collected on women who chose to seek services elsewhere.) The study will be repeated at Asociación Pro Bienestar de la Familia Ecuatoriana (APROFE), another Ecuadorian NGO.

## FEES FOR OTHER SERVICES HELP PAY FOR FAMILY PLANNING

In Ecuador, the Centro Médico de Orientación y Planificación Familiar (CEMOPLAF) has been searching for ways to generate income and recover costs, while increasing clients' access to family planning services and improving quality of care.

One of CEMOPLAF's strategies is charging client fees to recover some of the costs of providing family planning services. Another is subsidizing family planning through income gained from selling ultrasound diagnostic services.

"CEMOPLAF's main mission is to provide family planning services," says Teresa de Vargas, administrative director. "However, CEMOPLAF also offers other health services to increase self-sufficiency and better service to clients. A focus on sustainability does not imply abandoning our social mission."

In 1992, CEMOPLAF began an ultrasound service at a clinic in Quito. The service was established after staff conducted an extensive assessment of potential costs to the clinic for providing this specialized service, possible demand from clients, and expected income during the first five years. Ultrasound was chosen over other services because of the clinic's high number of gynecology and prenatal clients.

The service was so successful at the Quito clinic that managers decided to expand ultrasound to some of CEMOPLAF's 20 other clinics and 12 satellite clinics. However, ultrasound equipment is expensive, as are the costs of training, personnel, materials and supplies. To ensure that services were needed and would be profitable, CEMOPLAF conducted an analysis.

Twelve sites were easily eliminated because estimated client use would be too low and the sites lacked necessary staff. In the remaining clinics, detailed estimates examined demand for services, costs, and projected income. In the end, CEMOPLAF purchased three additional ultrasound machines, and services have proven to be profitable. Prior to the evaluation, staff suggested buying 10 machines, which cost U.S. \$25,000 each. The analysis helped

planning services varied as much as 65 percent among its 21 clinics. Also, the organization learned that one of the clinics with the highest fees served the largest group of low-income clients.

CEMOPLAF concluded that prices were too low in most clinics, deciding to raise prices periodically (twice a year). Also, the difference in charges among clinics is being reduced.

CEMOPLAF is developing plans for greater financial independence because support from donors is expected to decline.

FHI, the Population Council's Investigación Operativa y Asistencia Técnica en Planificación Familiar y Salud Materno-infantil en América Latina y el Caribe (INOPAL) III Project, and The Futures Group International have worked with CEMOPLAF to conduct studies on financial sustainability.

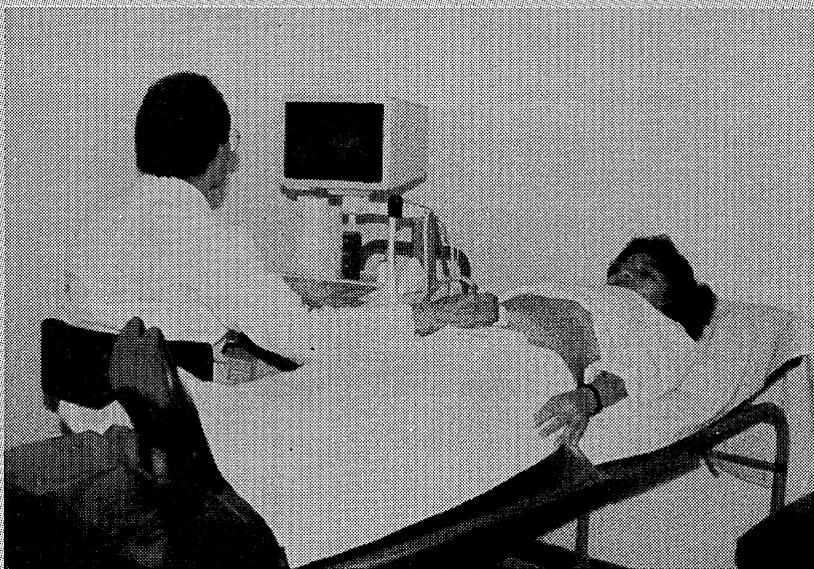
"Some family planning managers may think that just offering a service ensures that it will be profitable, but this point of view is not very realistic," says John Bratt, a senior research associate at FHI, who helped conduct the studies. "There has to be a market for any service, and clients must be willing and

able to pay for it."

The financial gains from ultrasound services and standardized pricing are relatively small, but contribute to a cumulative, long-term commitment toward financial sustainability. In 1997, CEMOPLAF will generate 75 percent of its operating budget from client fees, a significant increase from previous years. "Progress toward sustainability is often measured in small steps," says Bratt.

— Barbara Barnett

CEMOPLAF



A PREGNANT WOMAN RECEIVES AN ULTRASOUND DIAGNOSIS AT A CEMOPLAF CLINIC IN ECUADOR, WHERE FEES FROM ULTRASOUND SUBSIDIZE FAMILY PLANNING SERVICES.

CEMOPLAF make better decisions, based on estimated demand and income, rather than speculation.

In another effort to improve sustainability, CEMOPLAF recently examined its fee structure. Although one of CEMOPLAF's main goals is to serve the poor, a questionnaire given to clients revealed that many were middle- to upper-income. Forty percent of clients owned homes, while 35 percent had completed secondary school or attended a university, and 33 percent sent their children to private schools. In reviewing its charges, CEMOPLAF learned that prices for family

Previous studies to determine the impact of price changes on contraceptive use have often yielded mixed results, in part because different research methods have been used, says Dr. Janowitz.<sup>8</sup> However, the Ecuador study comparison of what clients say and what actually happens in clinics is groundbreaking research that can provide useful information to program managers and health policy-makers, she says.

## HOW MUCH TO CHARGE

Family planning program managers must consider the effect of pricing systems on client demand. However, managers must also consider the effect of pricing systems on the clinic's resources.

"There are several important questions when considering client fees," says Dr. Janowitz of FHI. "First, what is the potential for introducing or raising fees to generate revenue? How do fees affect the number of clients who get services from you? How do fees affect the client mix? If you charge fees or raise fees, will you cut out people at the lower end of the income scale and serve only the middle-class? That's a concern."

For example, will the program charge for all contraceptive methods or selected methods? Will fees apply to methods, services or both? Should fees vary throughout the day to encourage use when staff are less busy?

"The first thing to learn when establishing a fee system is how much things cost," says Alvaro Monroy, director of the Transition Project for the International Planned Parenthood Federation's (IPPF) Western Hemisphere Region, which helps IPPF affiliates become less reliant on donor funding. "Even a donated commodity has a cost. For a [donated] cycle of pills there are administrative costs, staffing costs, the costs that will come when it is replaced by another commodity. A good accounting system is essential."

"Program managers need to understand unit costs," says Sallie Craig Huber, technical director of the Family Planning Management Development Project for MSH, who has worked helping African NGOs establish pricing systems for health services. "How many minutes does the staff spend on a service and what is that time worth? What are the program's fixed costs, its overhead costs? What are the actual costs of contraceptive commodities? Programs

need to understand how much it costs them to deliver a service and how this equates with what they're charging for a service."

FHI is working with NGOs in several developing countries, helping family planning programs measure costs. For example, FHI is working with the Asociación Demográfica Salvadoreña in El Salvador to design a pricing policy based on client ability to pay, competitors' prices and costs of services. The Population Council, APROFE and FHI have carried out a similar study in Ecuador.

"Many NGOs are already charging fees, but the prices may have been determined by unscientific means," says John Bratt, a senior research associate at FHI, who has worked on costing issues in Latin America. "Prices may have been set originally as a symbolic effort to cover some of the costs of services. In many cases, NGOs do not know what it actually costs to provide services."

For programs thinking of implementing a fee system, The Futures Group International recommends considering the political, regulatory and institutional constraints of charging fees (for example, laws or regulations may prohibit selling donated supplies to clients); setting priorities for how revenues will be used; designing a means to protect poor clients who may not be able to afford even a small charge; and carefully monitoring how money is collected and spent.<sup>9</sup>

MSH recommends that program managers ask themselves a variety of questions as they consider a pricing system, including the objective of fees (to expand services, for example, or to become less reliant on donor or government funds). Whether clients can afford to pay and clients' perceptions about the quality of services are among other important considerations.<sup>10</sup>

Announcement that client fees will be implemented or that price increases will take effect should be made months in advance, MSH recommends. Also, programs should explain to clients how the fees will improve services. For example, a program might use fees to reduce waiting times or to offer more convenient hours, and a list of these improvements could be posted in waiting areas.

After user fees have been implemented or increased, program managers should determine how changes have affected client use, recommends the U.S.-based John Snow, Inc. Comparisons of levels of client

use of services should be made six months prior to implementation of the fee system, then several months after the fee system has been in place, to determine the impact of price on demand.<sup>11</sup> Such before-after comparisons were made in the CEMOPLAF study on clients' ability to pay versus willingness to pay.

Another concern for program managers is how to subsidize services for clients who cannot afford to pay. In Peru, the Instituto Peruano de Paternidad Responsable (INPPARES) implemented a sliding scale to waive or reduce fees for low-income clients. Marie Stopes/Population Health Services Program in Kenya developed a checklist to help program managers determine whether clients should be exempt from paying. Poor mothers who were unemployed or working for very low wages were exempt, as were high parity women who could not afford to pay, clients who owned less than an acre of land, school or college students, and workers at tea and coffee estates.<sup>12</sup>

But Dr. Janowitz cautions that establishing exemptions has its problems. "It's not easy to make them work," she says. "If criteria are too strict, people who should get services do not. If criteria are too lenient, you cover people you do not want to." In addition, the approach can be expensive to administer, and can lead to problems if clients discover that different fees are charged for the same service.

One strategy for ensuring that poor people continue to have access to family planning is "cross-subsidization." Charges for other health services, such as lab tests, are used to subsidize family planning services. Since 1991, CEMOPLAF has established 20 laboratories, which provide 35 different services, including Pap smears, tests to diagnose sexually transmitted diseases, pregnancy tests, tests to measure cholesterol levels in the blood, and tests to determine the presence of parasites in the digestive system. The average profit made from lab services is 47 percent, and revenues help finance family planning services.<sup>13</sup>

## PRICING FOR SUSTAINABILITY

Fees can help ensure a steady source of revenue, thus enabling a program to become sustainable as international donor support diminishes. But there is a difference between sustainability of an institution and

## COSTS CAN INFLUENCE FAMILY PLANNING DECISIONS

Men and women who need family planning services often consider whether they can afford them, given other household expenses.

They also weigh potential benefits of family planning against costs to obtain these services, which may include purchasing methods and supplies, traveling time to a clinic, child care during clinic visits and lost work time. And they should consider the future costs of having more children.

Little research has been done on how couples make decisions about spending money on health care. However, a study in the Philippines, supported by FHI's Women's Studies Project, is exploring couples' decision-making, including decisions on family planning expenditures.

Research in Cebu, located in the southern Philippines, found that women typically play the major role in decisions about household expenditures, while decisions about health and family planning are made jointly with other family members. For example, about two-thirds of women in a survey consulted no one else in their decisions to buy shoes or children's clothing, and 43 percent said they consulted no one when taking children to a doctor.

purchases for the household; 90 percent about buying land; 75 percent about hiring household help; and 84 percent about travel outside of Cebu. If conflicts arise, 82 percent of women said they and their spouse arrive at a mutual final decision, while only 12 percent said the husband's judgment prevails.

In decisions about whether to use family planning, most women said they consult others. Only 12 percent of women said they made autonomous decisions about contraceptive use. Unlike other decisions where the spouse was the primary person consulted, some 20 percent of study participants said they talked with other adult females about family planning. Among women who consulted their husbands about family planning, 25 percent of women reported that, in case of conflict, the woman's decision prevailed. Only 7 percent reported that their husband's choice prevailed.

The research was a recent follow-up to the 1983 Cebu Longitudinal Health and Nutrition Survey, a 10-year survey of approximately 3,000 households on contraceptive use and child spacing, as well as maternal diet and infant feeding patterns. The study was conducted by the Office of Population at the University of San Carlos in Cebu and the U.S.-based Carolina Population Center at the

University of North Carolina, with support from FHI.<sup>1</sup>

To gather information for the follow-up study, interviewers named common household decisions and asked women whether they consulted anyone when making these decisions, whom they consulted, whose judgment prevailed in case of conflict, and what women do when they disagree with a decision made by someone else.

Other studies have examined factors that influence couples' decision-making about household expenditures and have found that price is often only one consideration that affects family planning use. A study of rural women, also in Cebu, found that time

spent in obtaining contraceptives was an important factor in women's use of contraception.<sup>2</sup> Research in Thailand found similar concerns about the costs involved in obtaining methods.<sup>3</sup>

A small study, which surveyed 64 women in or near a fishing village in southern India, found that contraceptive prevalence was influenced by women's autonomy rather than income. In the village and surrounding rural area, contraceptive prevalence was 27 percent. Although women living in the village had higher family incomes and better access to health services, their use of family planning was the same as the rural women, who lived in a caste community. Researchers found that the main reason women gave for not using family planning was their lack of decision-making power. Women's age, family size, children's age and birth order affected women's decision-making power and access to money.<sup>4</sup>

A recent study in Pakistan found that a higher level of wives' unearned income — possessions that the wife owns and the husband does not control, such as household goods, land or jewelry — resulted in overall lower fertility for women in both urban and rural areas. Researchers found that if unearned income for rural women increased by 25 percent, compared to unearned income for men, the fertility rate would drop by one child per couple. Researchers recommended that since Pakistan's fertility rate is high — 5.4 children per woman — government policies that put more financial resources in the hands of women could ultimately help improve contraceptive use and lower fertility.<sup>5</sup>

— Barbara Barnett

IMPACT VISUALS/SEAN SPRAGUE



COUPLES TYPICALLY CONSIDER WHETHER THEY CAN AFFORD HEALTH CARE, INCLUDING FAMILY PLANNING SERVICES.

However, women tend to consult others — primarily spouses — about decisions that involved larger expenditures. For example, 86 percent said they consulted spouses about major

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INTER-AMERICAN DEVELOPMENT BANK/DAVID MANGURIAN

BETTER ACCESS CAN BE ONE WAY TO IMPROVE SERVICES BY USING ADDITIONAL FEE REVENUES. FOR EXAMPLE, IT IS OFTEN DIFFICULT FOR RURAL RESIDENTS TO VISIT A DISTANT CLINIC. AS IN MANY PLACES, RURAL RESIDENTS IN THE VERACRUZ STATE OF MEXICO TYPICALLY TRAVEL BY FOOT.

sustainability of a nation's entire family planning effort, notes Dr. Janowitz. At the country level, policy-makers will be concerned with making sure all citizens have access to family planning and may not fund one institution's operations if clients have easy access to family planning elsewhere.

Also, an institution concerned about survival may be willing to eliminate family planning services if they become too costly. The Kumar Warmi (Healthy Woman) program administered by the Centro de Información y Desarrollo de la Mujer (CIDEM) in El Alto, Bolivia, which educates women about health care and human rights, is one example. The program continues family planning education, but a Kumar Warmi family planning clinic that opened in 1986 recently transferred services to another clinic to improve CIDEM's long-term financial sustainability.<sup>14</sup>

Creative strategies have also been used to help subsidize the costs of services and improve program sustainability. In Bangladesh, the Concerned Women for Family Planning (CWFP) established a maternal-child health and family planning clinic, which required income in order to match donor support. CWFP began charging fees for clinic services on a sliding scale, based on clients' ability to pay, although no client was denied services. CWFP also opened a restaurant and catering service, a laundry and a beauty parlor. These activities served the dual purpose of providing jobs for local women and generating income for the organization.<sup>15</sup>

The Fundación Mexicana para la Planificación Familiar (MEXFAM) in Mexico has increased fees for family planning and has begun selling training materials as part of IPPF's Transition Project. MEXFAM officials predict that this year the clinic will be 34 percent self-sufficient, compared with 13 percent five years ago.

PROFAMILIA in Colombia began as a single clinic in Sante Fe de Bogotá but has expanded to 48 clinics in urban and rural areas, recovering 50 percent of its total costs through the sale of medical and surgical services and a social marketing program. Income is used to help subsidize family planning programs.<sup>16</sup>

One of the advantages of charging fees is that it can lead to improvements in quality of services, says Dr. Foreit of the Population Council. "At the moment you start charging people, the client becomes the primary user of the service. You have to please him or her, and your quality becomes the quality that person demands. Services that are offered become the services users want, not the services other people think the clients should have. One of the 'side effects' of sustainability is that it empowers the user."

Improvements in quality were one of the benefits observed in IPPF's Transition Project. The project was completed earlier this year, and one of the changes is that programs are more client-oriented, says Monroy of IPPF. "There is more sensitivity about the needs of the clients. Providers now

ask people what they want, how they feel, if all their questions have been answered. In the past, providers used to call people by a number, but those days are gone."

— Barbara Barnett

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# Commercial Sector Can Improve Access

Convenience and quality are among reasons people are attracted to private physicians, clinics or pharmacies.

**E**ncouraging commercial family planning services for people who are able to pay is one way to improve services for those who cannot pay, experts say. By attracting some clients to the commercial sector, public resources can be used more effectively to serve lower-income clients.

“Governments need to identify their most appropriate role. They need to provide free services for those who cannot afford them, but in a lot of countries, middle-class people use these free government clinics as well,” says Robert Bonardi, who was deputy director of the recently concluded Promoting Financial Investments and Transfers (PROFIT) project, an effort that coordinated private sector initiatives throughout the world.

Few developing countries, however, have a viable commercial market for contraceptives. Well-trained commercial providers, a dependable supply system for commodities and a pool of potential customers are needed for a commercial system to succeed. “You have to convince consumers that the private sector can be advantageous to them, that these services are affordable, high-quality and convenient,” says Bonardi. “Governments can play a supportive role by ensuring that regulations do not hinder the private sector and that public programs do not compete with the private sector in counterproductive ways.”

The commercial sector may include physicians, clinics, pharmacies or hospitals that are generally financially independent of ongoing government or donor agency subsidies. Public funds might be used, however, to stimulate consumer interest in the commercial sector.

Across varying cultures and political systems, researchers have identified a few common factors that seem to be crucial to commercial success. These include the level of urbanization, the number of physicians per capita, and the extent of free contraceptive services available. “Because family planning is a relatively specialized market, a large enough client base in an urban area needs to exist in order for a commercial medical practice or clinic to survive,” says William Winfrey of The Futures Group International, a U.S.-based organization. Also, places where there are more doctors per capita tend to have more physicians working in the private sector, making a commercial effort more viable. Where people have access to free contraceptives, says Winfrey, “they have little or no incentive to pay for the same products at a commercial facility” unless other aspects are appealing, such as convenience. Winfrey has found no association between a country’s contraceptive prevalence and commercial sector involvement.<sup>1</sup>

The commercial sector has generally been slow to expand into the family planning field because of free public services, lack of information and training, legal restrictions

and other reasons. Free contraceptives reduce the competitiveness of the private sector, notes Dr. Jaikishan Desai, formerly a Futures Group International research analyst. Moreover, promoting contraceptive services through advertising is rarely done where services are free or at low cost. Since advertising is a powerful motivating force among consumers deciding how to spend disposable income, lack of advertising makes commercial interest less likely.<sup>2</sup>

#### CONVENIENCE AND ACCESS

Despite these obstacles, a strong commercial market in family planning has evolved in a few developing countries, mostly in Latin America, North Africa and the Middle East. The commercial sector provides about 60 percent of contraceptives in Bolivia and Paraguay and more than 40 percent in most other Latin American countries, as well as in Turkey, Egypt and Jordan.<sup>3</sup> While the commercial sector is generally small in other regions of the developing world, some governments have recently made commercial involvement a priority.

For the commercial family planning sector to survive and expand, consumers must have incentives to use these services. "These consumers prefer private sector services because of convenience, greater access, better confidentiality and quality," says Don Levy, director of the Future Group's Social Marketing for Change (SOMARC) project. For example, he says, consumers prefer using the same doctor regularly and receiving private, personalized service, as long as the price remains affordable. "Our expansion in the direction of clinical services through the private sector demonstrates that affordable services for intrauterine devices (IUDs) or sterilization, for example, are much preferred to less expensive public services."

Analysts debate the viability of expanding the commercial market in countries where contraceptive prevalence is very low, especially in sub-Saharan Africa. Some say the level of consumer interest is insufficient for a viable commercial sector. Another perspective, says Winfrey, "is that the commercial sector can be leveraged, from the earliest stages of program development, to foster program growth in terms of increasing both contraceptive prevalence and sustainability."

A recent review of family planning costs and financing in sub-Saharan Africa found that many countries do not encourage the private sector. "Many of the constraints to commercial sector expansion in sub-

In Sudan, for example, the government placed oral contraceptives on its list of essential drugs, reducing import barriers and improving supply. In Senegal, after a meeting between the Ministry of Health and the National Association of Pharmacists, the tariff on imported condoms was abolished.<sup>4</sup>

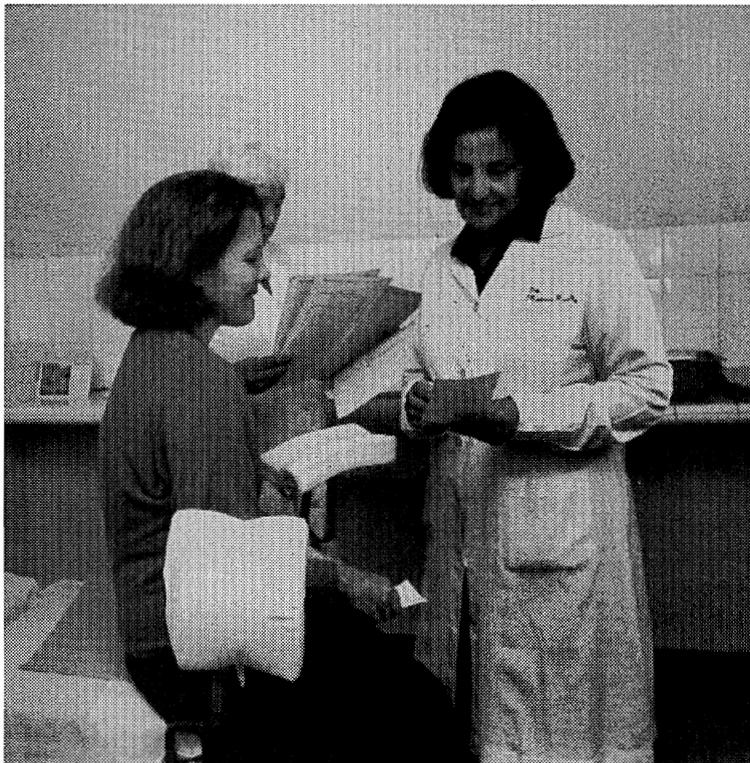
#### TRAINING PRIVATE PROVIDERS

Some donor agencies and government health ministries help train private-sector providers in family planning. Some also help to develop employer-based services. Projects in Zimbabwe, Romania, Indonesia, Jamaica and Turkey illustrate various approaches under way.

The Zimbabwe National Family Planning Council (ZNFPC), which coordinates public family planning clinics, is training private doctors, nurses, midwives and pharmacists in family planning information and skills. The project has also worked closely with two medical insurance companies to publicize the fact that coverage is available for family planning services, and it is encouraging pharmaceutical companies to sell commodities at a low cost to the private sector.

"The public sector was unable to meet all the demands because people who can afford to pay for contraceptives are using the free clinics," says Roxana Rogers, family planning advisor for the U.S. Agency for International Development

BERYL GOLDBERG



A STRONG COMMERCIAL MARKET IN FAMILY PLANNING HAS EVOLVED IN SOME COUNTRIES, INCLUDING MOST IN LATIN AMERICA. A WOMAN VISITS A PRIVATE PHYSICIAN'S OFFICE IN MONTEVIDEO, URUGUAY.

Saharan Africa stem from a lack of appreciation of the potential for public-private collaboration in service delivery or financing," explains Dr. Barbara Janowitz, who directs FHI's research on economic issues. "The government must sign on to any effort to improve the environment for commercial sector expansion if it is to be effective."

Some African countries are seeking to eliminate laws, regulations and other structural barriers to private sector involvement.

(USAID) in Zimbabwe and a member of a coordinating committee of physicians, pharmacists, retailers and others planning ways to encourage commercial services. "People were already shifting to the private sector, but in an uncoordinated way. We were able to make this happen in a quicker way."

An assessment of the commercial sector found that 6 percent of Zimbabwe's population is covered by medical aid societies, a form of private insurance. While most of the

groups offer coverage for family planning, few members use this option. Moreover, most private clinic managers did not know they could submit claims for family planning services to the medical aid societies. The project also encouraged companies that have nurses for their employees to send the nurses to a four-week course on family planning services. And, nearly 200 peer educators have been trained at eight companies to talk especially with men about family planning issues.<sup>5</sup>

A consumer information campaign is emphasizing quality and convenience. "We need to let women know that they can get good quality services from private providers," says Rogers. "We also need to help the providers have access to low-cost contraceptives in the commercial sector." In 1997, the coordinating committee worked closely with the Ministry of Finance to reduce the tariffs on contraceptives.

#### PHARMACISTS AND MIDWIVES

Two groups of commercial providers that are often underutilized are pharmacists and midwives. The Zimbabwe project trained 90 private pharmacists in providing family planning services. It also developed a quick reference guide for pharmacists on contraceptives, communication and counseling skills, and business practices, and distributed it to more than 300 pharmacists. The reference guide was endorsed by the Ministry of Health, ZNFPC, University of Zimbabwe Medical School and the Retail Pharmacist Association (RPA). "This project provided the coordination we needed," says Andrew Vaughn, RPA vice-president. "We did not have the time and resources to take these steps on our own."

The project also assisted six model pharmacies to have a nurse on hand for family planning counseling and minimum screening tests in a quiet, private space. In Zimbabwe, pharmacists can dispense contraceptives.

A project in Romania involved the National Pharmacists Association, the University of Bucharest Department of Pharmacy and a local ad agency. Coordinated by PROFIT, it sought primarily to involve young people in family planning. The project trained 195 private pharmacists, almost all of them women, and developed an easy-to-read resource book summarizing contraceptive technology, distributed to 3,500 pharmacists.



A ROMANIAN BROCHURE USES THE SLOGAN, "LOVE CAREFULLY — YOU CAN CHOOSE WHEN TO HAVE A CHILD."

An information and ad campaign used television, radio, print media, brochures and special events to encourage young women to buy contraceptives at pharmacies, using a silhouette of a young man and woman and the slogan, "Love Carefully — You Can Choose When to Have a Child." From 1996 to 1997, the sale of oral contraceptives at private pharmacies increased 25 percent. Also, a survey comparing 67 trained pharmacists with 102 pharmacists without training found that those with training demonstrated more knowledge about mechanism of action, correct use, side effects and effectiveness.<sup>6</sup>

In some countries, midwives could provide more contraceptive services. The Indonesian health ministry has trained midwives, but there are not enough public-sector jobs for all of them. To bolster the involvement of these midwives in the commercial sector, a U.S. \$1 million revolving loan fund project in Indonesia was implemented through a midwives association, the national family planning program and a major bank. PROFIT supplied half the money for the loans, with the bank providing the other half, allowing relatively low interest rates for loans to renovate clinics, buy equipment or purchase supplies. Some midwives used loans to establish a new practice.

Among the 372 midwives who participated, most borrowed the maximum amount of U.S. \$2,300 for 36 months. Only 6 percent of the borrowers were from villages, despite efforts to encourage village participation. In addition to attracting public sector clients, the project may be expanding overall contraceptive use. About 12 percent

of the borrowers' new clients had previously used public sector sources, while more than 75 percent had never used family planning. The remaining new clients had previously seen other private providers.<sup>7</sup>

Midwives and pharmacists can help expand commercial sector involvement, concluded PROFIT. "Pharmacists can be effective family planning educators, particularly in countries where they can sell contraceptive pills without a doctor's prescription," PROFIT said in a "lessons learned" report, written when the USAID-funded project ended in 1997. Similarly, PROFIT found that midwives in Indonesia, Philippines and Zimbabwe had a "strong desire to expand into the private sector and a strong need for assistance to do so."

#### PRIVATE PHYSICIANS

Innovative means to get private doctors involved is also needed, such as targeted training programs. In the Caribbean country of Jamaica, some 200 private physicians have attended a series of continuing medical education seminars on family planning methods over three years. USAID funding for family planning has been gradually declining in Jamaica, putting more pressure on the National Family Planning Board to find ways to engage the commercial sector.

Jamaica has high contraceptive prevalence (67 percent) and a substantial middle class that can afford to pay for family planning services. Yet few private physicians have been providing these services, since free commodities have been available at public clinics. An assessment found that private doctors opposed using some methods because of a lack of knowledge. For example, 24 percent of those surveyed thought incorrectly that the injectable depot-medroxyprogesterone acetate (DMPA) was unsafe and 16 percent believed incorrectly that it resulted in permanent fertility problems.<sup>8</sup>

The Medical Association of Jamaica, which has chapters throughout the island, working with the National Family Planning Board and FHI, developed a series of training seminars for private physicians. FHI has conducted eight seminars covering reproductive physiology, an overview of all modern contraceptive methods and special issues, such as family planning for adolescents. More than 70 physicians who attended at least six

of the eight seminars received certification in family planning through the Medical Association of Jamaica.

"We know the interest among private physicians for offering family planning is high," says Lynn Adrian of FHI, who worked with the project. "We hope this interest will result in substantially more commercial-sector provision of services."

## SOCIAL MARKETING

Social marketing has successfully involved the private sector in contraceptive distribution, especially the distribution of condoms to prevent the spread of sexually transmitted diseases, including HIV.

Social marketing uses commercial marketing strategies for a social purpose, usually selling the product at a subsidized rate. A

appealing logo and packaging build a loyal clientele.

In several projects, this social marketing model has been expanded to promote providers as well as specific products. In Turkey, for example, SOMARC developed a network of commercial health-care facilities to offer high quality family planning services at affordable prices. Called Kadin Sagligi Ve Aile Planlamasi Hizmet Sistemi (KAPS), which means Women's Health and Family Planning Service System, the network includes more than 150 outlets in Istanbul. The Turkish Family Health and Planning Foundation (TFHPF), Marketing Systems and AVSC International are partners in the effort.

discouraged use. Several hospitals reduced sterilization fees by 30 percent, for example, and KAPS members agreed to post a price board in the reception area, making consumers aware of available services and prices. KAPS operates a telephone hotline to answer family planning questions. Also, local community promoters contact women to tell them about services.

Client surveys found that the portion of postpartum clients who received family planning information went from virtually no counseling to 31 percent after the network's first year.<sup>9</sup> "The services network is evolving, being improved and revised," says Levy of SOMARC. "The model is being tried in Nepal and the Philippines."

— William R. Finger



OSSIE HAMILTON

A PARTICIPANT ASKS QUESTIONS AT A MEDICAL ASSOCIATION OF JAMAICA CONTRACEPTIVE TECHNOLOGY UPDATE SEMINAR FOR PRIVATE PHYSICIANS, NURSES AND OTHERS. FHI AND THE NATIONAL FAMILY PLANNING BOARD OF JAMAICA ASSISTED WITH THE SESSION.

typical project develops a network of outlets for selling contraceptives, building consumer awareness of the product through advertising, often using a logo or symbol that can be displayed at participating pharmacies and shops. In Uganda, while millions of condoms are given away free through the public sector, a social marketing program still sells millions more per year by targeting

The project recruited providers for the network, developed a site assessment form to monitor quality, and in order to promote quality practices, required those providers who wished to belong to KAPS to send their staff to a three-day training program.

It negotiated with the members of the network to reduce their fees because consumer surveys showed high prices

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# Cost Analysis Serves Many Purposes

All resources must be examined, especially the use of staff.

An analysis of family planning program costs can be performed for different reasons. A cost analysis might be used to make major decisions about a national family planning program, for example, or even to compare the benefits of a national family planning program with other social programs.

Cost analyses can also be tailored to examine smaller issues, such as comparing different services within a program or clinic. Examples of these studies include an analysis of adding Norplant to family planning programs in Thailand and whether to change the number of follow-up office visits for intrauterine device (IUD) users in Ecuador.

Cost studies need to consider all resources involved, especially the use of staff. Some costs are relatively easy to measure, such as the cost of supplies. However, determining the cost of staff time needed for a specific service involves on-site research.

"You need to find out how staff members spend their time," says Dr. Barbara Janowitz, who directs economics research at FHI. "The only way to do that is to go to the clinic or delivery site. This is the critical element in a cost approach that sees the program as a system — using specific resources to produce desired services." Dr. Janowitz and her colleagues developed a guidebook to assist program managers in using such a system analysis framework.<sup>1</sup>

## BETTER USE OF STAFF

The Mexican government, working with FHI, analyzed a national system that provides 16 percent of all family planning services in Mexico. A more efficient use of staff could substantially increase the number of clients served, the study suggests.

The study found that nurses work an average of about 6.5 hours a day and physicians about 6.25 hours a day, totals that include personal break time. Government officials say a reasonable work day should be eight hours. Also, the health workers spend less than half of their time providing direct services to clients (nurses, 38 percent; doctors, 47 percent). Meetings, administrative duties, unoccupied work time and personal time account for much of the remainder.

By increasing the workday to eight hours and increasing the portion of time with clients to two-thirds of a provider's work day, "efficiency can be increased to accommodate growing demand within the current service delivery system up to the year 2010," the study concluded. This would allow the system to expand services from the current 1.5 million couple years of protection (CYPs) to 1.8 million CYPs in 2010 without additional staff. The CYP cost averaged for all contraceptive methods would decline from about U.S. \$26.40 in 1995 to about U.S. \$24 in 2010.

The study showed "how the Ministry of Health can contain program costs while continuing to meet the needs of a population that is still growing," says Dr. Gregorio Pérez-Palacios, director general of

reproductive health for the Mexican Ministry of Health. The study also found that CYP costs could be reduced by increasing the number of contraceptive units (oral contraceptives and condoms) provided at each clinic visit and by switching from a one-month injectable to a three-month injectable.<sup>2</sup>

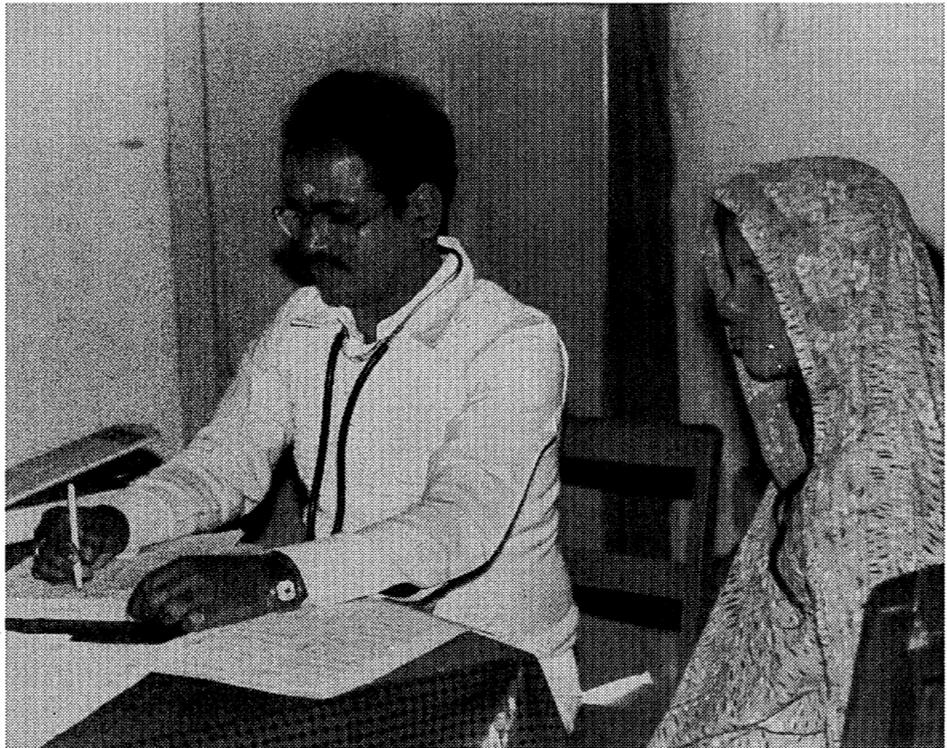
Ten research teams observed physicians and nurses in hospitals, urban and rural health centers and health auxiliary units. The cost of provider labor was estimated, and this cost, plus costs for capital, commodities and other expenses, allowed calculation of CYP costs for different contraceptive methods.

Like Mexico, contraceptive prevalence has grown rapidly in Bangladesh, from 8 percent in the 1970s to 45 percent in the current decade. Bangladesh officials, working with FHI, examined the capacity of its family planning outreach and clinic systems, assuming a continuing increase in the demand for services.

As in Mexico, this study observed how staff spend their time, using that and other data to calculate the CYP cost for each method. Government field workers spent about 3.75 hours a day working, with about two-thirds of that time traveling and one-third with clients. Unauthorized leave accounts for about 20 percent of the cost of a field worker providing family planning services, based on a surveillance of whether field workers actually worked and, if so, the length of time they worked.

If field workers eliminated absenteeism and increased the time they worked each day by one hour, the labor cost per CYP for the pill would decline by about one-third, from U.S. \$3.05 to U.S. \$1.97. With this better use of staff time, the number of field workers needed by the year 2004 would be only 17,118, a decline from the 23,500 employed in 1994. However, each worker would be responsible for almost twice as many couples, to 1,382 couples from the current 719 couples to visit per year. With no change in work patterns, the program would have to increase the number of field workers by more than a third, to 32,861 field workers, with the cost going from U.S. \$24 million to U.S. \$33 million.

"Increased productivity would enable the existing systems to meet the projected demand in 2004," concludes an FHI study. But maintaining good quality services and good management approaches are also critical, the study says. "An important question is



COST STUDIES NEED TO CONSIDER ALL RESOURCES, ESPECIALLY THE USE OF STAFF TIME. TIME AVAILABLE TO SERVE CLIENTS IS INFLUENCED BY OTHER DUTIES, INCLUDING THE NEED TO ATTEND MEETINGS OR PERFORM ADMINISTRATIVE TASKS. A WOMAN RECEIVES COUNSELING AT A FAMILY PLANNING CLINIC IN NEPAL.

whether these changes are realistic, in that they assume an increased work effort on the part of field workers."<sup>3</sup> The study does not address how absenteeism would be reduced and added work time increased by the government. It points out, however, that a similar study found that field workers at nongovernmental organizations (NGOs), whose salaries are similar to government field workers, were absent less often and spent more time making home visits than the government workers.<sup>4</sup> This suggests that NGOs may offer motivation factors that could be duplicated among government workers, encouraging better performance.

### SPECIFIC DECISIONS

Cost studies can also be done on specific issues facing program planners or policy-makers, such as whether to introduce a new method or revise guidelines for an existing method.

A study in Thailand found that the labor, supply and commodity costs of the contraceptive implant Norplant would total U.S. \$9.40 per CYP, compared to about U.S. \$5 for

injectables and U.S. \$1.40 for the IUD. Moreover, almost all of the new Norplant acceptors interviewed in the study indicated they would have used another modern method if they did not have access to Norplant. Hence, it would be less expensive for the government to supply injectables and IUDs instead of Norplant. The government had to decide whether to purchase Norplant for widespread distribution, even though less costly alternatives were available; charge users higher prices; or limit Norplant to certain groups, such as women in remote areas or to those who had completed their families and did not want to be sterilized.<sup>5</sup>

"Soon after the introduction of the method, the policy was to provide the implants to a few target groups of users in remote areas, not nationwide," says Dr. Kanchana Kanchanasinith of the Thailand Ministry of Public Health. The policy was influenced by limited supplies and high demand. More recently, enough supplies have been available to serve all appropriate clients who requested Norplant. Women pay about 20 percent of the cost of the device (about U.S. \$4.27 of the \$19.25 commodity cost).

## WAYS TO EVALUATE STAFF

Evaluating how staff use their time can be done different ways. One approach is to ask staff members to record how they spend their time. Another way, called "patient flow analysis," collects time data from clients, by having each staff member enter time of arrival and departure on a form carried by the client as the client moves through the clinic.

Yet another approach, more expensive and time consuming, is known as a "time-motion" study, based on actually observing how personnel spend their time.

In general, the time-motion approach to cost analysis, in which staff are observed, tends to be more accurate, says John Bratt of FHI, who has coordinated several large cost studies. Unproductive staff time tends to be recorded more accurately using this approach.

A recent study compared the provider interview and patient flow analysis approaches to actual time observed in clinics, a time-motion model. "The provider interview approach was particularly weak, substantially overestimating contact time with clients and underestimating non-productive time," says Bratt, who coordinated the study with the Population Council. "The magnitude of error in these estimates calls into question the validity of studies that use provider interviews for measuring staff time."

The researchers were hoping the study would provide a way to substitute less costly methods of time measurements for time-motion studies. "But the outcome indicates that these other methods perform far less well than does the time-motion method," Bratt says. "We are now looking at ways to use time-motion in a small number of sites and extrapolate from that to the full system. But we need to do more research to see if that is as reliable."

—William R. Finger

A STUDY IN MEXICO CONCLUDED THAT EFFICIENT USE OF FAMILY PLANNING PROVIDERS COULD ACCOMMODATE A GROWING DEMAND ON SERVICES THROUGH THE YEAR 2010. A WOMAN TRAINED TO GIVE FAMILY PLANNING INFORMATION VISITS A CLIENT AT HER HOME IN MEXICO.

Analysts have pointed out weaknesses in depending entirely upon the CYP measurement when making decisions about services. CYP does not take into account the different failure rates during normal use from one method to the next, for example, nor do they consider other important aspects, such as a client's need to use condoms or other barrier methods to protect against sexually transmitted diseases or clients' perceptions and preferences.<sup>6</sup>

A study in Ecuador with Centro Médico de Orientación y Planificación Familiar (CEMOPLAF) examined potential cost savings in reducing the number of required follow-up visits for IUD users without endangering a woman's health. The study, which interviewed some 5,000 women, found that one follow-up visit would detect 66 percent of the health problems, while the required four visits would detect 73 percent of the problems. Changing to a one-visit standard allowed substantial savings.<sup>7</sup> CEMOPLAF made the change, allowing staff to provide other services, including more care to clients who experience problems. At the same time, the program emphasized to IUD users that they should return for a follow-up visit if they noticed any abdominal pain.

In Honduras, the Asociación Hondureña de Planificación de Familia (ASHONPLAFA), working with FHI, found that its two largest clinics produced

68 percent of the clinical services provided in 1991. Four smaller clinics accounted for the remaining use and generally had the same fixed costs. This meant the average cost per client was much higher in smaller clinics. Finding ways to increase utilization of the four smaller clinics would spread out the fixed costs among more visits and thus reduce average costs.<sup>8</sup>

## COMPARED TO OTHER SERVICES

Some cost studies compare the value of family planning to other health costs.

A cost-benefit analysis in Mexico examined whether the Instituto Mexicano de Seguro Social (IMSS)'s family planning services saved IMSS money by reducing the load on its maternal and infant care service. The study used cost data from 37 IMSS hospitals and 16 clinics. The study found that for every peso IMSS spent on family planning services in its urban population during a 12-year period, it saved nine pesos on maternal and infant care services, averting 3.6 million births during the study period.<sup>9</sup>

A recent study in the United States compared the costs of 15 different contraceptive methods to the health costs of using no method, and found that all methods were less costly compared to the health costs of unintended pregnancies when using no method. The study also concluded that

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"up-front acquisition costs are inaccurate predictors of the total economic costs of competing contraceptive methods."<sup>10</sup>

A recent study in Great Britain found a similar result, reporting that all contraceptive methods resulted in net savings to the National Health Service because family planning services are less expensive than all outcomes from unplanned pregnancy, with additional savings through the avoidance of income maintenance and social welfare provision arising from unplanned pregnancies.<sup>11</sup>

These studies included insurance costs for health care associated with unwanted pregnancies, which involved insurance systems that are unique to the United States and Great Britain. Even so, the studies have implications for developing countries, where many governments essentially pay the health-care costs that private insurance supports in some western countries.

Other reproductive health issues have also been examined. In a recent study in Tanzania, researchers from the London School of Hygiene and Tropical Medicine and elsewhere concluded that the cost-effectiveness of intervention to prevent

HIV infections compared favorably with other successful preventive medicine programs, such as childhood immunization efforts. The scientists compared the costs of intervention to the number of HIV infections prevented to reach this conclusion.<sup>12</sup>

— William R. Finger

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## News Briefs

Continued from page 2

HIV antibodies. They were then screened for p24 antigen, an HIV core protein, which can detect HIV-infected blood several weeks before HIV antibodies first appear.

"With p24 antigen screening, we can identify HIV infections much sooner after they occur and, thus, get a more accurate picture of risk factors and symptoms of acute HIV infection," explains senior author Dr. Thomas Quinn of NIAID.

Clinical symptoms among p24 antigen-positive patients included fever, night sweats and joint pain. However, symptoms such as enlarged lymph nodes, oral thrush, diarrhea and rash, which previous studies have linked to acute HIV infection,

were not clearly associated with the presence of p24 antigen in patients' blood.

"Our data suggest that many of the previously described signs and symptoms of acute HIV infection may be relatively nonspecific, particularly in developing country settings where other endemic diseases with similar symptoms are more common," Dr. Quinn and his colleagues conclude.

### PROTOTYPE FORMS GEL BARRIER

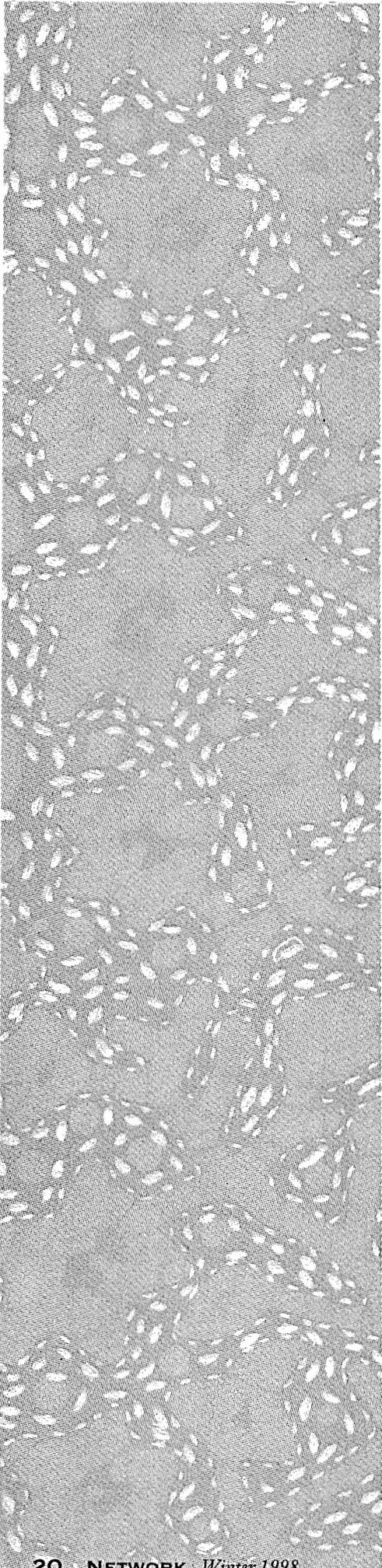
Canadian scientists say they have developed a promising prototype of a new kind of barrier method for women that may protect against the transmission of HIV and other sexually transmitted diseases.

Developed over seven years at Laval University's Infectious Diseases Research Center, the prototype is applied as a polymer-based liquid that solidifies into a gel at body temperature. A woman or male homosexual partner would apply the liquid to genital or anal parts before a sexual encounter, similar to the way spermicides are used.

Laboratory tests show that the non-toxic gel forms a film that physically blocks the transmission of HIV, the virus responsible for AIDS, and HSV, the virus responsible for genital herpes. Studies are in progress to determine how long the gel remains effective after its application and to see if the gel can act as a contraceptive.

"We hope this will lead to a successful product that can protect women when their male

partners refuse to wear latex condoms," says Dr. Michel G. Bergeron, director of the infectious diseases research center at the university in the city of Quebec. "It can be used without telling a partner who does not want to use a latex condom." Clinical trials involving humans are expected to begin soon, Dr. Bergeron says.



# Integrating Services Involves Cost Issues

Integrating STD care with family planning can make services more accessible while also reducing costs.

Responding to clients' needs and appeals from women's advocates, health providers are searching for ways to integrate care for sexually transmitted diseases (STDs) with family planning programs.

An important question in integrating STD care is how much new services will cost. Conducting cost analyses can guide policy and provide details for program budgets.

The 1994 International Conference on Population and Development in Cairo called for a comprehensive approach to reproductive health, rather than a narrow focus on family planning. Preventing and treating STDs is considered crucial to this approach because some STDs enhance transmission of the deadly virus that causes AIDS, a major health concern worldwide.

More than 330 million new cases of curable STDs develop every year and, besides increasing HIV transmission, they cause pain and infertility in both sexes. However, women are biologically more susceptible to STD infection, less likely to show symptoms and harder to diagnose. Women also face harsh consequences, including pelvic inflammatory disease (PID), cervical cancer and death. STD-infected pregnant women risk ectopic pregnancy, miscarriage, premature delivery and stillbirth, and their infants may develop pneumonia or blindness, or they may die. All of these risks are costly to individuals and to society in terms of medical expenses and lost productivity.

STDs already influence family planning services. A woman infected with or at risk of an STD should not use an IUD, for example. Barrier methods — especially condoms — are a more appropriate recommendation, since they can protect against STDs, or clients at risk may wish to combine condom use with another contraceptive. In addition, some women incorrectly interpret reproductive tract infections as a side effect of their contraceptive method, says Dr. John Townsend, a Population Council senior associate in India. Integrating STD care with family planning may mean better care for clients, longer contraceptive continuation, and higher savings for family planning programs because of fewer unnecessary visits, he says.

On a policy level, cost analysis can point out the relative costs and benefits of STD services and indicate how they should be funded. While treating STDs can save money in the long-term, the cost of maintaining laboratories, training staff and supplying drugs can burden health budgets that may already be overextended. For example, an FHI study by the AIDS Control and Prevention (AIDSCAP) Project in five Bangkok clinics found that offering STD services cost an average of U.S. \$19 to U.S. \$25 per patient, while the Thai government was spending only U.S. \$20 per capita on all health needs at the time.<sup>1</sup>

But policy-makers also must be aware of benefits, even those that cannot be quantified, says Steven Forsythe, health economics officer at AIDSCAP. "If you are doing a

cost analysis, you should make sure that you not only emphasize costs, but the benefits being achieved," which include lower long-term medical costs, increased productivity, savings to employers and a reduction in pain, suffering, infertility and mortality for individuals, he says. These benefits often do not show up on a family planning program's balance sheet but should be considered at policy levels, experts say.

"Of various [health] investment options, reproductive health interventions rank among the 'best buys' available," according to Iain Aitken and Laura Reichenbach of the Harvard University School of Public Health, who studied programs in Africa and Asia.<sup>2</sup> And STD treatment ranks as one of the least expensive of these reproductive health options, per year of healthy life saved.

An FHI report concludes that many international organizations consider STD care an essential component of a comprehensive reproductive health program, but they disagree about which services to offer. The study urges policy-makers to plan comprehensive reproductive health programs methodically, by identifying national health goals first, followed by making decisions on which new reproductive health services are needed to achieve the goals. Next, countries should examine funding requirements and sources of funding, followed by a strategy for implementing new services.<sup>3</sup>

### COST-EFFECTIVE SERVICES

For programs, cost analysis can be used to decide whether STD services fit into the budget, which of several interventions will be most cost-effective, and how to make services sustainable. "Sustainability should be built into project planning from the very start," Forsythe says. "Planners should identify ways of sustaining services, and not wait until after funding has disappeared." In the course of analyzing costs, keeping a focus on clients' needs and quality of services is important, experts agree.

Integrating STD care with family planning can make services more accessible, reach a network of sexually active women and reduce costs. For example, a study by the Population Council in Mombasa, Kenya clinics

run by the Mkomani Clinic Society found that offering STD services to a symptomatic client who requested oral contraceptives during the same visit cost about U.S. \$8.60, while offering the services separately cost U.S. \$12.40. The difference, which did not include startup expenses for integration, was due primarily to savings in overhead and staff costs.<sup>4</sup>

Deciding which services are most cost-effective is essential. The best approaches for evaluating cost-effectiveness take into account local STD prevalence, cultural setting and clients' needs, in addition to available resources. The most appropriate and cost-effective approach for some family planning programs may be referring clients at risk to STD clinics. Another simple, often less expensive route to addressing STDs is prevention — education and condom distribution — which has been widely used for HIV control. Still other clinics are moving to evaluate, diagnose and treat clients, and even notify their partners.

However, only a few detailed studies have examined costs to determine which of such interventions would be the most cost-effective — solving a given problem using the least amount of money.

In the United States, chlamydial infection is the most common bacterial STD, with about 4 million new cases each year. As with many other STDs in women, chlamydial infection is often asymptomatic — most infected women show no signs of having it. However, the infection can lead to PID, infertility or other serious sequelae, so family planning clinics have been searching for an effective way to screen and treat women for it.

In one study conducted in the Pacific Northwest region of the United States, researchers wanted to find out whether selective or universal screening for chlamydia would be more cost-effective. They evaluated more than 11,000 family planning clients and 19,000 STD clients with a pelvic exam, and asked questions about age and sexual history. Then they tested all clients for *Chlamydia trachomatis*

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INTEGRATING STD CARE WITH FAMILY PLANNING CAN MAKE SERVICES MORE ACCESSIBLE, AS WELL AS REDUCE COSTS. WOMEN AWAIT SERVICES AT A FAMILY PLANNING CLINIC IN GUATEMALA.



LABORATORY TESTING TO IDENTIFY STD INFECTIONS IS EXPENSIVE BUT RELIABLE. IN ONE OF THE FIRST STUDIES TO EXAMINE COSTS OF DIFFERENT DIAGNOSTIC STRATEGIES, ALL STRATEGIES EXCEPT LABORATORY TESTING MISSED A SIZEABLE NUMBER OF INFECTED WOMEN AND INCORRECTLY DIAGNOSED MANY WHO WERE NOT INFECTED.

using a direct fluorescent antibody test, an enzyme immunoassay, a DNA probe or cell culture.<sup>5</sup>

About 6 percent of the women tested positive for chlamydia, and those younger than 20 were most likely to be infected. When medical costs and lost productivity were taken into account, the researchers concluded that screening all family planning clients for chlamydia would be more cost-effective than selective screening, if disease prevalence was above 3 percent. For STD clients, selective screening would be most cost-effective until prevalence reached 7 percent, because the screening criteria better predicted which of these women were infected.

An earlier study in California family planning clinics found that universal screening for chlamydial infection would pay for itself through long-term medical savings if the prevalence of infection was as low as 2 percent.<sup>6</sup>

However, these results from the United States cannot be used to predict conditions in developing countries. Costs vary widely based on several factors, including location,

disease prevalence and type, and the intervention being tested. For example, in the developing world, syndromic management of STDs, rather than laboratory tests, might be considered for symptomatic women because of its lower costs. Rent, salaries, drug costs and other expenses also vary widely.

Few studies in developing countries examine the costs of alternative strategies to determine which women to treat. In one of the first such studies, Laurie Fox and Alan Spruyt of FHI collaborated with Jamaican researchers to examine the cost-effectiveness of STD interventions in two family planning clinics in Kingston, Jamaica. Their study also estimated the prevalence of chlamydial infections, gonorrhea, syphilis and trichomoniasis and identified STD risk factors among the clinic's clients.<sup>7</sup>

The researchers examined a variety of diagnostic approaches to see which was most cost-effective and worked best to identify and treat clients with STDs. All clients in the study were interviewed and received a leukocyte esterase urine test also known as

urine LED, which is done with an inexpensive dipstick; pelvic exams; and laboratory tests. The interview covered a woman's age, her sexual history and symptoms, and those of her partner. Costs of labor, materials and drugs associated with each screening method were calculated, but cost of training and equipment were not included.

The relative cost-effectiveness of each strategy was evaluated by comparing these costs per infection identified and treated. The study's findings were analyzed to determine which intervention or combination of interventions would be most appropriate in these clinics.

Of 767 family planning clients screened, 26 percent had at least one STD, and 14 percent of the 767 clients had a cervical infection with gonorrhea or chlamydia. The interview and urine test together identified more than three quarters of the women with a cervical infection. Adding a pelvic exam without a laboratory test only diagnosed an additional 4 percent of infected women, suggested unnecessary treatment for an additional 5 percent of uninfected women and was substantially more costly, adding 38 percent (U.S. \$15) to the cost of each STD identified and treated.

"The interview and urine test do not identify everyone with infections — we wish they did," Fox says. "But they are more within the reach of family planning programs around the world than pelvic exams, which have high costs for training and equipment, without adding substantially to correct STD identification," she says. All strategies except the laboratory-based diagnosis missed a sizable number of infected women and incorrectly diagnosed many who were not infected. The researchers recommended education and condom promotion at a minimum, and less costly strategies based on methods such as risk assessment and urine LED as the best current options for STD management among family planning clients in resource-poor settings.

#### INTEGRATION IN INDIA, COLOMBIA

Like Jamaica, India has a high rate of reproductive tract infections (RTIs), which may afflict up to 60 percent of women. RTIs can result from STDs, overgrowth of normal microbes in the reproductive tract, or

poor clinical practice during IUD insertion, pelvic exams and other procedures. The Indian government has developed a plan for integrating STD care with family planning and other health services, and policy-makers are exploring the best way to proceed.

As part of this preparation, the U.S.-based Population Council is working with the state of Uttar Pradesh in India to determine the feasibility, strategy and cost of offering RTI care with other health services.<sup>8</sup> The research team trained doctors in RTI case management, and lab technicians to do simple diagnostic tests at several health centers with limited lab facilities. They then determined the costs of training, salaries and services and modeled the RTI program's cost at different levels of disease prevalence and service use.

Their analysis determined that, at the primary health center level, the program would cost more than U.S. \$2,500 annually to serve 600 people, considered a low level of use. The drug budget alone would need to double in order to offer services to symptomatic women — a small percentage of those who have STDs.

Asymptomatic women were not included in the estimates because the program is just beginning, says Dr. Saumya RamaRao, the study's lead author. "This is the first step," she says. "As we get more clients and determine the patterns of infection, we will know more about how to modify the model and the services."

Because of the high cost of diagnosis and treatment, the Population Council recommended supporting education efforts, training providers to manage RTI cases, cutting down on procedure-related infection and encouraging clients' use of barrier methods to reduce infections.

PROFAMILIA, a family planning organization in Colombia, is among programs that have already expanded STD services into family planning clinics. Dr. Gabriel Ojeda of PROFAMILIA cautions that it is essential to budget for all costs — both fixed ones, such as equipment facilities and other items, and variable costs, including drugs

and other supplies that change with the number of clients. Salaries, utilities and other costs must all be taken into account as well.

PROFAMILIA offers STD services at its three types of clinics — for men, women and adolescents. Women are not screened for STDs, but those who have symptoms are diagnosed and treated. Finding out how to pay for such services has been an important consideration, Dr. Ojeda says. "We have to be financially self-sufficient," he says. PROFAMILIA's clinics require clients to pay a fee for STD services.

Other programs have asked clients to pay a small amount for STD care. For example, the AIDSCAP study in Bangkok found that adding night hours drew more STD clients, but the greater expense of running the clinic at night could not be sustained without more funding. The study recommended that clients be charged a small fee for exams to help recoup some costs.

The difficulty, experts say, is that some clients will not seek STD treatment, contributing to a severe public health problem. So programs have to find a balance. "We have found that we can offer STD services and people accept them," Dr. Ojeda says. "There is a demand. If the services are good, people prefer to pay rather than to go to free government services where the quality is not as high."

Besides charging fees, PROFAMILIA has found that its STD services can remain financially self-supporting through other means. The organization has arranged contracts with private medical organizations and with the Colombian social security system to offer STD treatment and diagnosis as part of a reproductive health care package, Dr. Ojeda says. However, these contracts do not cover costly HIV treatment, which PROFAMILIA cannot afford to provide, he says. PROFAMILIA also raised funds for its initial integration of STD services through donations from international organizations.

Family planning managers can use cost analyses to determine how to budget for integrated care, which services to offer, and how to make them sustainable, experts say. After evaluating local STD prevalence and type, clients' needs, available resources and

whether STD and other services can effectively be provided elsewhere, those deciding whether to integrate services should consider a strategy of first starting on a small scale.

"Program managers need to look at STD prevalence, methods of diagnosis and treatment, and appropriate means of education and prevention to determine what best suits the environment in terms of cost and culture," says Fox of FHI. Beginning with a small pilot program can help clarify how some of these factors work in practice, allowing managers to adjust their strategy as services expand.

— Carol Lynn Blaney

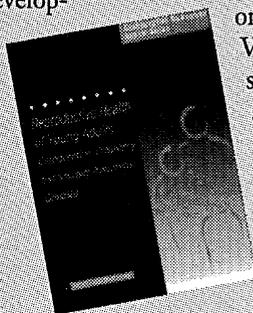
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# Resources

## FHI TRAINING MODULE ON REPRODUCTIVE HEALTH OF YOUNG ADULTS

Reproductive health issues affecting young adults, including important considerations when choosing a contraceptive method, are discussed in a slide lecture module produced by Family Health International. *Reproductive Health of Young Adults: Contraception, Pregnancy and Sexually Transmitted Diseases* is part of FHI's *Contraceptive Technology Update Series*, presentations designed to teach health-care providers, program managers and policy-makers about specific contraceptive methods. Currently available in English, with translations in French and Spanish available this spring, the module is free or at cost to trainers and educators in developing countries. To obtain a copy, please contact Carol Smith at Family Health International, P.O. Box 13950, Research Triangle Park, NC 27709, USA. Telephone: (919) 544-7040. Fax: (919) 544-7261.



## CD-ROM OFFERS HIV/AIDS PUBLICATIONS

A CD-ROM produced by Family Health International's AIDS Control and Prevention (AIDSCAP) Project and its partners contains more than 300 scientific journal articles, technical reports, training manuals and periodicals on HIV/AIDS prevention. Called *The AIDSCAP Electronic Library*, it is designed primarily for organizations and individuals working to halt the spread of HIV and RTIs. The CD includes publications from the AIDSCAP Project, which recently concluded. Publications are arranged alphabetically and by subject,

grouped by categories. Most documents are reproduced in their entirety, with photographs and charts from the originals. To order a copy, please e-mail [cdrom@fhi.org](mailto:cdrom@fhi.org) or write to: CD-ROM, Family Health International, HIV/AIDS Department, 2201 Wilson Boulevard, Suite 700, Arlington, VA 22201, USA. Telephone: (703) 516-9779 Fax: (703) 516-9781.



## AFTER PREGNANCY METHODS POSTER

A new FHI poster, *When to Begin Family Planning Methods After Pregnancy*, is available in English, adapted from a chart in the summer 1997 issue of *Network on Reproductive Health After Pregnancy*, Vol. 17, No. 4. French and Spanish versions of the poster will be available this spring. The 86 by 58 cm poster describes when to begin methods for mothers who are breastfeeding, mothers who are not breastfeeding, postabortion women and men whose partners have recently been pregnant. To request free copies, write: Publications Coordinator, Family Health International, P.O. Box 13950, Research Triangle Park, NC 27709 USA. Telephone: (919) 544-7040. Fax (919) 544-7261.



## CD-ROM ON HEALTH CARE FINANCING

Health care financing and sustainability in developing countries is examined in research and policy papers from two U.S. Agency for International Development projects, the Health Financing and Sustainability (HFS) Project and the Latin

America and Caribbean Health and Nutrition Sustainability (LAC/HNS) Project.

The CD-ROM is published and distributed by the Partnerships for Health Reform (PHR) Project. Materials include literature reviews, surveys, policy studies, and issue briefs. The papers cover on-the-ground-work conducted in collaboration with public and private agencies in countries throughout Africa, Asia, the Middle East, Latin America and the Caribbean. To obtain a free copy of the CD, please contact: PHR Project, Abt Associates Inc., 4800 Montgomery Lane, Suite 600, Bethesda, MD 20814, USA or telephone 301-652-0500, fax: 301-653-3916, or e-mail [phr-infocenter@abtassoc.com](mailto:phr-infocenter@abtassoc.com).

## CLARIFICATION

*Network* incorrectly reported in the summer issue of *Resources*, Vol. 17, No. 4, that a supplement on female genital mutilation to *The Universal Childbirth Picture Book* is available in Spanish. The book itself is available in Spanish, English, French, Arabic and Somali for U.S. \$7 including postage, or may be shipped overseas by air mail for an additional U.S. \$4. A separate supplement on female genital mutilation is only available in English, French and Arabic, and the supplement is included within the Somali edition of the book. The supplement is available at no additional cost.

For information, write: Fran P. Hosken, Women's International News Network, 187 Grant St., Lexington, MA 02173, USA, or call (617) 862-9431.