Population Reports

HIGHLIGHTS

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Paying for Family Planning

By the year 2000 as many as 600 million couples in the developing world may be using family planning—about 250 million more than in 1990. Family planning for these users could cost as much as US$11 billion per year. Who will pay for these supplies and services?

Governments can pay more. The $3.4 billion that developing-country governments now spend covers an estimated 75% of family planning costs. But this expenditure amounts to only about 0.4% of their total budgets. By comparison, military spending accounts for 19%.

Donor organizations can pay more. Donor assistance for family planning amounts to about $560 million annually, or about 15% of family planning costs. But this accounts for only 1% of all development assistance. By the year 2000 donors should be contributing $4 billion to help meet the need for family planning.

Could others who benefit from family planning also contribute more? Family planning users in developing countries now pay an estimated 10% of total family planning costs. Could some family planning users who now rely on free supplies and services pay something for family planning? And could employers and insurers, who save money when their employees or clients use family planning, help to pay for family planning also?

A wide array of approaches is developing to tap the willingness of users, employers, insurers, and others to pay for family planning. These approaches will not relieve governments

and donors of their responsibility for family planning in the foreseeable future. They can, however, make useful contributions in many places. Their potential is greatest, of course, where the average couple has money to spend or where large employers and health care financing systems can help pay for family planning.

Among the approaches are:

- **Make retail sales easier.** Two actions are needed: (1) Remove constraints that limit sales, such as import duties, prescription requirements, and price controls. (2) Encourage sales by promoting family planning and allowing brand advertising.
- **Strengthen private providers** so they can serve more people—promote them to the public, train more providers in family planning, and contract with them to provide services. The largest such effort, Indonesia's Blue Circle campaign, wants 80% of contraceptors to rely on private providers by 2005.
- **Expand social marketing programs.** In about 30 countries these programs sell usually subsidized contraceptives at low prices through retail outlets. Using commercial marketing techniques, they seek to serve couples who can pay a little for contraceptives but who cannot afford full price.
- **Improve services.** Private nonprofit providers have learned that clients willingly pay modest fees for good-quality services. If government providers offer good care, they also could charge small fees to clients who can pay. At the same time they could still exempt the poor.
- **Publicize and promote family planning.** Promotion is crucial to all these approaches. It tells consumers what is available and where. It also can persuade people that family planning is worth paying for. Intelligent and imaginative promotion can enhance the image of contraceptives and of the people who use them.
- **Set up workplace family planning services with employer support.** By providing family planning for employees, employers save on other costs and serve some people who would have used public family planning services.
- **Include family planning in health insurance coverage**—for example, through social security systems and private health insurance. These "third-parties" save money on other health care by covering family planning. For example, the Mexican social security system has saved nine times what it has paid to provide its urban members with family planning.
- **Cross-subsidize family planning for the poor.** Charge more than cost in affluent neighborhoods or for curative services. Then use the profit to serve the poor.
- **Increase efficiency.** Reducing waste of time and resources expands services just as effectively as increasing revenue.

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The Challenge

Family planning programs serve millions of clients in developing countries, and the number of clients is growing fast. The very success of family planning programs poses a challenge: how to pay for family planning services for all who need and want them.

Paying for family planning is part of the larger problem of paying for health care in developing countries. For years many developing-country governments have tried to provide free health services to all, considering it a basic human right. Financial, logistical, and political constraints have prevented them from serving everyone, however. Furthermore, like the demand for family planning, the demand for all health care is increasing, and governments have not kept pace. Thus governments, along with donor agencies and private voluntary organizations, are searching for new ways to pay for health services, including family planning.

Current and Projected Costs of Family Planning

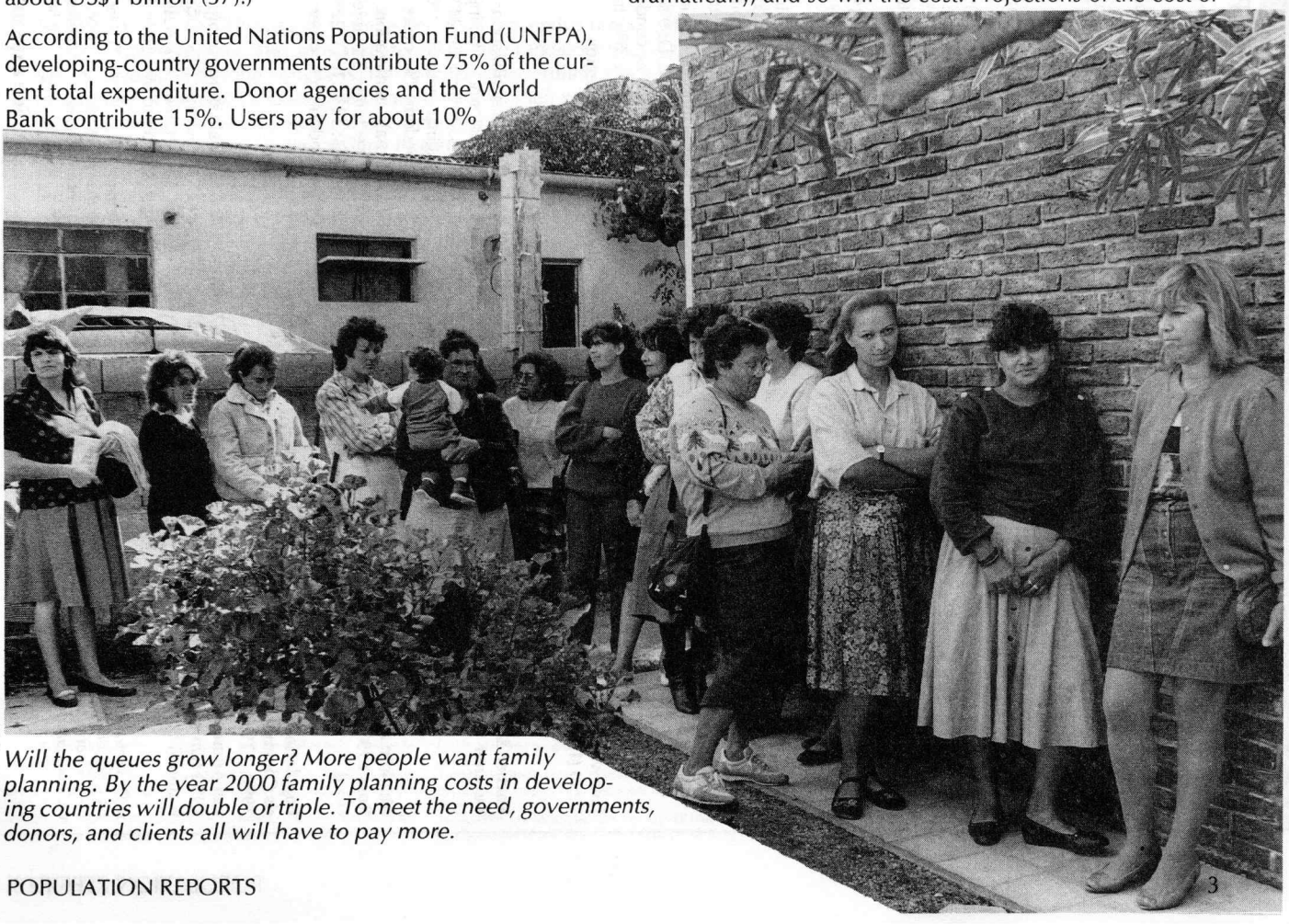
How much is being spent now on family planning in the developing world? Estimates of current expenditures range from US$2.2 to $4.5 billion ($22 to $45 hundred million) (84, 109, 179, 215). The low end of the range excludes China and most costs indirectly related to service delivery—for example, the cost of research, surveys, training, communication, and technical assistance. The high end includes China and many of these indirect costs. (Expenditures in China have been estimated at about US$1 per capita, or about US$1 billion (37).)

According to the United Nations Population Fund (UNFPA), developing-country governments contribute 75% of the current total expenditure. Donor agencies and the World Bank contribute 15%. Users pay for about 10% (213, 215). The Population Crisis Committee (PCC) estimates that governments pay 63%; donors, 20%; and users, 17% (179).

How far do these expenditures go? Currently, an estimated 315 million married couples of reproductive age in developing countries, including China, use a modern method of family planning (211). These couples account for 44% of all married women of reproductive age. This expenditure falls short of meeting the need.

How much more money is needed now? By rough estimate, an additional US$1.0 to $1.4 billion per year would meet the family planning needs of married women who want to limit or space births but are not now using modern contraception. This estimate is based on findings from 25 Demographic and Health Surveys (DHS). In those surveys the percentage of married women who said that they did not want more children at the time but were not using family planning ranged from 11% in Thailand to 40% in Togo (220). An approximate regionally weighted median for the developing world including China is 15%, which amounts to about 100 million couples who need family planning now but are not using it. Currently, US$3.2 to $4.5 billion serves 315 million modern-method users in all developing countries. Dividing the total expenditure by the number of users yields a crude estimate of the average annual cost per user—$10 to $14. If this cost per user also applies to serving new users, meeting all unmet need for family planning now would cost an additional $1.0 to $1.4 billion. This estimate does not include additional costs for condoms used to protect against AIDS and other sexually transmitted diseases.

How much money will be needed in the future? By the year 2000 the numbers of family planning users will have grown dramatically, and so will the cost. Projections of the cost of



Beryl Goldberg

Will the queues grow longer? More people want family planning. By the year 2000 family planning costs in developing countries will double or triple. To meet the need, governments, donors, and clients all will have to pay more.

Table 1. Projected Expenditures on Family Planning in Developing Countries in the Year 2000

Author & Date (Ref. No.)	Population Projection Used	Contraceptive Prevalence in 2000	No. of Contraceptive Users (Total/Modern)	Method Mix	Indirect Costs Included	Year 2000 Cost in 1988 US$: Per Modern Method User	Year 2000 Cost in 1988 US$: Total	% Increase of Year 2000 Cost Over Est. 1988 Expenditure
Bulatao 1985 (World Bank) (37)	World Bank "standard" fertility decline (includes China)	58%	425 million/NA	Varies by country	Training, institutional development, data collection, and others	$19.55[a]	$8,310,000,000	57[b]
Destler et al. 1990 (63)	UN high variant (excludes China)	56%	286 million/229 million	Female sterilization: 32% Vasectomy: 5% OCs: 20%; IUD: 10% Injectables/implant: 4% Vaginal methods: 1% Condom: 8%; traditional: 20%	Training, institutional development, data collection, and others	$21.83[c]	$5,000,000,000	117[d]
Gillespie et al. 1988 (US AID) (84)	UN medium variant (excludes China)	52%[e]	349 million/265 million	Sterilization: 28% OCs: 24%; IUD: 11% Condom: 6%; other supply: 7% Traditional: 24%	Some training and information activities	$19.72	$5,226,000,000	74[b]
	UN medium variant (excludes China)	52%	349 million/265 million	Sterilization: 27%; injectables: 1.5% OCs: 23%; IUD: 10% Norplant: 1.5%; condom: 6% Other supply: 7%; traditional: 24%	As above	$20.00	$5,301,000,000	77[b]
	UN medium variant (excludes China)	52%	349 million/265 million	Sterilization: 26%; injectables: 3% OCs: 22%; IUD: 9% Norplant: 3%; condom: 6% Other supply: 6%; traditional: 24%	As above	$20.25	$5,365,000,000	79[b]
Janowitz et al. 1990 (109)	UN medium variant (excludes China)	48.4–49.5%[e]	320 million/257 million	Varies by region	Donor funding of biomedical and demographic research, evaluation, training, and information activities (=$713 million in 2000)	$14.10	$3,623,000,000	67
Kocher & Buckner 1991 (127)	UN medium variant (includes China)	Africa: 23% Asia: 57% LA: 55%	474 million/422 million	Female sterilization: 33% Vasectomy: 11%; injectables: 2% OCs: 13%; IUD: 24% Vaginal methods: 1% Condom: 7%; other: 9%	Information activities, data collection, research, policy development, and training and institutional development (= $2.9 billion in 2000)	Af: $15[a] As: $10[a] LA: $10[a]	$7,812,000,000	47
Mauldin & Ross 1991 (156)	UN medium variant (includes China)	59%	567 million/510 million	Female sterilization: 36% Vasectomy: 8%; injectables: 4% OCs: 13%; IUD: 22% Condom: 6%; other: 10%	None	$1.23 (commodities only)	$627,000,000 (commodities only)	57
Population Crisis Committee 1990 (179,239)	Stable world population by 2095 (includes China)[f]	75%	720 million/NA	NA	Information, training, and research	$16.00[a]	$11,500,000,000	259
van Arendonk 1990 (United Nations) (215)	UN medium variant (includes China)	59%	567 million/510 million	Female sterilization: 36% Vasectomy: 8%; OCs: 13% Injectables: 4%; IUD: 22% Condom: 6%; other 10%	Research, information and promotion activities to policy-makers, evaluation, institutional development, training	$17.65	$9,000,000,000	100

IUD = intrauterine device
LA = Latin America
NA = not available
OCs = oral contraceptives

[a]Cost per user of modern and traditional methods
[b]% increase over projection for 1990 rather than for 1988
[c]Assumes decreasing cost per user as prevalence increases
[d]% increase over 1985 expenditure

[e]Gillespie and colleagues based prevalence on the 1986 UN assessment of world population. Janowitz and colleagues used the 1988 assessment, which reported higher fertility rates than the 1986 assessment.

[f]Projects prevalence needed to stabilize world population at 9.3 billion by 2095.

See explanatory note, p. 29.

Policy Implications for Financing Family Planning

How can the costs of family planning be shared among all beneficiaries so that the maximum number of people can be served?

Policy-makers can:

- Publicly endorse the important potential of the private sector to provide family planning, and encourage its development.
- Encourage cooperation between the private and the public sectors. Examples are social marketing programs and government and donor support for employment-based family planning programs.

Government ministries can:

- Eliminate duties and taxes on contraceptives; offer tax credits for employers, insurance companies, and health maintenance organizations that offer family planning; and make other changes in tax codes to encourage commercial sales, private practice, and third-party coverage of family planning.
- Remove any prescription requirements on contraceptives so that more retailers can sell them. Promote training of retailers in family planning, especially in screening oral contraceptive customers.
- Allow brand-name commercial advertising of contraceptives in the mass media and directly promote family planning methods generically.
- Remove price controls on contraceptives.
- Institute and enforce laws and regulations to see that private-sector clients are treated fairly, and that price gouging and corruption are minimized.
- Encourage social security systems to cover family planning.
- Allow field workers in public programs to refer clients to private providers.
- Allow public providers to operate private practices, too.
- Offer incentives and subsidies for private providers to set up practice in poorly served areas.
- Streamline procedures for regulatory approval of new contraceptives.
- Allow public programs to charge clients who can afford to pay.
- Allow public programs that collect fees to keep all or part of them.

Family planning administrators can:

- Charge those who can afford to pay for services and supplies while using simple standards to identify and to exempt or assist the poor.
- Improve the quality of services so as to attract paying clients.
- Promote a better image of family planning methods, family planning users, and family planning providers; a better image will induce greater willingness to pay for family planning.
- Cross-subsidize family planning services for the poor with profits from other services or from more affluent areas.
- Keep alert for opportunities to increase efficiency; keep experimenting to find more efficient approaches (operations research).
- Survey users to make sure that subsidies are going to people who cannot afford to pay the full price.
- Add community-based distribution programs to clinic programs to decrease costs per couple-year of protection.
- Study how sales and use of services respond to price changes.

Health care training institutions can:

- In professional schools, devote more attention to family planning so that all providers, private and public, can offer basic information and services.
- Offer in-service family planning training for private practitioners and retailers.

family planning in the year 2000 range from less than $4 billion to more than $11 billion in 1988 US dollars (see Table 1). Most of these estimates assume that population growth will proceed according to a standard projection—usually the United Nations medium variant projection. They then estimate the cost of providing services for the number of contraceptive users needed to hold population growth to the projection. The estimates vary widely because some include many indirect costs while others do not. The estimates also depend on researchers' assumptions about the number of users, the methods that they will use, and the cost of each method or the program cost per user, as well as whether or not they include China.

For example, Duff Gillespie and colleagues at the United States Agency for International Development assume that, to reach the UN medium population projection in the year 2000, 349 million couples in developing countries excluding China will use family planning in 2000. This would amount to 52% of married women of reproductive age. They assume the current method mix and add two scenarios in which the percentages using injectables and implants increase and the percentages using oral contraceptives, voluntary sterilization, and intrauterine devices (IUDs) decline. They assign commodity costs for each method and add an average service delivery cost of $18 per couple-year of contraceptive protection for all methods. Thus they estimate that meeting the UN medium projection in the year 2000 will cost $5.2 to $5.4 billion in the developing world (84).

By comparison, PCC has estimated that contraceptive prevalence in the developing world including China will have to increase more rapidly—to 75%, or 720 million users, by the year 2000—to stabilize world population at 9.3 billion by 2095. Using a cost of $16 per user, PCC estimates that the total cost of services for these 720 million users in the year 2000 will be $11.5 billion, more than three times the PCC estimate of current expenditure (179, 239).

What Can Be Done?

Despite differences, all projections indicate large growth in the number of family planning users by the turn of the century and thus a higher cost of serving them. While the growth in family planning use is crucial, the increasing cost raises the issue of who will pay for the services, and how.

Donor agencies in developed countries have been challenged to increase funding for family planning dramatically. They currently allocate only a tiny proportion of total

The Donor Role: Bigger Contributions Needed

The developed-country donor agencies will need to do much more to help meet the rising demand for family planning. Assistance at more than seven times the current level will be needed.

In 1989 developed countries allocated about US$560 million to support population programs in developing countries. Of the 18 countries that provide support, the US is by far the largest contributor. The US allocated $248 million in 1989, 44% of the total, and $281 million in 1990. Other major donors are Japan (11% in 1989), Norway (8%), and Canada (6%) (213, 242).

Population assistance accounts for just over 1% of the $45 billion of total development aid by these developed countries. (Figures on total development aid are not available for the Soviet Union, which contributed $500,000 to population assistance in 1989.) Norway allocates the highest proportion of its development aid to population assistance—almost 5% in 1989. The US allocated about 3%, six countries allocated between 1% and 3%, and the remaining nine countries allocated less than 1% (213).

Donors have been challenged to increase population assistance dramatically in the next decade. Both the United Nations Population Fund (UNFPA) and the Population Crisis Committee call on donors to contribute $4 billion a year by the year 2000 to help pay for family planning programs projected to cost $9 to $11.5 billion (179, 215, 239). To reach $4 billion in population assistance, UNFPA urges donors to double total development assistance between 1988 and 2000—as they did between 1978 and 1988—and to increase the percentage of assistance going to population and family planning from 1% to 4% (215).

While these calls for more assistance seek over seven times the current amount of family planning support, the amount is still small. By comparison, military assistance to developing countries in 1988 by the US amounted to $2.6 billion (excluding aid to Israel), or 10 times the amount of US population assistance, and $7.8 billion by the Soviet Union (240, 244).

aid for developing countries to family planning (see box, this page).

Developing-country governments also could pay more. They currently spend about $3.4 billion on family planning. This amounts to only 0.4% of total government expenditures. By comparison, they allocate about $167 billion to military expenditures, accounting for 19% of total government expenditures (243). UNFPA and PCC suggest only moderate increases in developing-country government expenditures by the year 2000—to $3.5 to $4 billion per year (179, 215). To reach these levels, developing-country governments would need to shift only one-tenth of 1% of their total expenditures to family planning.

Several projections anticipate that family planning users will contribute $1 billion in the year 2000, about double what they currently pay. Many users can and will pay at least nominal charges for family planning supplies and services. Others who benefit from family planning, such as employers, also can contribute. A number of approaches are being used to tap this potential:

- **Increasing the role of the commercial sector**—that is, pharmacies and other retail outlets—and of fee-for-service providers, mainly doctors, nurses, and midwives in private practice. More promotion of private-sector family planning services is needed. So is an end to regulations that hobble these providers. With more users paying for family planning from these sources, public programs will be able to serve more of those who cannot pay.
- **Expanding health care coverage by third parties**—social security systems, health insurance companies, and health maintenance organizations (HMOs)—to include family planning services.
- **Expanding cooperation between the public and private sectors**—for example, in social marketing programs and employment-based family planning programs.
- **Recovering costs.** Public and private nonprofit programs can introduce or increase user fees. They also can cross-subsidize family planning services from other health care services. For public programs community financing is a third option—for example, paying the salary of a village health worker from fees levied on villagers.
- **Increasing efficiency.** For example, using lower-level health care personnel in place of doctors often can safely reduce unit cost, thus allowing expanded services.

These approaches are not likely to change who pays for most family planning in the developing world. They will not relieve governments and donors of the responsibility for providing family planning to most users. They may, however, make some contributions to paying for family planning.

The importance of this contribution will differ in different regions. Increasing the role of the private sector is important in Latin America and the Near East, where many users already buy contraceptives, and in countries where contraceptive prevalence is high, such as Indonesia. Social marketing programs have the most potential in areas of moderate economic development and moderate contraceptive use, where both expendable income and the desire for family planning are growing. Increasing health care coverage, especially in social security systems, has great potential in Latin America. In sub-Saharan Africa and South Asia, heavy subsidies will continue to be necessary, but modest cost recovery by public and private nonprofit programs, community financing, increases in efficiency, and employment-based programs may make a small contribution.

Retail Sales and Fee-for-Service Providers

A larger role in family planning for the commercial sector and for private, fee-for-service practitioners will increase the availability of supplies and services: Retailers such as pharmacists, chemical sellers, and market traders can sell more contraceptives; more private practitioners such as doctors, nurses, midwives, and nurse-midwives can offer family planning services. A larger role for retailers and fee-for-service providers also can help governments and voluntary organizations devote more of their resources to the poor. When the commercial sector serves those who can pay full price, more of the subsidized services can go to those who cannot pay. In the developing world government policies, restrictions,

and duties have often limited the role of retailers and fee-for-service providers. Removing some of these limitations can foster the growth of private-sector family planning providers.

■

The Commercial Sector and Family Planning

The commercial sector plays a much larger role in family planning in developed countries than in developing countries. In developed countries contraceptives first became available through shops long before governments played any role in health care. Family planning movements grew without government help and often in spite of government opposition. In contrast, in developing countries the large growth in the use of contraception has often followed government endorsement.

In developed countries retail stores—mainly pharmacies—are the major source of contraceptive supplies. About 40 million couples buy contraceptives from pharmacies, although in most developed countries those buying oral contraceptives (OCs) need a prescription from a health care provider. These couples constitute about one-third of all developed-country couples using family planning and three-quarters of those using methods that require continual supplies (called supply methods)—OCs, condoms, injectables, spermicides, and other vaginal methods. In the US, for example, pharmacies sell two-thirds of condoms and three-quarters of OCs (132). (See **Population Reports**, *Pharmacists and Family Planning*, J-37, November 1989.)

In developed countries the importance of fee-for-service providers—doctors, midwives, and nurses, typically—varies from one country to another, depending on the extent of government health services. In the US, for example, almost three-quarters of women using family planning get services from doctors on a fee-for-service basis (112). In the UK, in contrast, the National Health Service, which is available to all, pays for family planning supplies and services. Typically, general practitioners give clients prescriptions that they fill at no charge at pharmacies. Family planning clinics provide contraceptives directly (112). Some people prefer, however, to buy condoms and spermicides without prescription, or they go to private practitioners or clinics for voluntary sterilization rather than put up with long waits for elective surgery under the National Health Service.

In the developing world the commercial sector serves a much smaller proportion of contraceptive users. With the exclusion of China, the percentages of family planning services and supplies provided by the commercial sector are as follows (52, 109, 132):

Sterilization services	<20%		
IUD services	<35%		
Supply methods	<43%	Pharmacies	31%
		Private doctors, midwives, hospitals, clinics	<12%

These estimates are based on the findings of Demographic and Health Surveys (DHS) and other family planning surveys in developing countries (see Table 2). The importance of retailers and fee-for-service providers varies somewhat by region. They play a relatively small role in sub-Saharan Africa and Asia but a much larger one in Latin America, especially in Brazil, and in the Near East.

Table 2

Sources of Family Planning Methods

For Married Women of Reproductive Age As Reported in Demographic and Health Surveys, 1986–1990

Region & Country	Ref. No.	Year	% Using Supply Methods[a]	% of Supply Method Users Served by: Commercial Sector	Public Sector	Private NGOs	% Using Clinical Methods[b]	% of Clinical Method Users Served by: Commercial Sector	Public Sector	Private NGOs
AFRICA										
Botswana	138	1988	22	4	95	NA	10	8	92	NA
Ghana	82	1988	4	34	20	21	2	3	76	12
Kenya	118	1989	9	16	67	13	8	16	75	7
Nigeria	167	1990	2	55	30	4	1	20	61	18
Uganda	114	1988–89	2	15	32	48	1	9	78	12
Zimbabwe	230	1988	33	3	52	41	4	17	65	11
LATIN AMERICA AND CARIBBEAN										
Brazil[c]	18	1986	19	94	3	1	19[d]	44	53	1
Colombia	53	1986	23	78	8	9	30	13	21	62
Ecuador	66	1987	11	56	29	16	25	35	44	19
Guatemala	91	1987	6	49	23	25	13	21	22	41
Jamaica	157	1989	36	34	66	NA	15	14	85	NA
Mexico	162	1987	15	22	NA	NA	30	NA	NA	NA
Paraguay	170	1990	22	80	9	6	16	43	38	17
Peru	86	1986	10	51	30	NA	14	23	67	NA
ASIA										
Indonesia	102	1987	27	14	75	NA	17	9	90	NA
Sri Lanka	197	1987	9	31	60	NA	32	2	94	NA
Thailand	46	1987	30	24	74	NA	35	8	88	NA
NEAR EAST										
Egypt	191	1988	18	39	7	NA	17	53	45	NA
Morocco	21	1987	24	19	59	1	7	25	72	2
Tunisia	13	1988	12	40	60	NA	29	8	92	NA

NA = not available
NGOs = nongovernmental organizations
[a] *Oral contraceptives, condoms, injectables, or vaginal methods*
[b] *Intrauterine device or voluntary sterilization*
[c] *All women*
[d] *Includes diaphragms*

The potential market for commercial family planning services in developing countries is difficult to quantify, but it is clearly much greater than their current market. It comprises all couples who need family planning services, can afford to pay for them, and have access to pharmacies and private physicians or trained midwives.

For example, an estimated 15 million married couples buy contraceptives from pharmacies in developing countries. These couples amount to about 10% of those using any family planning method and about one-third of those using supply methods. But the number who could buy supply methods from pharmacies or other retailers is estimated at 87 million. This estimate assumes that all urban women with some education plus some rural women and some with no education could buy from pharmacies. The number includes women who are now buying from pharmacies, women obtaining contraceptives from other sources, and women who want no more children now but are not using any family planning (132).

Why so large a gap between the actual and potential markets for retail sales and fee-for-service providers? The immediate reason is the marketing and pricing policies of manufacturers and retailers and, similarly, the availability and charges of fee-for-service providers. But these in turn reflect market conditions and government policies that have prevailed in developing countries.

Retailers' Marketing Strategy

In developing countries the usual retail marketing strategy for contraceptives has been to sell fairly small volumes at fairly high prices. Simply stated, the rationale for this strategy is that it will produce greater total profits than selling larger volumes at low prices. This is a cautious marketing strategy; it minimizes the risk of overcommitment to a product for which demand has been slight. Also, in many developing countries most consumers' incomes are quite limited, government policies constrain the commercial sector, distribution systems are weak, and long-term economic and political conditions are often hard to predict. In addition, free or partially subsidized family planning supplies and services may draw customers away from commercial providers.

Pricing strategies in the private sector keep contraceptives out of the reach of most developing-country consumers. Social marketing programs have found that people are willing to pay about 1% of their income for a year's supply of contraceptives. A recent worldwide review of contraceptive prices in the private sector by the Population Crisis Committee found, however, that the annual cost of OCs, for example, was more than 1% in about 50 of 65 developing countries. In six of these countries the annual cost of OCs was 20% or more of per capita income. By comparison, in 19 of 22 developed countries surveyed, OCs cost less than 1% of per capita income (178).

In some countries the share of contraceptive users supplied by the commercial sector decreased in the 1980s, according to a comparison of data from DHS and the earlier Contraceptive Prevalence Surveys (CPS). In 5 of 13 countries studied, the commercial share decreased substantially, and commercial providers actually lost customers even as contraceptive use grew. Pharmacies accounted for a large part of the decrease. In 12 of the 13 countries pharmacies' share decreased, and in 7 countries pharmacies actually lost customers. Greater use of clinical methods—provided mainly by the public sector—is an important reason for the slow growth or decreasing share of the commercial sector. In five of the countries clinical methods accounted for 80% or more of the increase in modern contraceptive use in the 1980s. The data used in this comparative study have some limitations. For example, in some of the CPS especially, respondents did not specify whether their source was commercial, private nonprofit, or public (55).

Fee-for-Service Providers' Marketing Strategy

Private providers trained in modern medicine—mainly doctors, nurses, and trained midwives—are scarce in many developing countries (223). The fees of private providers and their location mostly in urban areas further limit the number of low-income families that have access to their services. Private midwives generally charge less than private doctors, however, and thus lower-income groups make up more of their clientele.

Although traditional practitioners also charge for their services, they are widespread and serve many people. In rural areas traditional practitioners are often the most accessible source of care. They charge less than modern providers and are usually more flexible about extending credit, accepting in-kind payments, or waiving charges. Many of their clients are people who cannot afford or prefer not to go to modern providers. (Some people, however, go to both modern and traditional providers.) With a few exceptions (111, 192), most traditional practitioners do not provide modern family planning methods. Few attempts have been made to train them or integrate them into family planning programs.

The constraints on fee-for-service providers in family planning resemble the constraints on retailers—competition from free or partially subsidized public services, lack of training in family planning, and lack of incentive to promote services or provide information. In addition, private providers' charges for clinical services such as voluntary sterilization are more than most people can pay at one time.

What Can Be Done?

Because of the conditions that they face, both retailers and private, fee-for-service providers serve only a fraction of potential family planning clients in most developing countries, and they do not aggressively seek new clients. Changes in government policies could make a difference.

Increasing demand for private-sector services. To increase demand for retail and fee-for-service family planning services, governments can:

- **Promote private providers** in the mass media. A massive government effort to promote the family planning services of private providers is the Blue Circle campaign in Indonesia (see pp. 10–11). One of its goals is to increase the percentage of users buying from the private sector from the current 20% to 50% in 1994 and 80% by 2005. (One projection of private-sector use in Indonesia has concluded, however, that in rural areas few people can afford private-sector prices or have access to private doctors or midwives, and 30% would be a more realistic goal for 1994 (155).)
- **Promote family planning generically** on government-owned television and radio stations. Advertisements can

stress the benefits of family planning or promote particular types of contraceptives.

- **Allow and encourage brand-name advertising of contraceptives** in the mass media. Consumers trust a brand-name product more than a generic product. They perceive its quality to be higher, and higher perceived quality leads to more sales (16, 70, 123) (see p. 16).
- **Remove import duties on contraceptives**, which in some countries are as high as 100% (123). Such duties raise the price of contraceptives and thus limit the market. Mexico reduced import duties on condoms from 45% to 10% between 1988 and 1991. The reduction lowered condom prices and contributed to a 25% increase in condom sales in 1990 (60).
- **Lower the cost of clinical services from private providers** by subsidizing such services. In Taiwan, for example, the government pays for voluntary sterilizations—both tubal ligation and vasectomy—provided to poor clients by private hospitals and clinics (45). IUD services are partially subsidized (see pp. 19–20).
- **Reduce competition from the public sector** by charging middle- and upper-income clients for publicly funded family planning services. A 27-country review of women's sources of contraception and their educational level found that in 12 countries more than half of women with secondary education went to the public sector for family planning services (55). Many of these women may have had enough income to pay for their own supplies and services (see pp. 21–25). Putting an end to undercutting the private sector will help shift demand to the private sector.

Rita Leavell/SOMARC

"Here you can obtain Blue Circle family planning supplies, which are effective and suited to you," declares a banner hung on an Indonesian pharmacy. Indonesia's Blue Circle campaign is an ambitious effort to increase the role of private family planning providers through promotion and training. In addition, private practitioners and pharmacies sell Blue Circle contraceptives.

Increasing the supply of private-sector services. To expand the supply of family planning services from retail outlets and private health care providers, governments can:

- **Strengthen preservice training.** Some schools of medicine, midwifery, nursing, and pharmacy are strengthening their training in family planning. As a result, graduates who enter private practice will be better prepared to offer family planning. In Tanzania, for example, the medical school of the University of Dar-es-Salaam has recently expanded the family planning curriculum from 14 hours of classroom instruction to comprehensive training integrated with courses on community health and pediatrics. Also, interns receive clinical training in IUD insertion and voluntary sterilization. The Johns Hopkins Program for International Education in Reproductive Health (JHPIEGO) provided technical assistance (101). In northeast Brazil the Centro de Asistencia Especial Materno-Infantil, with help from Development Associates, has trained nursing school faculty in family planning (62).
- **Train more private providers.** Indonesia, for example, is planning to increase the number of trained midwives from 8,000 to 34,000 in the next five years. Due to a recent policy change, the nurse-midwives may operate private practices while they work for the government (see pp. 10–11). Sri Lanka provides three years of training for Assistant Medical Officers, most of whom provide primary health care, including family planning services, in rural areas. After 7½ years of public service, they are eligible for licensing as Registered Medical Practitioners and can open private practices (128).
- **Support in-service training.** Brief in-service training programs can fill in gaps in preservice training and inform private providers about recent advances in family planning. In the Philippines, for example, the Integrated Maternal Child Care and Social Development Institute, with help from the Program for International Training in Health (INTRAH), conducted a pilot project in 1988 and 1989 offering in-service training for pharmacists and private midwives (87). Currently, the Institute, with help from Development Associates, offers 2-week training courses for midwives. The Integrated Midwife Association of the Philippines awards 40 continuing education credits to participants. Midwives need 60 credits every three years to be relicensed (15).
- **Help providers to set up private practices.** Such help may involve start-up funding, help in getting loans, and training in business skills. In Mexico and the Dominican Republic, for example, donor-funded programs help private doctors to set up clinics providing family planning and child health services (see pp. 19–20).
- **Remove price controls on pharmaceutical contraceptives.** If price controls prevent retailers from making as much profit on contraceptives as on other items, or if they prevent prices from rising with inflation, retailers will be reluctant to sell contraceptives. Indeed, retailers may take products off shelves while they wait for governments to approve price increases that keep pace with inflation.
- **Relax prescription and laboratory test requirements** for users of pharmaceutical contraceptives. Where such requirements are enforced, they limit the market, so that only women with access to a doctor can buy. A number of countries have dropped or eased prescription requirements, allowing nurse-midwives or specially trained re-

Haryono Suyono on the Blue Circle

As chairman of the Indonesian National Family Planning Coordinating Board (BKKBN), Dr. Haryono Suyono directs the Blue Circle campaign, an ambitious effort to persuade couples to pay for family planning services in the private sector. In an interview Dr. Haryono spoke about the development of the campaign, its future, and lessons for other countries seeking to increase the role of the private sector in family planning.

Population Reports: *What is the Blue Circle campaign?*

Dr. Haryono: We are in the position right now that we have in Indonesia around 50% of all eligible couples joining family planning.... They like not only to be served by doctors from the health centers, doctors from the government, but they can also, if at all possible, be served by their own doctors, their own midwives in their neighborhoods. That was why we trained private doctors and private midwives—so that they can give services to those who are ready to have success in family planning. With this kind of idea, then, we, jointly with the Department of Health, have an agreement that private doctors and private midwives could give and deliver family planning services with a fee.

Originally it was all free, given by the government. The medical checkup, the drugs, and everything was given free from the government.

PR: *Why was there a need for this campaign?*

Dr. Haryono: Some couples are reluctant to go back and forth to the government clinics. Some are distant from their own houses, around 25 or 50 kilometers, while in their neighborhood they have doctors. And they are ready to pay for their services because for them family planning is very important and they can afford to pay. Why should the government build clinics and compete with the private sector, if people go to the private doctors for other health services? So the government does not really compete with the private sector but rather supports the private sector.

PR: *Why are people willing to pay for services when they could get them free from the public clinics?*

Dr. Haryono: It costs them not too much, though. The pill is only Rp.1,500, less than one US dollar. So their contribution is so little. But if there are a million users, for instance, then this will be a lot of money.

The other reason is because of the convenience, because of the time, and because of the problem of queuing in the government clinics. We have only 8,000–10,000 government clinics, and they have to serve around 20 million family planning acceptors. To some people, this kind of queuing is not convenient.

PR: *How did the campaign come to be known as the Blue Circle campaign?*

Dr. Haryono: This is a very professional undertaking. We tested a lot of symbols, and we came up with several of them, and then we retested and retested and finally people chose this blue circle with KB in the middle. We chose blue because it is the color of the sky, the color of the sea, meaning that the sky is so high. A circle means commitment. KB is the abbreviation of family planning but also the abbreviation of happy family, the abbreviation of small family, the abbreviation of potential family.

PR: *The campaign wants to give private providers a greater role in family planning. How have they responded to this campaign?*

Dr. Haryono: The response from the doctors is amazing. Almost all doctors right now are participating in this Blue Circle campaign. The response of the midwives has been very good. Pharmacists like it. This is new business. Originally, they had nothing to do in family planning. But right now they are beginning to sell contraceptives.

And as a matter of fact the government right now is undertaking to train more midwives. Before we had only 8,000 midwives and 4,000 assistant midwives. In the coming five years we are going to produce around 34,000 new midwives.... We hope that the quality of the maternal and child health services and also that the Blue Circle campaign would be assisted.

The midwives will serve for public service and also in their own private services. This is a new policy for midwives because we want to improve what you call, in the US, privatization. For the doctor this has been the policy for some time.

PR: *The campaign is mostly in urban areas, isn't it?*

Dr. Haryono: This year we have a special campaign also to rural areas. We inform people in 34,000 villages, or one-half of the Indonesian villages, where family planning is more advanced.

PR: *In the beginning of the campaign the Blue Circle logo identified the private doctors and midwives providing family planning services. Now it also identifies family planning products. Has this change created any problems?*

Dr. Haryono: No.... The Blue Circle symbol differentiates between the drug offered freely by the government and the drug that you have to pay for. And, interestingly enough, some people say that the *Blue Circle* pill is better than the

Campaign in Indonesia

regular pill, even though it is produced by the same company. Of course this is not true. But people got that kind of impression. It's the perception of the people: If you have to buy, this must be better than something free.

***PR:** You have been quoted as saying that you want 80% of family planning users to use the private sector in 15 years. How do you expect to achieve this?*

Dr. Haryono: Number 1: Of course, by increasing the campaign. Expanding the campaign not only in the urban areas but also in the rural areas.

Number 2: By increasing the number and deployment of midwives all over the country.

Number 3: By the fact that economic development right now in Indonesia is really progressing fantastically. The economic growth rate right now is about 7–8% a year, which gives the people the capacity to pay for family planning for themselves.

Number 4: We anticipate that by the year 2000 40–50% of family planning acceptors would have joined private-sector family planning, or Blue Circle family planning, or whatever name. It is possible that after the successful Blue Circle other companies would offer contraceptives in the private sector with their own campaign, with their own management, their own funding....

Number 5: Education of people. By the year 2000 I can almost be certain that none of the eligible couples would have illiterate wives. The participation of women in the labor force will be much higher than 20 years ago, 10 years ago, or today. If the participation of women in the labor force increases as we anticipate, then the capacity of the couples to pay in the year 2000 and beyond would be much greater than yesterday and today.

***PR:** What were the biggest problems that you had to solve in the campaign?*

Dr. Haryono: One of the biggest problems was getting the kind permission from the Ministry of Health to allow the doctors and midwives to have drugs in their own offices. Doctors and midwives are not supposed to have drugs available in their office. They have to give prescriptions, and clients have to go to the drugstore and then go back to the doctors either for injection or for insertion of the IUD. We solved the problem by the generous agreement of the Ministry of Health that those who have been trained for the Blue Circle campaign can have the drugs available in their office. Family planning acceptors can just come once to the doctor's office or to the midwife's office and get the IUD or the injectable right there.

Number 2 is that the minister also gave permission for those that are taking the pill, for instance, if they have the Blue Circle membership card, they can ask somebody in the family or the group in the village or in the neighborhood to collect pills for 10 or 15 or 20 people instead of going one-by-one to the drugstore.

This is a special arrangement. The prescriptions can really be used again and again if women have no problems. If there are problems, they have to go back to the doctors or midwives to have a medical check. But if they have no problems, they don't need to get new prescriptions from the doctors or the midwives.

***PR:** What do you see as the next big challenges in the campaign?*

Dr. Haryono: I see a problem with the distributors, number one. We can expand the campaign in terms of IEC all over the country very easily: Using radios, using television, using face-to-face communication, and meetings. But readiness to join family planning is not equal all over the country. In one area which may be very far away from Jakarta, we may have only 10 out of hundreds of thousands of people ready for family planning. Economically, it is not feasible for the drug companies and distributors to have their own agents just to serve 10 people. So we may disappoint these 10 couples in those areas.... We have to think about how to initiate small groups of people.

***PR:** What have you learned from the Blue Circle campaign that would be useful for other countries?*

Dr. Haryono: What we have learned is to trust the private sector. Give them opportunities and coordinate them with flexibility. Give them encouragement and support their initiative. Without government support, without firm government political commitment, the private sector would have a lot of problems because of the bureaucracy. The private sector has a role in a huge family planning program like ours in Indonesia or in other countries around the world. But a little program can become an example, can become a kind of guiding light for others to follow. If you are successful in making this small light which is important in the future of your family planning program, you are taking a first step in a successful program.

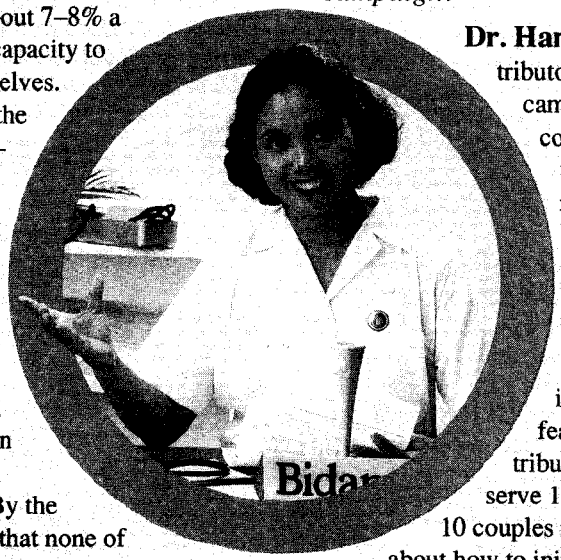


Photo: A smiling midwife from a poster for the Blue Circle campaign urges people to visit private family planning providers. The blue circle symbol identifies participating providers and the family planning products that they sell.

tailers to screen women (106). For example, Ghana allows chemical sellers (drug sellers with little or no previous formal training) to sell OCs if they have been trained by the social marketing program to screen customers (195). Retailers have not always been reliable about screening customers, however. For example, the trained staff member may not always be the person who waits on women wanting to buy OCs (see **Population Reports**, *Pharmacists and Family Planning*, J-37, November 1989).

- **Allow more retailers to sell contraceptives.** Most developed countries and some developing countries restrict the sale of oral contraceptives and injectables to pharmacies. Even physicians are not allowed to sell them. This was true in Indonesia until 1988, when the Ministry of Health first allowed doctors, and midwives supervised by doctors, to sell injectable contraceptives. In 1989 they were first allowed to stock and sell *Blue Circle* OCs (117) (see p. 20). A few countries restrict even the sale of condoms to pharmacies.
- **Expedite approval of new contraceptives.** Delaying or denying approval of new contraceptives limits choices. Many developing countries wait for approval by the US, France, or the UK before they approve a new product. Developing countries may also require local experience with a drug, usually a clinical trial, before they will approve it. These requirements are intended to protect users against harmful pharmaceuticals, but they may instead prevent or delay access to useful new products—even products that have fewer side effects than products already on the market.
- **Adopt international standards for contraceptives.** Varying national standards may discourage international manufacturers from entering markets. Low standards permit poor quality, which may discourage sales. There are currently about 30 national standards for condoms, although not all countries enforce them. The International Organization for Standardization recently established an international standard, which many countries may soon adopt (see **Population Reports**, *Condoms—Now More Than Ever*, H-8, September 1990).

Governments may be reluctant to change measures intended to raise revenue, such as import duties. At the same time, however, some of these policies discourage the commercial sector from providing family planning and other health services. Thus on balance they may be counterproductive. Modifying policies—for example, exempting just contraceptives from import duties—can encourage the commercial sector without substantially decreasing revenue.

While promoting the commercial sector, governments also need to prevent abuses. Governments need to be prudent in changing some regulations. For example, removing price controls may encourage the private sector to sell contraceptives, but suppliers may respond by charging excessively high prices. Thus governments need to try to ensure open competition. Also, governments need to regulate the quality of care of private providers. In sum, governments must strike a balance between overregulating the commercial sector and leaving it unchecked.

■

The Shift to New Marketing Strategies

With new policies in place that encourage commercial sales and services, these sales and services can expand. Manufacturers and retailers will have the opportunity to take a new approach to selling contraceptives. With broader markets for retailers, some contraceptives can be marketed with a low-volume, high-price strategy, while others can be marketed with a high-volume, low-price strategy. Retailers and fee-for-service providers will be able to position their products and services more specifically. Positioning means developing and promoting a product or service in a way that appeals to a specific group of consumers. This is usually done by emphasizing a particular product trait. Positioning makes it possible to charge different prices to different groups of consumers for products that are otherwise similar. With different products positioned and promoted for different consumer groups, contraceptive sales can increase.

Some contraceptive manufacturers are already trying low-price, high-volume strategies in developing countries. For example, Schering AG and London International Group are selling at low prices to social marketing programs in the Dominican Republic, Indonesia, Jordan, and other countries (see p. 15).

Everyone can benefit from these new strategies. The commercial sector sells contraceptives more profitably. Family planning users have convenient and inexpensive sources of contraceptives. Governments save money by reducing the subsidies to people who can afford to buy their own contraceptives.

Third-Party Coverage

In many situations health care payment involves a third party, such as a social security institute or insurance plan, that pays for health care for a group of people. Most third-party coverage does not include family planning. Where it has, however, the result has been considerable savings to the third-party providers.

In third-party coverage plans, individuals in the covered group either pay the third party for part or all of health care coverage or receive coverage as a benefit of membership or employment. In developed countries many people have third-party coverage through their employers or through some form of government-subsidized health insurance. In the developing world, in contrast, 15% to 25% of people participate in some form of third-party coverage. If China is excluded, at most 15% have such coverage (7).

Third-party coverage is increasing rapidly, however. In Latin America coverage by social security systems almost tripled between 1960 and 1990, from 21% to 60% of the population. Other countries—for example, China, Egypt, and the Philippines—had no third-party coverage in the late 1950s and early 1960s but now have programs that cover millions of people (7, 158).

Group coverage is valuable to group members because it spreads the risk of health care costs over the group. It is a risk-sharing arrangement: When members pay, they pay the expected average cost of care and avoid any risk of having to pay high health care costs.

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Types of Health Care Coverage

Health care coverage comes from four major sources:

- Social security systems,
- Employers or unions,
- Health maintenance organizations (HMOs), and
- Private insurers.

Social security. In developing countries and especially in Latin America, most third-party health care coverage comes from government-run social security systems. Most cover only wage earners—that is, those working in the modern sector—and their dependents. Some systems cover only certain employed groups—for example, industrial employees or small businesses. Systems usually are funded by contributions from employers and employees. In some countries governments contribute to social security systems as well.

Employment-related coverage. Some employers or unions provide health care coverage as a benefit to attract employees or members and to maintain a healthy workforce. Some extend coverage to dependents, and some employers cover the entire community where they are located. Some employers provide health care services at the worksite in a company clinic staffed by doctors or nurses who are company employees. Other employers contract with a hospital or private clinic (see pp. 18–19).

Health maintenance organizations. In HMOs participants pay a fee periodically, usually once a year, that covers most or all of their care, both preventive and curative, from providers who work for or under contract to the HMO, often in HMO facilities. Alternatively, employers may pay all or part of the fee, as with health insurance. Health maintenance organizations have been successful in a few countries in Latin America—for example, Brazil, Chile, and Venezuela (11, 75, 76). In Brazil in 1987 about 200 HMOs covered 13 million people enrolled mainly through their employers. Employers pay fees to the HMOs; employees generally do not have to contribute. To be viable, HMOs need a market willing to pay for full health care coverage. They also need political support and financing to get started, and staff with the administrative skills to draft contracts, control quality of care, establish premium levels, and process claims daily (51, 208).

Health insurance. Under health insurance, participants pay the insurer a fee, usually once a year, that entitles them to a specified amount of health care coverage. Employers may pay all or part of the fee for employees. The insurer reimburses members for health fees paid or else pays the providers directly. Generally, in developing countries those covered by private health insurance are middle- and upper-income households, because they either buy the insurance themselves or have it provided by employers.

■

Coverage for Family Planning

Many third-party providers limit the health care covered to curative care; they do not cover family planning services or other preventive health care. Risk-sharing arrangements were first designed to cover curative care because it can be more expensive than preventive care and the need for it is less predictable. But family planning and other preventive health services can play an important role in health care coverage by reducing the need for—and thus the expenditure on—curative care. Also, as a matter of public policy, covering family planning along with other health services may encourage its use.

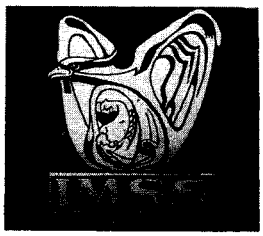
The opportunity for cost savings gives third-party providers an incentive to cover family planning. Including family planning services in third-party coverage can lower costs for:

- Maternity care, including cesarean section,
- Treatment for complications of abortion, and
- Medical care for children.

How much can providers of health care coverage save by providing family planning services? Cost analyses have been done for a social security system, an HMO, and public and private health insurance.

Social security systems. Among the social security systems that cover family planning services are those in Bolivia, Brazil, Costa Rica, Ecuador, El Salvador, Honduras, Mexico, Peru, and Turkey. In some countries—for example, Brazil and Mexico—the social security institutes serve more family planning users than the ministries of health (159).

A study of the urban population covered by the Instituto Mexicano del Seguro Social (IMSS) in Mexico found that between 1972, when IMSS began offering family planning, and 1985 IMSS saved an estimated 300 billion pesos in 1983 currency (US$2 billion) by offering family planning services. Family planning helped participants prevent 3.5 million births and about 350,000 incomplete abortions during the 14-year period. The costs avoided—for medical care for women during and after pregnancy, health care for the child for one year, and treatment of incomplete abortion—totaled 355 billion pesos. By comparison, the cost of recruiting and supplying family planning users was about 38 billion pesos. Thus, for every peso that IMSS spent on family planning services, it saved nine pesos. During the first three years, however, costs exceeded benefits. In 1973, for example, IMSS spent almost 500 million pesos but saved only 50 million. In 1984, however, IMSS spent 5.5 billion pesos and saved 48.8 billion (168). For IMSS and most other social security systems in Latin America, the cost of offering family planning services adds very little to their expenses for curative care.



Providing family planning saved Mexico's social security system nine times what it spent.

Health maintenance organizations. Few HMOs in developing countries cover family planning, even though the potential savings could be considerable. For example, according to a 1987 projection for a 64,000-member HMO in Belo Horizonte, Brazil, if contraceptive prevalence were 70% among participants, family planning would enable the HMO to avoid the costs of 88 abortion complications, 34 cesarean deliveries, and 60 vaginal births each year. The projected savings to the HMO would result from a small increase in prevalence and a shift to more effective methods. Cumulative costs for the first three years, excluding commodity costs for IUDs and start-up costs such as provider training, would be about US$4,400, and savings would be about $6,000. Thus net savings would be $1,600. Costs would exceed savings for the first two years, but in the third year the net savings would be about $2,000. The HMO in Belo Horizonte decided not to offer family planning services for several reasons, however. For one, it found that a large percentage of members were already using family planning (11). (On the basis of a client survey, the projection assumed that most family planning clients would switch to the HMO from their current source of supply. These clients would add to the HMO's costs but not to savings since they were already using family planning.) Associação Brasileira de Medicina de Grupo (ABRAMGE), the national organization of group medicine practices, has used this analysis to persuade other Brazilian HMOs to offer family planning services (75). With assistance from Pathfinder International, ABRAMGE helped

PSI

In Pakistan a customer buys Sathi condoms at a pharmacy. Social marketing programs such as the Pakistan Social Marketing of Contraceptives project combine commercial marketing channels and promotion with public subsidies that keep prices affordable to low-income consumers.

18 HMOs provide family planning services to about 20,000 new and continuing users between 1988 and 1991 (131).

Health insurance. Insurers, too, can save on maternity and pediatric claims by covering family planning services. Where family planning is in demand, offering such coverage also can give insurance companies a competitive advantage. In Zimbabwe, for example, the Commercial and Industrial Medical Aid Society (CIMAS), a nonprofit organization, began to cover family planning services in 1989. CIMAS is Zimbabwe's largest private insurance company; in 1987 it had 160,000 health insurance beneficiaries. A 1988 analysis by the Technical Information on Population for the Private Sector (TIPPS) project forecast that CIMAS could save more than US$120,000 in five years by covering family planning services, at an average annual cost of less than $.75 per member. As a result CIMAS agreed to pay all of the cost of family planning services that beneficiaries received from the Zimbabwe National Family Planning Council (ZNFPC) and part of the cost of services from private providers. During the first year about 5,000 beneficiaries received services from ZNFPC, for which CIMAS paid US$13,300 (113, 175).

In the US the public health insurance program for the poor, called Medicaid, covers family planning. In 1987 public spending on reversible family planning services for the poor—including Medicaid and other federal programs as well as state programs—totaled about $412 million. As a result Medicaid saved $876 million to $1.9 billion on medical services that it provides for two years following a birth (78). Thus for every public dollar spent, Medicaid saved $2.10 to $4.60.

In some countries communities have set up health insurance programs. In Thailand's Community Health Card Fund, for example, villagers pay US$4 to $13 for cards that entitle them to treatment for four to six illnesses per year and unlimited preventive care, including family planning. Card fees pay the health care facilities. In 1987 health card funds covered 10% of Thai villages, or 3% of the rural population. Some 25% of people in these villages bought cards (6, 165).

The role of family planning in HMOs and health insurance may be limited, however. Some health insurance companies and HMOs have found that the number of people who take advantage of family planning services is smaller than expected, and savings are also smaller than expected. In countries where prevalence is already high, most beneficiaries may already be using family planning. Also, where family planning is controversial, for-profit insurance companies and HMOs may be reluctant to offend groups opposed to family planning.

How Governments Can Help

Governments can increase third-party coverage for family planning services in several ways. They can:

- Encourage social security institutes to cover family planning services. Some institutes cover only the health care of employees but not of their families. In such a case governments also can encourage complete family coverage that includes family planning services.
- Stimulate the development of HMOs through official endorsement, start-up grants, and low-cost loans. Governments also can encourage competitive bidding among HMOs for coverage of specific areas. The winning bid would get the exclusive right to cover a given town, for example (159).
- Provide public family planning services in ways that do not compete with firms offering health care coverage—most obviously, by charging people who can afford to pay (see pp. 21–24).

Public-Private Collaboration

Governments and donor agencies collaborate with the commercial sector in:

- Contraceptive social marketing programs,
- Employment-based family planning programs, and
- Programs to encourage private providers with such assistance as start-up funding, free or partially subsidized contraceptives, and reimbursement schemes.

Both the public and private sectors benefit from such collaboration. Governments can get family planning services to some users without paying a full subsidy or paying for facilities and equipment. The private sector can expand its market to people who would otherwise use free government services or would not use modern family planning at all. For employers who provide health services to employees, family planning services can lower the costs of other maternal and child health care and the costs of other services that they provide, such as education.

Social Marketing Programs

Contraceptive social marketing programs sell contraceptives through retail outlets at reduced prices. Reduced prices are made possible in most cases by donor or government subsidy. Most programs seek to attract middle- and low-income couples through low prices, easy access, and promotion. Sales revenue recovers some—or, in a few cases, all—costs, and it supports the private distribution chain. Social marketing programs can be cost-effective because they recover at

least part of their costs, they use existing retail outlets, and most use existing commercial distribution systems and staff.

Contraceptive social marketing programs operate in approximately 30 countries. The largest 20 programs sell enough contraceptives to protect about 8.2 million couples a year. India's *Nirodh* condom marketing program accounts for about one-third of this total. In the countries with the largest programs—Bangladesh, Colombia, Egypt, India, Indonesia, and Pakistan—2% to 13% of couples of reproductive age buy contraceptives distributed by the social marketing program (67). In Bangladesh and Zaire the social marketing programs are the major providers of contraceptives.

Donor agencies—in most cases the United States Agency for International Development (US AID)—subsidize most contraceptive social marketing programs. They generally provide start-up funding, donate contraceptives, and pay for promotion and training of providers. Social Marketing for Change (SOMARC) and Population Services International (PSI) assist most programs supported by US AID.

Most social marketing programs are heavily subsidized. In some, subsidies cover more than 80% of program costs. For example, in Indonesia in 1987 subsidies accounted for 83% of the costs of the IKB-SOMARK project, which started in 1986 and sold only condoms at that time (142). In the Ghana Social Marketing Program, which began in 1985 and currently sells condoms, oral contraceptives, and foaming tablets, subsidies account for about 95% of program costs (200). In Pakistan subsidies accounted for 87% of the 1990 operating costs of US$6.3 million of the Pakistan Social Marketing of Contraceptives project, which sold only condoms at that time. The program started in 1986 (180). A few social marketing programs in Latin America and the Caribbean operate without subsidy, however. Programs in Barbados and the Dominican Republic, for example, cover all costs (200).

The major costs of social marketing programs are contraceptives, salaries, packaging, promotion, and technical assistance. Contraceptives cost by far the most. In Ghana and Pakistan, for example, they account for a little more than half of total program costs (180, 200). Instead of obtaining contraceptives from donors, some social marketing programs buy them from manufacturers at discounted prices. For example, Schering AG sells OCs at discounted prices to social marketing programs in the Dominican Republic and Indonesia, and London International Group has lowered prices on condoms sold to programs in Jordan and Kenya (95, 200). Both expect social marketing promotion to bring a higher volume of sales that will make up for the lower price. Selling through social marketing programs also helps to establish consumer loyalty to companies' brands.

Yet another approach has developed in Turkey. The pharmaceutical company Excasibasi Ilac Pasarfama imports high-quality condoms and sells them through commercial channels. Market-building promotion by SOMARC, including television spots, makes a low price possible. In the first month the company sold one million condoms. A similar cooperative approach is being used to encourage women to try low-dose OCs (237).

Do the subsidies to contraceptive social marketing programs benefit the intended people—those able to pay part but not the full cost of family planning and who had been using public sources or would not otherwise use family planning? For the most part social marketing programs do seem to be reaching the right income groups. For example, in Bangladesh, Honduras, Indonesia, Mexico, Nepal, and Pakistan, indicators such as annual family income, car ownership, household electricity, and sanitation suggest that social marketing customers come from a lower socioeconomic level than contraceptors as a whole or, in the case of Honduras, than women buying other brands of oral contraceptives (25, 180, 192, 201).

Only a few studies have asked social marketing customers about their previous use or source of family planning supplies and services (see Table 3). In most of these studies new users accounted for 30% or more of all social marketing customers. Six surveys recorded previous sources of supply for OC and condom users who switched to the social marketing brand. In five of the six countries, the percentage of new users plus previous users of more subsidized products—the intended market—exceeded the percentage drawn away from full-price products. Information on the previous sources of clients who switched from other methods would be needed to give a complete picture of the market for social marketing programs.

Table 3

Previous Use of Family Planning Among Current Customers of Social Marketing Programs

As Reported in Customer Surveys, 1986–1990

Method, Country, Year	Ref. No.	No. Surveyed	New Users of Family Planning (%)	Previous Users of Same Method by Type of Previous Source (%)			Previous Users of Other Methods
				Subsidized	Commercial	Other[a]	
Oral Contraceptives							
Dom. Rep.1986–87	88	252	34	13	40	0	13
Honduras 1986**.....**	25	222[b]	NA	49	41	10	NA
Peru 1989**.....**	54	362	53[c]	——13——		2	32[d]
Condoms							
Barbados 1989**.....**	207	140	31	9	27	0	31
Ghana 1990**.....**	207	249	43	7	3	3	44[d]
Indonesia 1988**.....**	207	101[e]	26	0	40	0	34
Mexico 1988**.....**	207	388	32	33[f]	21[f]	0	17
Morocco 1990**.....**	207	242	40	NA	NA	NA	NA

NA = Not available

[a] *Source not identifiable as either subsidized or commercial, or source unknown*

[b] *Previous OC users only*

[c] *Includes 19% who had used traditional methods*

[d] *May include previous users of other social marketing products*

[e] *Ever-users of Dua Lima condoms*

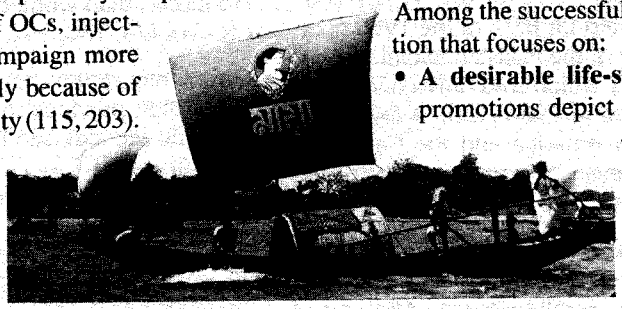
[f] *May include multiple responses. Row adds to 103%.*

PROMOTION: Key to

Promotion—advertising and other publicity—is crucial to sales for most businesses. Thus it is crucial for the business side of family planning—for the manufacturers, retailers, private providers, nonprofit family planning organizations, and even government services that want to attract paying customers.

Promotion tries to influence consumers' spending decisions by increasing the awareness, knowledge, and perceived quality and value of a product. Since people's incomes are finite, they will buy a product only if they perceive its value to be greater than the value of other possible purchases. Evidence from the US—a survey of consumers and more than 700 businesses selling consumer products ranging from candy to snowmobiles to typewriters —indicates the power of promotion to affect perceptions of quality: The products that consumers thought were of the highest quality were the products that were most advertised. The survey also found that improvements in perceived quality led to increases in market share (16).

Evidence from social marketing programs and nonprofit family planning organizations indicates clearly that sales of family planning supplies and services respond to publicity and promotion. For example, in Indonesia sales of OCs, injectables, and IUDs by the Blue Circle campaign more than doubled from 1989 to 1990, largely because of mass-media promotion and other publicity (115, 203).



In Trinidad and Tobago a television commercial for the family planning association, broadcast 58 times during one month in 1987, increased the association's clientele by one-third (68).

Promotion can be effective, but it also can be costly. Thus, to design efficient promotional campaigns, program and product managers need to know:

- How to design campaigns that increase sales, and
- How much promotion costs per person reached and per new family planning client.

Designing Effective Promotion

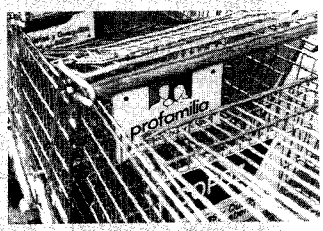
In designing promotional campaigns, programs need to consider the: (1) audience, (2) message, (3) source—the person delivering the message—and (4) channel, or medium.

Audience. Choice of audience comes first; it guides other choices in the design of a promotional campaign. Advertising to increase contraceptive sales is generally directed at urban middle-income couples. For example, the intended audience of Indonesia's Blue Circle campaign has been mainly the 8.4 million middle-income urban couples who make up 9% of Indonesia's population (2).

Audience research—surveys, interviews, and focus-group discussions, for example—is vital to identify the most persuasive messages and sources and the media that best reach the intended audience. Audience research helps to avoid costly mistakes that can limit the impact of promotional campaigns.

Message. Messages often have two main purposes: (1) to give consumers information and (2) to convince consumers of the value of the product.

What do people need to know to buy contraceptives? At the least, promotion needs to provide information that the audience can act on immediately. Thus, some advertising for social marketing programs gives the addresses of pharmacies and the prices of contraceptives.



Advertising also creates an image of value. People are most willing to buy a safe, reliable, effective product that gives them greater control over their lives and improves their self-perception. Thus advertising publicizes the benefits of products for the consumer. The message must be persuasively put and arrestingly presented, with good technical quality. In the language of advertising, promotion "positions" the product, often seeking to link it, in the consumer's mind, with one main benefit. Thus much advertising for oral contraceptives stresses safety.

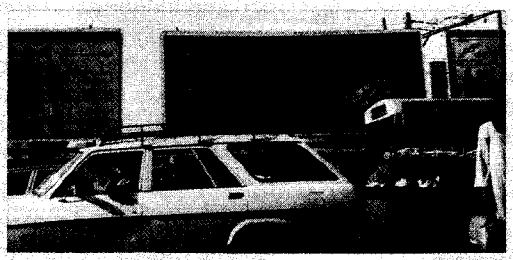
Among the successful approaches has been promotion that focuses on:

- **A desirable life-style.** Many family planning promotions depict contraceptive users as happy and well-to-do. For example, the Male Motivation Project conducted by the Zimbabwe National Family Planning Council in 1988–89, with help from Johns Hopkins University Population Communication Services (JHU/PCS), involved a 6-month 52-episode radio drama, pamphlets, and motivational talks. The drama, entitled "You Reap What You Sow," portrayed two husbands' irresponsible sexual behavior and the problems that it brings them. A postproject survey of 900 men age 18 to 55 found that 41% had heard the drama. The survey results suggest that, of the approximately 2 million men age 18 to 55 in Zimbabwe, over 80,000 started to use a family planning method as a result of the radio drama (130, 139).
- **Advantages of private providers.** For example, audience research for the Indonesia Blue Circle campaign revealed why consumers liked private providers: they spend time with clients, they listen to and address their clients' problems, they provide private and personal service, and they helped wives to discuss family planning with their husbands. These advantages

Family Planning Sales

of private providers were then promoted in Blue Circle mass-media advertising (187). In Thailand radio advertising encourages people to buy OCs from pharmacists who have received special training (92). Private providers also are promoted in Egypt, Ghana, Thailand, Turkey, and other countries.

- **Men's self-esteem.** For example, to launch *Protex* condoms in late 1989, the Morocco Social Marketing Program produced radio spots featuring the slogan, "Family planning is also a man's responsibility." In one spot two men in a cafe express admiration for their friend Omar because he is planning his family and using *Protex* condoms (169). The program sold over one million condoms in 1990, accounting for 44% of the condom market (207).



Source. The source—the person speaking in broadcast advertising or appearing in print promotion—should suit the message. Ads that provide information or seek to reassure the audience about the safety of contraceptives often depict health care professionals. Satisfied users have been effective publicists, particularly for voluntary female sterilization and vasectomy, even when the publicity is not organized. The Asociación Pro-Bienestar de la Familia Colombiana (PROFAMILIA), for example, depends for the most part on word-of-mouth communication among consumers (209).

Media. Intended audience and cost often determine which media to use. Broadcast media reach the largest audience with the greatest frequency. In developing countries there is one radio for every five people, and one television set for every 12 people (35). Television has been used in Egypt, for example, in the Clinical Services Improvement (CSI) project conducted by the Egyptian Family Planning Association (EFPA). In 1988 EFPA, with assistance from Pathfinder International and JHU/PCS, began to upgrade services and promote them with television, radio, and newspaper advertising, brochures, and billboards. A survey of 1,200 first-time clients found that about 70% had learned about CSI from television (232) (see p. 25). Social marketing programs often use broadcast media, particularly radio. Magazine and newspaper advertising has a more limited audience, reaching mainly literate people in urban areas.

Promotion where people buy—called "point-of-purchase promotion"—draws people's attention to or reminds them to buy contraceptives. In Pakistan, for example, until 1990 the Social Marketing of Contraceptives project promoted *Sathi* condoms only in store displays, brochures, and cinema ads. The government did not allow brand-name advertising of contraceptives in the mass media. The point-of-purchase promotion is credited with generating most condom sales, which in 1989 amounted to more than 40 million units (141, 180). Mass-media promotion began in mid-1990, and sales totaled 70 million units in that year (95). A Mexican study in 1986–87 found that condom sales were four times higher in supermarkets that stocked condoms both in the pharmacy department and next to the cashiers than in supermarkets that stocked them only in the pharmacy department (61).

Cost-Effectiveness

Few studies have examined the cost-effectiveness of family planning promotion in developing countries. The effect of advertising is difficult to measure because many factors influence sales. In developed countries, too, advertisers are not always sure of the return on their investment in advertising. Some indications of the cost-effectiveness of family planning promotion come from Brazil, Turkey, and Zimbabwe.

In Brazil Promoção da Paternidade Responsável (PRO-PATER) has calculated the cost of attracting a new client. In 1989 PRO-PATER and three clinics in northeast Brazil, with assistance from JHU/PCS, launched a mass-media campaign consisting of television, radio, magazine, and billboard advertising; pamphlets distributed at clinics and through the mail; and public relations activities. For PRO-PATER's clinic in São Paulo alone, the campaign cost about US$123,000 and increased the number of vasectomy clients by 1,752 to 2,138 in the first year, depending on assumptions about trends in the absence of any campaign (122). Based on the first year alone, the campaign cost $58 to $70 per additional vasectomy and an estimated $5.70 to $7.00 per additional couple-year of contraceptive protection. Even short-term promotional campaigns such as this can have a persistent effect, however. This means that the longer the impact is measured after the campaign, the lower the average cost per additional client becomes.

In Turkey and Zimbabwe broadcast campaigns show that the broadcast media can cost very little per person reached and per new family planning client. In Turkey in 1988–89 a television campaign reached an estimated six million women of reproductive age. It cost US$.04 per woman reached and $.97 per new user of modern family planning methods. These figures are based on projections from surveys of about 2,000 married women before and after the campaign (228). In the Zimbabwe Male Motivation Project, the radio dramas cost $92,000 to produce and reached 41% of men age 18 to 55. Projections from the survey sample to the national population of men age 18 to 55 indicate that the cost was US$.11 per man reached and $1.12 per new family planning user (130, 139).

How much do social marketing programs cost per intended user—new users and users of lower-priced methods? Two cost studies of family planning programs report that social marketing programs cost US$1 to $15 per CYP (100, 109). If it is assumed that on average 60% of all clients are intended clients, then the cost for them is $2 to $25 per CYP.

While social marketing programs appear to take some customers away from commercial products, their promotion may increase commercial sales at the same time—the so-called halo effect. For example, in the Dominican Republic commercial sales of OCs increased about 60% as much as sales of the social marketing product *Microgynon* (199).

The cooperation of retailers is essential to social marketing programs. Without cooperation, some retailers may charge the full commercial price for the social marketing brands, taking the subsidy themselves rather than passing it on to customers. They also may promote the commercial brands rather than the social marketing brands because they make more money on them. Thus social marketing programs usually offer pharmacists more than their usual margin on the social marketing products, and they work closely with pharmacists' associations.

Employment-Based Programs

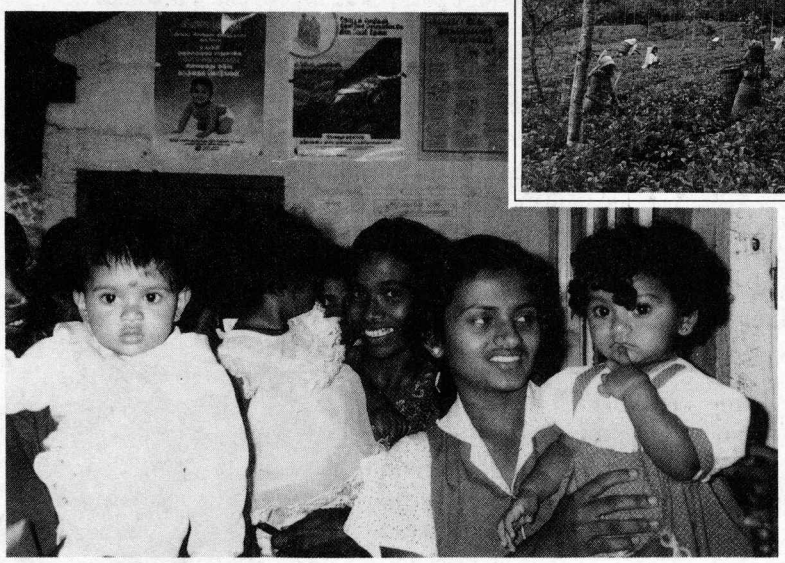
Some employers have been willing to pay part of the cost of family planning services for their employees in order to:

- Contribute to the welfare of their employees and improve labor-management relations,
- Help national family planning efforts, and
- Save money by reducing the need for pregnancy-related illness, sick leave, and maternity benefits for employees.

Most employment-based family planning programs have received support from US AID—through the Enterprise Program, Technical Information on Population for the Private Sector (TIPPS), and, in Kenya, the Family Planning Private Sector (FPPS) Program—and from the United Nations Population Fund (UNFPA), through the International Labour Organisation (ILO). Also, labor unions have supported family planning programs in Indonesia, Jamaica, Turkey, and elsewhere. The ILO promotes employment-based programs and supports training for company health care providers, but it does not provide contraceptives or support family planning services directly. It supported about 35 programs in 25 developing countries in 1990 (103). The Enterprise Program supported the start of 46 employment-based programs in 21 countries from 1985 to 1990 (92, 163). The Enterprise Program and TIPPS worked with businesses, private nonprofit organizations, and private doctors and midwives in developing countries to increase their role in family planning. In Kenya FPPS has supported the start of about 60 employment-based programs since 1984 (234).

Some employers set up or add family planning services in their own clinics. Others—for example, in Mexico, El Salvador, and Indonesia—contract with private nonprofit organizations such as family planning associations to provide services for their employees. Typically, governments or donors provide free contraceptives, although some companies—for example, in the Philippines (184)—buy commercial contraceptives for their employees.

Savings can be substantial, but they may not exceed expenses for several years. For example, in Sri Lanka the Janatha Estates Development Board set up family planning programs in 60 of its 285 estates between 1988 and 1990 with help from the Enterprise Program. According to one projection, cumulative savings will first exceed costs—excluding the cost of commodities, which are provided by the government in 1991 (160). Other programs may require more time to recover costs. For example, the Tata Iron and Steel Company (TISCO) in India started one of the first employment-based family planning programs in 1956. The program provides services for employees, their dependents, and the community. Between 1960 and 1969 expenses exceeded savings, according to an analysis by TIPPS. In 1987, however, TISCO saved 3.5 rupees for every rupee spent, and for the entire period from 1960 to 1987, it had saved 2.4 rupees for every rupee spent (57).



Enterprise Program

In Sri Lanka Janatha Estates Development Board recently set up family planning programs for workers on many of its tea plantations. Some employers are willing to pay for family planning both to help their employees and to save money on health care and other work benefits.

Some programs serve much of the company workforce. For example, Kenya Canners' program, which FPPS supported from 1984 to 1986, had attracted 1,540 users by 1990, about one-quarter of the workforce (233). Four programs in Zimbabwe with industrial and agricultural employers, supported by the Enterprise Program, serve an average of about 20% of their employees (79).

Most employers need donors' stimulus, support, and technical assistance to help plan and start family planning programs. In Mexico, for example, the Enterprise Program provided more than 90% of the total cost for the first two years of an employment-based program with Industrias Unidas (IUSA) between 1987 and 1989. In Zimbabwe Enterprise contributed about half of the total cost to set up the four programs with industrial and agricultural employers (79).

Why subsidize employers who probably could afford to set up services on their own—especially since

they eventually save money on employee health care and benefits? The subsidy is needed to focus employers' attention on family planning. Providing family planning services is not a high priority for most companies, but, once services have been set up, many companies continue them after the initial subsidy ends. Thus the subsidy elicits support from the employer. For example, IUSA in Mexico and two of the four companies in Zimbabwe now fund their programs completely. A third company in Zimbabwe pays for everything except contraceptives, which it receives from the Zimbabwe National Family Planning Council (79, 194).

How many users do these programs attract, and at what cost to donors? One way of measuring donors' costs is simply to divide the number of users by the subsidy. For example, the program in Mexico with IUSA attracted 2,615 users in the first two years (194). Each user cost Enterprise US$22. The four programs in Zimbabwe served 4,095 users during the start-up period, at a cost of US$41 per user (79). But this calculation does not take into account the support elicited from employers. Once companies take on the full cost, the initial donor cost per CYP declines.

In Kenya the Family Planning Private Sector project has helped about 60 employers offer family planning to their employees. Many companies now offer family planning on their own. Posters such as this one, painted by Kenyan artists for FPPS, promote family planning.

To the extent that employment-based programs serve users who would have gone to public clinics or hospitals, the subsidies save governments money. In Zimbabwe, for example, the four Enterprise-supported programs may have saved the government over US$100,000 a year. Of the 4,095 users enrolled in these programs, an estimated 3,850 would have used government sources, rather than private providers, mission hospitals, or pharmacies, if these users had chosen providers in the same proportions that the national population does (79, 230).

Governments can encourage employment-based programs by:

- **Legislating and enforcing mandatory coverage.** In the Philippines, for example, firms must offer family planning if they offer other health services to employees (196). Where governments require employers to provide health care insurance coverage to their workers, family planning should be one of the services specifically mandated.
- **Offering incentives to providers**, such as tax reductions. In India, for example, employers pay a tax to support hospitals for the poor. If they offer their employees health care, however, they are exempted from the tax (181). In Mexico IMSS decreased the contribution required of IUSA by 10% because the employer set up a family planning program for employees (194).

■

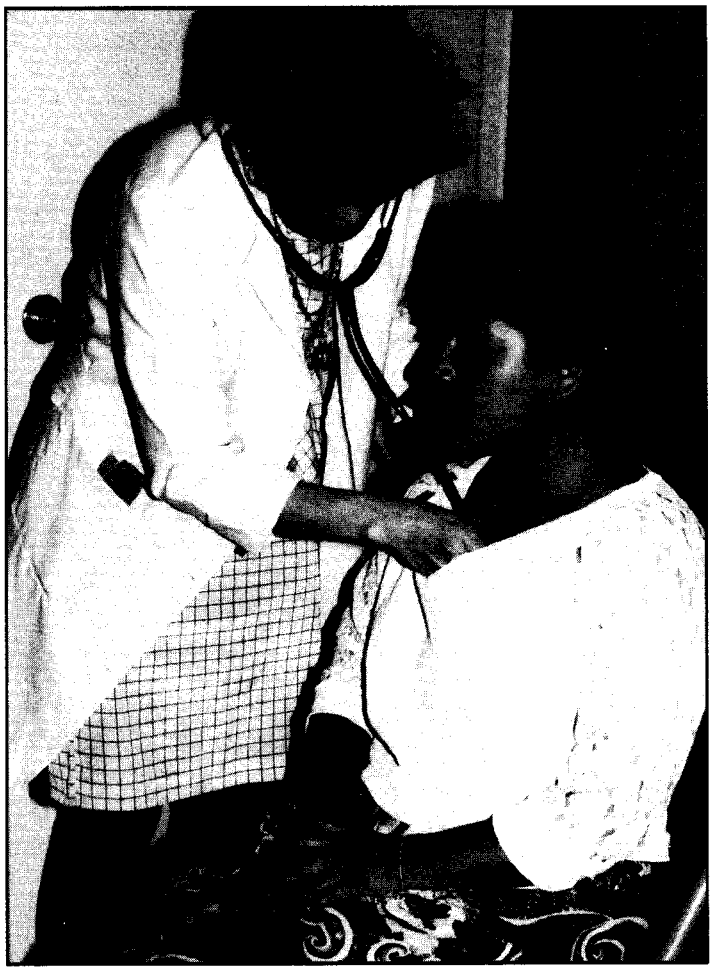
Working with Private Providers

In addition to paying for medical education, governments and donors have partially subsidized family planning through private providers in developing countries by:

- Donating start-up funding to help doctors and midwives get into private practice or, if they are already in practice, to help them add family planning to the services that they offer (as in the Dominican Republic, Egypt, Ghana, Indonesia, Kenya, and Mexico);
- Encouraging employers to contract with private health care organizations to provide family planning services for employees (as in El Salvador, Indonesia, and Mexico) (see p. 26);
- Allowing public outreach workers to refer clients to private providers (as in Indonesia and the Philippines); and
- Reimbursing private providers for providing family planning services (as in Brazil, Indonesia, South Korea, Taiwan, and the US).

Private providers can generally provide services more efficiently than governments. For example, a study in Thailand found that the cost of public clinical family planning services, including salaries, equipment, supplies, and capital costs, exceeds the fees charged by private services. For IUD insertion private clinics charged on average less than half of what the government paid to provide them. For voluntary female sterilization private clinics charged three-quarters of the public costs, and for vasectomy, one-third (236).

Start-up funding has helped doctors open private practices and provide family planning services to underserved communities. Mexico, for example, has a surplus of doctors; some are unemployed or not working as doctors. The Fundación Mexicana para la Planeación Familiar (MEXFAM), with support from US AID and the International Planned Parenthood Federation, has helped more than 175 doctors open community clinics since 1986. The clinics provide family planning and child health services in small towns and poor urban areas. Each clinic costs about US$15,000 to establish. In addition, MEXFAM reimburses the doctor for a number of first-time family planning visits—120 visits the first month, 115 the second, 110 the third, and so on until the subsidy ends after two years. At that time the



MEXFAM

Programs in several countries help doctors open private clinics offering family planning and other services. In Mexico, for example, MEXFAM has helped set up more than 175 community clinics.

doctor can buy the office and medical equipment from MEXFAM for half of its original cost. MEXFAM continues to provide contraceptives and training after two years (17, 152).

Providers already in business may need training, equipment, and publicity to offer family planning services. This is the idea behind the Blue Circle campaign in Indonesia (see pp. 10–11). Private providers are being trained in other countries, as well. For example, the Ghana Registered Midwives Association, with assistance mainly from the American College of Nurse-Midwives and the Enterprise Program, is helping nurse-midwives to add family planning to their maternity services. They receive training in family planning and in the business skills needed to run a private practice (83).

Support to private providers often includes giving them contraceptives. Providing free contraceptives was one of the Indonesian government's first steps toward encouraging family planning users to go to private providers. Between the launching of the Blue Circle campaign in 1986 and the introduction of *Blue Circle* products in 1988, the National Family Planning Coordinating Board (BKKBN) distributed contraceptives at no charge to private doctors and midwives. These providers then charged clients only for their services. The government's goal was to accustom the providers to dispensing contraceptives—which had previously been illegal—and to encourage users to go to the private providers for the partially subsidized services (2).

Referring clients to private providers. An operations research project in Lampung, Indonesia, in 1988–89, conducted with technical assistance from University Research Corporation (URC), arranged for government field workers, at their discretion, to refer family planning clients to private nurse-midwives or to public clinics. Most decided on the basis of client's income or education. Although 29% of field workers in a survey said that they had referred potential users to private nurse-midwives, only 3% of the nurse-midwives' family planning clients said that field workers had referred them (96).

Reimbursing private providers for family planning services—especially clinical services—is common in many developed countries and some developing countries. In Taiwan, for example, private providers perform most IUD insertions. The government contributes about US$1.90 toward the cost of an IUD insertion performed in a private hospital or clinic (45, 49, 148).

Reimbursement is usually less than the cost of the procedure or the usual fees of private providers. In Indonesia BKKBN's reimbursement of Rp 10,000 (about US$6) per voluntary sterilization procedure covered one-third of the average operating cost in 1988 (172). In the US in 1983, the latest year for which information is available, Medicaid reimbursements amounted to 50% of the average fees of obstetrician-gynecologists for a first visit for contraception (98).

Who pays the rest? Providers may charge their clients the difference, or they may cross-subsidize by charging higher prices to other clients or for other services. In Taiwan the government expects clients to pay 40% of the cost of services for a Lippes Loop IUD, for example (45). In contrast, in Indonesia, according to a 1988 study, providers generally did not charge women referred by field workers. Instead, women who came without referral were charged the full cost of the procedure or more, to cover the cost for women who were charged less (172). Thus the reimbursement acts as an incentive for providers to offer the service and to find ways to make up the difference between the reimbursement and the full cost of the service.

Filling out forms and waiting for money are common problems with reimbursement programs. In Indonesia, for example, providers reported that they had to wait seven or eight weeks on average to be reimbursed. Some waited as long as eight months. For each client the provider had to file an average of six copies each of three forms (172).

By collaborating with the commercial sector, governments can make use of the commercial sector's expertise at recovering costs from consumers and of employers' willingness to assist their employees. Thus they stretch public family planning funds further. Another way for governments and private nonprofit family planning organizations to stretch their funds is by recovering some of their costs directly from consumers or employers, usually by charging their clients.

Recovering Costs

Some governments and most private nonprofit family planning organizations recover some of the costs of family planning services directly from consumers or their employers. Public and private nonprofit family planning services

remain largely subsidized services, however. Recovering some costs helps to stretch these subsidies further.

Cost-recovery can take several forms. The most important are:

- Charging users for family planning services,
- Cross-subsidizing family planning services—i.e., charging users of curative or laboratory services more than their cost and using the difference to pay for family planning services, and
- Community financing—collecting from community residents, for example, to pay the salary of a health care worker who provides family planning services, or to buy drugs including contraceptives.

■

Fees in Public Family Planning Programs

Charging users for family planning services—or, indeed, for any government health service—can be controversial. Charges can be controversial even though most governments, if they charge at all, charge very little—typically a few cents for a cycle of pills and less than a penny each for condoms.

Arguments against government charges for family planning and other health care are:

- Governments should provide health services as a basic human right, free to all regardless of income. Governments have a further reason to pay for family planning. Some of the costs of couples having more children than they want are borne by governments. Thus governments have an interest in helping people to avoid unintended pregnancies. At a minimum, if couples do not use family planning because they lack information, government has a role to play in providing information (58, 148). Also, governments often need to subsidize clinical methods, at least in part. Most users cannot afford to pay the full price all at once, even though over the long term clinical methods are very cost-effective because they are very effective and long-lasting.
- Charges will exclude the poor from health care. In Zambia, for example, the government is introducing fees for curative care in clinics and hospitals. A 1990 survey of 11 hospitals found that fees—for example, a charge of four Kwacha (US$.10) for an outpatient visit—decreased attendance by about half (28). Use of family planning also is sensitive to price, at least in some cases (see box, pp. 22–23). Large price increases decrease use.
- People are not willing to pay for preventive health services such as family planning. In contrast, they are willing to pay for curative services because the benefits are clear and immediate (58, 148, 198, 231). This is obvious in reproductive health: Women will pay exorbitant fees for abortion but seem less willing to pay modest amounts for preventive family planning before pregnancy occurs.
- Collecting fees is too costly. Clinics will have to hire more staff to collect, account for, and distribute fees. They may also need to hire guards to prevent theft.

While these arguments have merit, policies resulting from them have often failed to provide high-quality services and to reach those most in need.

Free care for all? This may be a worthy ideal, but few governments allocate enough to health care—or to the type of health care that helps the most people—to achieve it. In most cases, services fall far short of need and thus in effect are rationed, but often by location rather than need. Most government funds for health care go to urban hospitals. Thus people in cities take advantage of them, regardless of their income. People in rural areas, who are generally poorer than those in cities, have less access to the free services. For example, a review of health care financing in Senegal in 1981–82 found that 43% of the government's health subsidy went to Dakar, where only 19% of the people lived (110).

In addition, people who use public health services often must pay in time rather than money. Typically, they have to travel long distances to clinics and wait for hours for care. Because funding is limited, clinics may be open for only a short time during the day, and some people may travel to the clinic only to find it closed. Clients also may have to pay money "under the table" to get faster service or to be treated at all. Thus free care for all is not truly available in most developing countries—or in many developed countries, for that matter.

Fees exclude the poor? In fact, in some developing countries the poor pay 1% to 8% of their income for health care (6, 32, 81). For example, a 1985 study in Côte d'Ivoire and Peru found that poor families spent 1.6% and 4.5% of their incomes on health care (81). Also, if governments use the proceeds of fees to set up rural health services, fees can help to give the poor access to more or higher-quality health services rather than exclude them.

Public facilities can exempt those who truly can pay nothing. Screening procedures need not be elaborate or require extensive paperwork. Some approaches are:

- Providers assess ability to pay subjectively and informally. The Planned Parenthood Federation of Nigeria, for example, exempts the poor by their appearance (202).
- Providers interview clients. For example, the Family Planning Association of the Philippines interviews clients to ask their monthly family income (205).
- Clients present proof of poverty. In Niger, for example, the village chief issues an indigency card to people too poor to pay for hospital care. Hospitals can bill the local government for the indigents' care, although they rarely do (219). In public hospitals in Jamaica fees are waived for people who receive subsidies for food (149).
- Clients living in poor areas get discounts or exemptions. All clients coming to a clinic may be asked where they live, or clinics in poor areas may charge less than clinics in wealthier areas. In the Dominican Republic, for example, clinic staff can judge people's ability to pay by their addresses (147).

Some organizations—for example, MEXFAM in Mexico and PROFAMILIA in Colombia—insist that all clients pay something (151, 166). MEXFAM extends credit rather than provide free services. Exemptions for the poor can invite trouble from other clients if they find out that someone else paid less. In general, organizations set fees that most of their clients can afford, and few clients ask for exemptions.

People are not willing to pay for preventive services? Many people are willing to pay something for family planning. The question is rather how much are they willing to pay. While charges may discourage some from using health services, in general people are willing to pay small fees (see p. 24 and box, pp. 22–23.).

Fee collection is too costly? Collection costs need not discourage charging for public family planning services. In the few studies of collection costs, they have proved to amount to a small percentage of revenue (58).

Do Price Changes Affect

Does changing the price of family planning supplies or services affect demand? In theory, higher prices should reduce demand. The few studies and program evaluations addressing this issue offer mixed results, however. Some suggest that under certain circumstances demand is unaffected. Others find at least short-term changes in demand when prices change.

Research Findings

Various types of price changes have been studied for their effect on demand (see Table 4).

Free versus fee. Some studies have compared demand for contraceptives at different locations, some sites giving away supplies and others charging a fee. In Colombia, Egypt, and South Korea, demand for oral contraceptives (OCs) appeared to be the same whether the pills were free or paid for (24, 48, 80). In a comparison of three similar-size populations in Taiwan, however, numbers of users were about the same where a cycle of OCs was given away free and where a cycle sold for US$.13, but, where a cycle sold for $.25, there were only half as many users. Demand appeared to be unaffected as long as the price was moderate (44, 85).

In northeast Brazil the government introduced free contraceptives in both urban and rural areas. Rural users were drawn away from commercial outlets in large numbers. In contrast, urban users did not change brands, probably because they had a wider range of convenient commercial outlets available than did rural users (186). For urban users convenience or other factors were more important than price.

Lower prices. Lowering contraceptive prices appears to increase demand. In Taiwan, for example, two different programs offered lower-price OCs and sold substantial amounts to new users (44). For example, when OCs were offered through the mail at one-third the commercial price, 25% of customers were new users. Most customers said that they would rather have bought at the local drugstore but did not want to pay the price there (144). Similarly, a 1986 study in the Dominican Republic found that introducing a lower-priced OC into the marketplace through a social marketing program drew out users who previously could not afford modern methods. Among 250 *Microgynon* buyers interviewed, 34% were first-time contraceptors (199) (see p. 15).

From fee to free. Dropping a charge for contraceptives also can attract new use. In Thailand the National Family Planning Program abolished charges for OCs—previously 5 Baht (US$.22) per cycle. They found a substantial and sustained increase in use (124). Most of the new users apparently were new contraceptors. Similarly, when the National Family Planning Association in South Korea dropped a US$20 charge for voluntary female sterilization, there was a dramatic surge in demand (48). In both cases the initial fees may have helped to create the image of value. When the same product or service was then offered free, consumers perceived that they were getting a valuable good without cost. Also, the original price of $20 for sterilization in Korea may have been too high for most low- and middle-income people (145).

Price increases. Seven studies of contraceptive price increases offer conflicting results. In Thailand doubling the price of injectable contraceptives at public clinics had no effect on the number of new or continuing users. Since injectables could be obtained at a lower cost some distance away, researchers concluded that time costs and convenience were more important than price (206). When contraceptive social marketing programs in Jamaica and Sri Lanka raised prices of OCs and condoms, there was an initial drop in sales to retailers, followed by a gradual movement back towards original levels. The short-term drops were attributed largely to retailers' having built up their inventories before the anticipated price rise, not to a drop in consumer demand (99, 145, 216).

Sudden and substantial price increases can cut sales drastically, however. After no price changes for eight years, the social marketing program in Bangladesh recently raised prices 60% to catch up partially with inflation. Sales of *Raja* condoms dropped 46% over the 12 months following the price rise. OC sales dropped 17%. Although total revenue increased, an estimated 400,000 to 500,000 of the lowest-income condom customers were lost during the year after the increase. Price appears to have been the principal reason for the drop in sales, but worsening economic conditions may have played a role, too (50).

A price increase in a small, new social marketing program in Benin produced a similar result in 1990. *Sultan* condoms had been sold for five months before the 51% price increase. In the following five months, sales fell 42% (95).

A recent study by the Association for Voluntary Surgical Contraception provides evidence that sterilization services are particularly vulnerable to fee increases. A decrease in funding for sterilization services in 17 nongovernmental clinics in Mexico, the Dominican Republic, and Brazil led to fee increases of various sizes and, at 14 of the 17 sites, to parallel decreases in demand for sterilization services. At a clinic in Juarez, Mexico, for example, when fees initially were raised from US$43 to $55, the average monthly case- load dropped 10%. A year later, when funding was cut further, the clinic increased fees by another $5, to $60, causing a 58% decrease in average monthly caseloads over the next year. At most sites, the larger the cumulative price increase, the more dramatic the effect on demand. At nine of the sites, it appeared that the clientele also changed, so that more middle-income and fewer low-income clients were using sterilization services (97).

Demand? That Depends ...

A sudden shift in economic conditions in Peru also showed how higher prices can deter sales. Community-based distributors who had been selling subsidized *Lo-Femenol* OCs at US$.08 per cycle also began offering *Microgynon* OCs at the full pharmacy price of $.46 per cycle (71). Initially, 9% of their pill customers switched to *Microgynon.* Then a new government lifted price controls, and prices of all goods rose sharply. The price of *Lo-Femenol* went to $.30 per cycle, and the price of *Microgynon* soared to $1.57 per cycle. *Microgynon* sales by community-based distributors dropped to almost zero, while *Lo-Femenol* sales fell 30% (71). Commercial sales of *Microgynon* and other brands fell, too—initially by about 80% (74).

In summary, different types of price changes appear to have different effects on demand. Most people seem as willing to pay a modest price as to get products free, and they will accept small price increases. When prices drop—either to lower prices or to zero—use increases, however. A large fee may exclude many poorer consumers, and a large increase can hurt sales badly, at least in the short run.

Why the Mixed Results?

Why do price changes affect demand one way in some cases and another way in other cases? A number of factors may be important:

Type of contraceptive. Condom sales may be more sensitive to price changes than OC sales. Condoms may be more discretionary or impulsive purchases than OCs, whereas women who choose OCs are highly motivated and do not want to interrupt their pill-taking (50). It may also be that women, as OC buyers, value pregnancy prevention more than men, as condom buyers.

Initial price versus cumulative cost. The amount that a user must pay for a contraceptive at any one time may be more important than the cumulative cost of the method. It is difficult for people with limited incomes to save enough money for large purchases. Thus they usually cannot afford US$20 for a sterilization, for example, even though they would have no further family planning costs. They can more easily buy a few condoms or a cycle of OCs and do so repeatedly, even over many years. For this reason, OCs and condoms are good candidates for commercial sales, but methods with high initial costs—sterilization, IUDs, and Norplant implants—probably will remain completely or heavily subsidized.

The role of substitutes. Some contraceptors may switch methods if relative prices of methods change. Using an econometric model based on survey data from Jamaica and Thailand, researchers concluded that many people would shift to other methods if condom prices were raised in Jamaica and Thailand, or if the prices of injectables rose in Jamaica. It appeared that price increases for other methods would not affect their use—a finding that suggests factors other than price were important to the choice of these methods (10). In Brazil a large proportion of clients of the nonprofit organization Centro de Estudios e Pesquisas Clovis Salgado (CEPECS) chose IUDs rather than sterilization after increases in the price of sterilization in the late 1980s (97).

Nonmonetary costs. If a potential user assesses the time and transportation costs of obtaining contraceptives, he or she may find these costs too high regardless of the price of the contraceptive itself. Potential users may be discouraged especially if they must travel long distances to buy contraceptives but can afford only one packet of pills or condoms at a time. Thus people may be willing to pay more for contraceptives that they can get conveniently (9).

Economic situation. Economic conditions such as inflation or currency devaluations affect the ability of some income groups to buy contraceptives. In social marketing programs, for example, the poor are often the primary intended market. But even a price increase to keep pace with inflation may put the product beyond the reach of a consumer whose income has not risen.

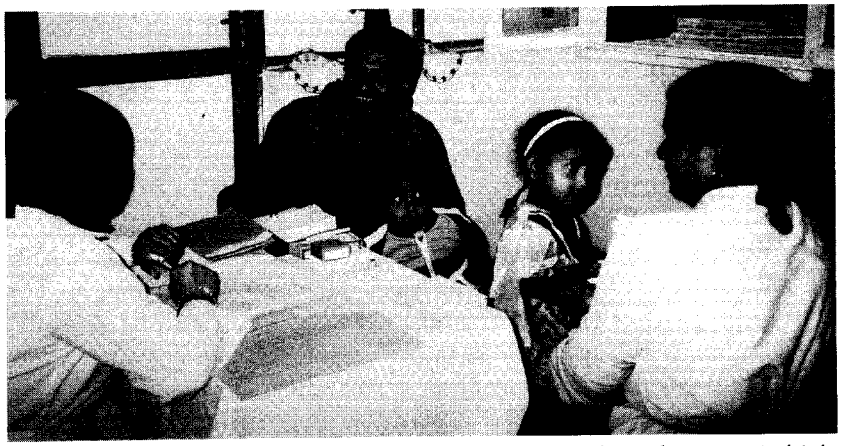
Perceptions of value. Some surveys suggest that most consumers prefer to pay for contraceptives, as well as for other goods and services, rather than to receive them free of charge. Consumers associate paying a fee with high quality and greater convenience (129). Indeed, in many societies consumers distrust free services. In Zaire, for example, mobile health teams found villagers suspicious of free health services. Once fees were charged, the services became popular (136). Of course, the perception that services are better when purchased may be correct; free services do discourage clients if the quality of service is poor.

Perceptions of value—and thus willingness to pay—reflect the image of a product or service. Thus a well-promoted product may sustain sales even when prices increase, since promotion can influence the perceived value of the product (see pp. 16–17).

Table 4

The Effect of Contraceptive Price on Demand

Price Change	No. of Studies	Ref. Nos.	Summary of Findings
Free vs. fee.....	5	24, 48, 80, 85, 186	Little difference in demand so long as price is low or moderate.
Price decrease ..	3	44, 144,199	Lowering prices attracts new users.
From fee to free	2	48, 124	Eliminating fees attracts new users.
Price increase ...	7	50, 71, 95, 99, 206, 216, 97	Mixed findings; large increase discourages use.



CSI

Many people will pay for family planning if the quality of service is high. Well-trained staff and well-equipped clinics—and publicity that informed the public—attracted 58,000 paying clients over three years to the Contraceptive Services Improvement project of the Egyptian Family Planning Association.

In addition to generating revenue, charging fees could have several other advantages for public family planning programs. Fees:

- Convey to clients that services are valuable. Clients may think that free supplies and services are of poor quality. Also, they may forget to use free drugs or supplies.
- Give clients the sense that they have control over their care.
- Help to account for contraceptives. In Ghana, for example, small fees help public clinics monitor their stock of contraceptives and maintain adequate supplies (39). Such monitoring helps to reduce theft. Contraceptives and other drugs and supplies often are stolen from public clinics in developing countries and then sold in private practices or in markets.

Facilities need an incentive to collect fees. Facilities lack this incentive when they have to return all fees to the national treasury. In Senegal, for example, government policy requires public health facilities to charge user fees, which are returned to the national treasury. Despite this requirement, one hospital collected no fees for 10 years because it was not allowed to use the revenue (90).

Some governments allow hospitals to use part of the revenue collected from user fees. In Jamaica, for example, hospitals return all fees to the Ministry of Health. They can, however, submit claims to the Ministry of Health for half of this revenue, most of which the hospitals spend on maintenance (149). In Niger hospitals return half their fees to the treasury, and half are distributed among the staff (219). Returning fees to staff, buying equipment, or improving facilities also boosts staff morale.

Some governments have used a negative incentive—reduced subsidies—to encourage facilities to collect user fees. For example, in Honduras in 1984 public hospitals were told to begin charging users in an effort to recover 30% of costs. Hospitals kept the revenue, but the government reduced subsidies by 5%. Thus hospitals that recovered more than 5% of costs increased their revenue. Average cost recovery in the first year was only 4.2%, however (90).

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Fees in Private Nonprofit Programs

For many of the reasons listed above, private nonprofit organizations generally charge their clients. Charging fees also reduces dependence on donor funding. In addition, where family planning is controversial, fees help to avoid any accusation that family planning organizations are forcing clients to use family planning; clients would not pay if they did not want the service (64).

Most nonprofit organizations charge low fees because their goal is to provide wide access to family planning services and to serve the poor. Thus user fees make up a small percentage of income for most of these organizations. For example, affiliates of the International Planned Parenthood Federation in developing countries raised 16% of their income in 1989 chiefly from user fees but also from contraceptive sales and fund-raising. The extent of cost-recovery varies widely, however—from 3% of income in South Asia to 38% in East and Southeast Asia. Even within regions, among countries with similar per capita income, affiliates differ greatly in the extent of cost-recovery (20).

Some of the larger nonprofit family planning organizations do take in substantial revenue from user fees and other charges. In Indonesia two of the largest nonprofit family planning organizations recover about one-quarter of their costs from fees, and in Colombia PROFAMILIA raised about half of its income in 1990 from contraceptive sales and fees for family planning and other maternal health services (155, 209).

In setting fees, nonprofit organizations take into account:

- The cost of services. As noted, fees generally do not cover costs, however.
- The income of clients in the neighborhood. Fees may be calculated as a percentage of average yearly income or equal to the price of common purchases such as a loaf of bread.
- The fees of public clinics, other nonprofit organizations, and commercial providers. Usually, nonprofit organizations set fees between those of public and commercial providers.

Most nonprofit organizations lower or waive fees for people who cannot afford the full price.

The family planning methods that a program offers and that users choose affect a program's ability to recover costs. Generally, users can pay more of the cost, or even the full cost, of supply methods—condoms, OCs, and injectables. In contrast, most users are not able to pay a large part of the cost of clinical methods—voluntary sterilization, IUDs, and Norplant implants. Most get these methods from subsidized sources. Thus these sources—public clinics and hospitals and nongovernmental family planning organizations—will need more subsidies for these methods and will be able to recover less of their cost.

■

Imposing or Increasing Fees

Imposing or increasing fees without losing clients is a challenge. If raising fees loses clients, programs may fail to meet their goal of serving as many as possible or of serving the poor. Also, for some nonprofit organizations the level of donor support is based on total couple-years of contraceptive protection provided; losing clients can mean reduced donor support. Furthermore, losing too many clients will cause a drop in total revenue rather than the intended increase.

Some nonprofit family planning organizations increase fees regularly to keep pace with inflation in the cost of living or, especially in Latin America, because donors have decreased funding. These organizations have found that clients are willing to pay more if:

- **Prices for a year's worth of supplies and services remain below about 1% of clients' annual incomes.** Contraceptive social marketing programs and some curative health services use this benchmark to set fees (6, 193). A lower proposed maximum price is two days of income, or .8% of yearly income, to buy one year's worth of condoms. A recent study of 17 social marketing programs found that the average price of a year's supply of condoms was 1.2 days' worth of income in the nine programs with the highest per-capita sales and 3.8 days' worth in the eight programs with the lowest per-capita sales (94).
- **Fee increases are small.** For example, in Colombia PROFAMILIA used to raise prices once a year to keep pace with inflation of about 30% per year. The result was fewer clients for several months after each increase. Now instead PROFAMILIA raises prices by about 10%—slightly more than the increase in the cost of living—three or four times a year, with no loss of clients (166, 209).
- **Clients can see improvements in service**, such as better facilities or more convenient hours. Also, better services can attract more clients who can afford to pay higher fees. In Indonesia, for example, Yayasan Kusuma Buana (YKB), a private nonprofit organization, operates four clinics in the Jakarta area that offer family planning and maternal and child health services. To attract more clients, YKB moved clinics to more accessible locations, promoted services through community education, extended service hours, and improved the appearance of the clinics. These steps contributed to a 75% increase in client visits per month between 1987 and 1988 (189). In Egypt, the Egyptian Family Planning Association has conducted the Clinical Services Improvement (CSI) project since 1988. The project has set up more than 100 well-equipped, clean, fee-for-service family planning clinics with well-trained staff. These improved services and a multimedia promotional campaign, which emphasizes "quality and caring service at an affordable price," attracted over 58,000 family planning clients to CSI clinics between 1988 and 1990. By gradually increasing fees, CSI plans to cover almost two-thirds of its costs by 1995 (187, 232, 238). Also, some clients may be willing to pay extra for an appointment—a convenience offered by private doctors—rather than wait to be served on a first-come, first-served basis. People also may be willing to pay more for an appointment that does not conflict with their work day—for example, in the evening or on a weekend (64). Improving quality need not be costly. For example, especially for family planning clients, sensitive counseling may be more important than the appearance of the office. Of course, simply improving service is not enough. Better services need to be publicized and promoted (see pp. 16–17).
- **Clients are not surprised by price increases.** Signs announcing future fee increases can help (64).

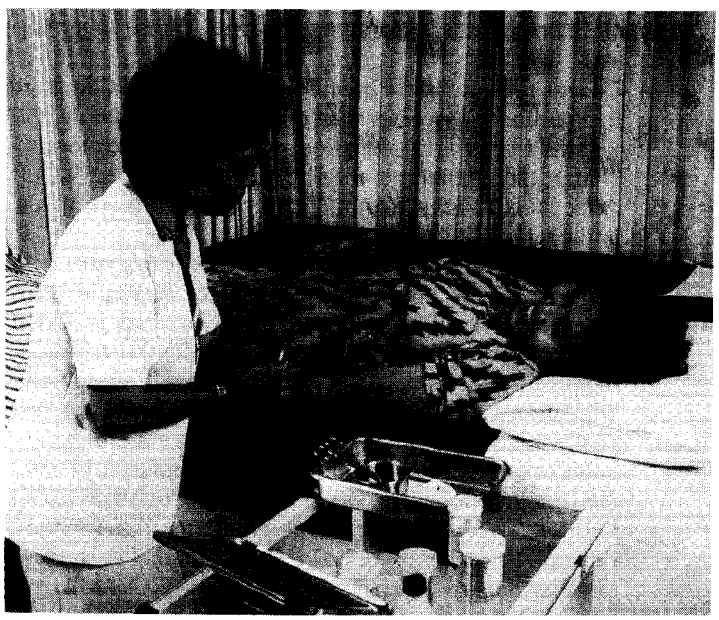
Organizations should carefully evaluate their clients' response to fee increases. As a rule of thumb, if raising fees leads to a substantial drop in clientele that lasts for several months, the increase is too great. Individual programs need to decide on what they think is a substantial drop in clientele. One suggested figure is a 20% drop (6). Examining service records or surveying the clientele before and after a fee increase can provide precise information about changes in the volume of clients and use of services by the poor. Keeping prices unchanged in one facility or area allows for useful comparison. For example, the volume of clients might stay the same at the facility that increased fees but increase at the facility where fees were not changed. Without the comparison, managers might not realize that the fee increase had discouraged some clients.

Cross-Subsidization

Family planning services can be cross-subsidized in part with the income from curative services or other specialized services. For example, in Colombia PROFAMILIA raised over US$4 million in 1990, about 30% of its income, from fees for gynecological and urological services, treatment of infertility and sexually transmitted diseases, prenatal care, and general medical care (209). In Brazil the private Hospital Sofia Feldman, which serves the low-income population of Belo Horizonte, pays part of family planning costs with revenues from laboratory analyses. In 1988, with support from the Enterprise Program, the hospital bought equipment to conduct parasitology studies, immunology analyses, and urinalyses. By mid-1989 laboratory revenue covered 45% of the hospital's family planning costs (161).

Alternatively, income from clinics or hospitals in wealthy areas can cross-subsidize facilities in poor areas. In Indonesia, for example, YKB clinics in wealthy neighborhoods have recovered as much as 150% of their costs, and the excess has helped to support clinics in poorer areas (181).

Money-making social marketing projects also can subsidize other family planning services. For example, the Family Planning Association of Sri Lanka earned about US$300,000 in 1990 from sales of donated condoms, OCs, and spermicidal foaming tablets (4). In Colombia PROFAMILIA's Community Marketing Program cost US$867,000 in 1990 and took in more than $2 million from contraceptive sales (209).



Improved services increased client visits by 75% over a year at YKB, a private family planning organization in Indonesia. Also, higher fees at clinics in wealthy areas subsidized clinics in poor areas.

Charging for training or consulting services is another way to pay for family planning services. For example, the Planned Parenthood Federation of Nigeria charges fees for training doctors and nurse-midwives in clinical services, counseling, and promotion (202). In Thailand the Population and Community Development Association (PDA) charges for advising and training staff of other organizations in health program management (174). Also, successful organizations can generate revenue by offering technical assistance to programs in other countries—perhaps as contractors on donor-supported family planning projects.

Some organizations sell noncontraceptive products to help pay for family planning services. For example, Thailand's PDA sells T-shirts, key chains, and pens imprinted with family planning messages. PDA also generates income by renting office space and conference rooms in their facilities and by leasing audiovisual equipment (174). Profits from a restaurant called Cabbages and Condoms also support PDA. PROFAMILIA in Colombia sells books, and in El Salvador the Asociación Demográfica Salvadoreña sells Christmas cards and auctions used cars (140). The social marketing program in Bangladesh has begun selling sanitary napkins to raise money (95).

Community Financing

In some countries communities pay for health services including family planning. In The Gambia, for example, villagers' contributions to community development committees pay the salary of a health worker. People who cannot afford to contribute may instead work in the health worker's field. The government provides the health worker with an initial supply of drugs including oral contraceptives. The health worker sells the drugs to clients, and the development committee uses the revenue to buy more drugs—an arrangement called a revolving drug fund (6, 31).

Other Ways To Recover Costs

Private nonprofit family planning organizations have recovered costs in other ways, some of which could be used by public family planning programs as well. These organizations:

- **Charge registration or membership fees** that entitle users to a number of services or to discounts. For example, the Family Planning Association of Trinidad and Tobago charges an annual membership fee of TT$10 (US$2.35) that covers a package of medical services, contraceptives, and counseling (56).
- **Contract with employers or social security systems to provide family planning services**. For example, Prosuperación Familiar Neolonesa in Mexico has provided family planning services at the worksite for three companies since 1987. Prosuperación supplies staff, equipment, educational materials, and contraceptives. After the first year, which the Enterprise Program supported, the companies covered all costs with a monthly donation. In 1990 the monthly donation was US$2,500, which was about $500 more than the cost of providing the services. Prosuperación has used the income to market its services to other employers (194). In Colombia PROFAMILIA is negotiating to provide family planning services for the Instituto de Seguros Sociales (209).
- **Conduct local fundraising.** For example, the Family Planning Association of Bangladesh conducts an annual lottery for prizes donated by individuals and corporations. The lottery accounts for about 3% of local income and promotes the organization (68). The Family Planning Association of Trinidad and Tobago conducts annual telethons with other nonprofit organizations (56, 104). (Telethons are television shows, usually featuring live entertainment, that may last for a day or longer.)
- **Depositing money in interest-bearing accounts**. For example, The Gambia Family Planning Association generated 4% of its total budget in 1988 from interest income on 3-month deposit accounts and a regular savings account. From 1988 to 1989 the association earned US$6,000 from these accounts, which it has used for building renovations, staff training, salary increases, and other purposes. Earning substantial interest income is possible only if donors allow funds to be deposited in interest-bearing accounts and the organization has enough to invest after it has set aside cash for daily expenses (68).

While cost-recovery efforts will help to extend family planning services, most public and private nonprofit family planning programs will continue to be subsidized. One of their main goals, after all, is to serve the poor, who will always need subsidized health services (93).

Increasing Efficiency

How can family planning programs get more for their money—provide more service and/or serve more clients? To increase efficiency, managers first need to know how efficient their programs are and how they compare with other, similar programs. Efficiency is usually measured as cost per unit of output. Thus, to calculate efficiency, programs must know the cost of providing services and the amount of service that they provide.

Comparing Efficiency

What is a typical cost of providing a couple-year of contraceptive protection (CYP)? Costs vary, of course, by mode of service delivery. For example, a review of 63 family planning programs in 10 developing countries found that social marketing programs and voluntary sterilization programs cost the least, in the range of US$1 to $6 per CYP. Community-based distribution programs and full-service clinics cost the most—$5 to $19 and $1 to $30 per CYP, respectively (100). Another study found higher costs—US$5 to $15 per CYP for social marketing programs in Bangladesh, Colombia, and Honduras; $2 to $13 per CYP for sterilization services in Bangladesh, Colombia, Guatemala, Honduras, Indonesia, Mexico, and Morocco; and $6 to $22 per CYP for community-based distribution (CBD) programs in four Latin American countries (109).

Such cost data are useful to compare the efficiency of similar programs, but they may be misleading if used to compare programs with different objectives. For example, CBD programs are designed to reach people in rural areas and usually offer supplies free. Thus they cost more per user than social marketing programs, which serve mainly urban areas and sell contraceptives.

Simpler measures of efficiency are the number of clients served per hour or day or the ratio of clients to staff. For example, the Peru Ministry of Health expects reproductive health clinics to serve an average of four users per hour (182).

A suggested norm for family planning clinics in Africa is five to six clients per hour (36). Subsidized nonprofit family planning clinics in the US serve 400 to 500 clients, averaging two visits each per year, per full-time staff member. One US clinic reported that it served 700 to 1,000 clients per full-time staff member per year after it took steps to improve its efficiency and to increase cost-recovery (116).

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Improving Efficiency

To increase efficiency, managers need to discover where resources are being wasted. For example:

- Are staff as productive as possible? Is every worker busy but not overburdened? Are all staff skills being put to their best uses?
- Do supplies run short periodically? Are supplies lost?
- Are doctors needed for the services that they are now performing, or can lower-level and less costly personnel perform them as safely and effectively?
- Does supervision ensure that staff are both competent and efficient?

Answering these questions requires observation, experimentation with changes in service delivery, recordkeeping to measure the effect of the changes, and the will to change practices that are inefficient. Managers need an incentive to do all this. They need to be rewarded for the good performance of their unit and held accountable for poor performance. One way to establish accountability and incentives is to decentralize health services and allow hospitals or clinics to charge and keep user fees (6) (see p. 24).

Thirty years of experience and dozens of operations research studies of family planning programs have identified ways of increasing the efficiency of service delivery, promotion, and evaluation.

Efficiency in service delivery. Increasing efficiency means either saving money without decreasing output or else increasing output without increasing costs. Most studies in developing countries focus on saving money without decreasing output or quality.

Money can be saved in various ways (see **Population Reports**, *Operations Research: Lessons for Policy and Programs*, J-31, May-June 1986). For example, programs can:

- **Use lower-level health care personnel** where appropriate. Studies in Pakistan, the Philippines, South Korea, Sudan, and Turkey have found that nurses and paramedical personnel can insert IUDs as safely as doctors can (5, 26, 29, 41, 225). A study in Colombia of 26 PROFAMILIA clinics found that clinics with similar budgets could increase output by 10% if they hired more nurses and fewer physicians (14). In Thailand nurse-midwives and medical students have safely performed voluntary female sterilization (38, 65).

  In many countries volunteers provide condoms and pills in CBD and employment-based programs (12, 134). Volunteers, however, can be more expensive than employees. Studies in Haiti and Bolivia have found that a small group of salaried promoters was more cost-effective than a large number of volunteers because of training and supervision costs (42, 43). In particular, high turnover among volunteers adds to training costs.
- **Reduce the frequency of supervision**, if possible. For example, a 1981 study in Brazil found that quarterly supervision of CBD workers was just as effective as monthly supervision and allowed programs to save money. In Pernambuco State, for example, switching to quarterly supervision allowed the CBD program to operate with 10 rather than 14 supervisors. This saved about US$19,500 on salaries, travel, and per diem expenses. Retraining supervisors, severance pay, and other costs amounted to about $13,500. Thus the net saving was $6,000 in the first year. Savings projected to the second year, $10,500, amounted to about one-third of the total program budget (72).
- **Retrain and supervise CBD workers individually and on the job** rather than in groups at a central location. Workers learn more, and programs save travel and transportation costs and avoid absenteeism at group meetings. Studies in Bangladesh and Guatemala have found that such individual supervision is more effective and less costly than group supervision and retraining (30, 188). A study in Kenya, however, found that group supervision of CBD workers—once-a-month meetings between supervisors and three or four community health workers—was as effective as monthly individual supervision and cost about half as much—US$6.30 versus $11.80 per supervisory visit per worker (108).
- **Combine clinic and CBD programs.** For example, a 1989 study in Kenya by FPPS found that programs combining clinic and CBD services cost $18 per CYP while those without CBD cost $25 per CYP (119). Rather than competing with the clinics, the CBD programs referred clients to them. A review of 63 projects in 10 developing countries found a similar difference: combined clinic and CBD services cost $9 per CYP on average, and clinics alone cost $13 (100).
- **Experiment to find the most cost-effective frequency for services** that are not offered every day. For example, in Peru the Instituto Peruano de Paternidad Responsable (INPPARES) operates a program in settlements on the periphery of Lima. INPPARES brings physicians and equipment into the communities to offer IUD services for clients referred by community-based distributors. INPPARES found that these IUD clinics were most cost-effective when open twice a month (about US$23 per IUD insertion) rather than once a month ($31) or once a week ($26). They also found, however, that the clinics drew people from the widest area when they were open once a week (73).

AMEC-PCP

Television and radio are the most cost-effective way to reach the public. A major family planning campaign can reach a large percentage of the population at a cost of only pennies per person.

News coverage is free publicity, and newsworthy people make news. Film stars such as Türkan Soray, here shown in a poster, helped the Turkish Family Health and Planning Foundation attract the news media's attention to a recent promotional campaign.

Efficiency in promotion. Experience in family planning promotion has identified several ways to promote efficiently. These include:

- **Using the mass media**, especially radio and television, if they are widespread (see pp. 16–17).
- **Working with the commercial sector**, which is usually more cost-effective than directly hiring technical staff and maintaining expensive equipment. Also, commercial firms—video production companies and printers, for example—can usually produce higher-quality work than government facilities. Thus their work better attracts corporate sponsorship or donations of broadcast time.
- **Negotiating and bargaining**, which can save money on many aspects of promotion. For example, actors, actresses, singers, scriptwriters, and producers may be willing to lower fees in exchange for the public exposure of a campaign and an opportunity to contribute to a worthy cause. In the Philippines the Multimedia Campaign for Young People, with help from JHU/PCS, produced popular songs and music videos promoting sexual responsibility. Popular singer Lea Salonga and the group Menudo charged little because the campaign managers inspired confidence that the songs would be of high quality and well-promoted (183).
- **Placing large orders.** Advertising agencies, printers, and other vendors may lower fees for large jobs and the promise of future work. Large orders also strengthen the buyer's negotiating position. On a large order the buyer can ask an advertising agency to assign its best people to the job. Small organizations can collaborate to take advantage of these benefits. In Kenya, for example, seven family planning organizations led by the Family Planning Association of Kenya are participating in a unified promotional campaign, the Provider and Client IEC Project. They plan to produce posters, flyers, and radio ads (69).
- **Using the same material in different media**. For example, a skit can be performed on stage, and its soundtrack can be played on radio. Multiple use can increase the audience and decrease the production cost per person reached. For example, a theatre troupe in Ghana recently performed a drama, "The Last Pregnancy." The performance was videotaped for television, copied onto videocassette, and transferred to 16 mm film for showing to rural audiences. The theme song, which was popular with audiences, was also used in a mass-media family planning campaign (164).

Sharing the costs of promotion can save money for a family planning organization and increase the exposure of a promotion campaign. Examples of cost-sharing include:

- **Persuading broadcast media to donate air time.** For example, in the Philippines the Multimedia Campaign for Young People received more than US$1 million in free radio and television airtime in 1987 and 1988 (183).
- **Making news**, which generates free mass-media coverage. Family planning programs have generated mass-media publicity by arranging festivals or other newsworthy events, holding news conferences, and distributing press releases. For example, the Turkish Family Health and Planning Foundation generated news coverage using well-known actresses and comedians in television spots. About 600 journalists were invited to a press conference just before the launch date. The Foundation generated about $45,000 worth of free media coverage in one month (241).

Efficiency in evaluation. Evaluation research measures the effects of a program, compares them with the program's goals, and identifies ways to improve the program and future programs. The main steps in evaluation research are designing the evaluation, gathering and analyzing data, and reporting results. The scope of evaluation should match the program being evaluated. Evaluation of family planning promotional campaigns, for example, typically accounts for 5% to 10% of total program costs (121).

Programs can conduct evaluation research efficiently if they determine their information requirements at an early stage, include evaluation in their workplans, and record the information that they need in their management information systems—the system that an organization uses routinely to collect and store program information. For some programs clinic records or commodity sales can give a clear picture of the clientele's response to changes—for example, in staffing or fees. A sample survey of households can identify large-scale changes.

If managers need to evaluate operations that are not envisioned in the workplan, they can use any of several quick and inexpensive methods to collect information. These include small surveys, focus-group discussions, and operations research studies. For example, small surveys—also called rapid assessments—can evaluate reasons that clients switch methods or discontinue use altogether. Typically, such surveys can be done in a few weeks. Many use proxy

indicators. For example, for information about household income, researchers can observe the quality of roofing or floor material or ownership of bicycles or motorbikes rather than try to collect actual income information (214, 221).

Training is often the major cost of collecting data—training clinic staff to keep records or training interviewers to conduct household surveys, for example. For household surveys, it is generally cheaper to train a small number of interviewers to do 20 or more interviews each than to train a large number of interviewers to do fewer than 10 interviews each. Also, the interviewers become more skillful as they conduct more interviews (120).

There is no such thing as free family planning services. Somebody must pay for them. Developing-country governments and donor agencies have paid and will continue to pay for most family planning. But their services will go further if the commercial sector becomes more active in family planning, the public and private sectors work together more closely, and public and private nonprofit programs recover more costs and operate more efficiently. Governments and donors will not be the only ones to benefit. Commercial providers will find a larger market for contraceptives and family planning services. Private nonprofit organizations will be able to serve more users and depend less on donor agencies. Public programs that can keep user fees will have an incentive to improve the quality of their services. And, most importantly, more people will have better access to affordable, high-quality family planning supplies and services.

Note to Table 1: Projecting Family Planning Costs

To estimate future costs of family planning services, researchers:

(1) Adopt a set of projected population growth rates and then calculate the contraceptive prevalence and the number of users or other measure of service output necessary to achieve those rates; and

(2) Calculate a unit cost: the cost per user, per visit, or per couple-year of protection (CYP, or the equivalent of one year of contraceptive protection for one couple).

Total costs are then the number of users or visits multiplied by the appropriate unit cost.

Projecting Numbers of Users

Most estimates have focused on the year 2000. To project the number of users in 2000, researchers begin with projections of national fertility rates in that year. Most use the United Nations medium variant projection of population growth. This projection forecasts the 5-year period between 1995 and 2045 in which each developing country will reach replacement-level fertility. According to the 1990 projection, all developing countries will reach replacement-level fertility by 2045 (212).

To calculate the prevalence and the number of contraceptive users needed to achieve these rates, most researchers use the Target-Setting Model developed by John Bongaarts. The model relates fertility rates to a variety of factors, including the proportion of women who are married, contraceptive use, and the level of induced and spontaneous abortion. Typically, researchers assume that any changes in factors except for contraceptive use will offset one another. Thus future fertility rates will depend entirely on increases in contraceptive use, taking into account both contraceptive prevalence and the effectiveness of the methods used (211). Projected numbers of users are then calculated by multiplying the prevalence rate by the projected number of married women of reproductive age (33).

Estimating Costs

Researchers' estimates of family planning costs in the year 2000 depend partly on the mix of contraceptive methods that they project and how they estimate commodity and service delivery costs. Most use the current method mix as reported in standard sources such as the Demographic and Health Surveys or UN estimates. They then assign costs to each method. For example, Duff Gillespie and colleagues assigned commodity costs to each method and added an average service delivery cost of $18 per CYP for all methods (84). In contrast, Barbara Janowitz and colleagues calculated the cost of the different modes of service delivery (clinics, community-based distribution, and social marketing, for example), rather than cost per user, using data on service costs and surveys in three countries (109). Rodolfo Bulatao of the World Bank calculated costs from population program expenditures in 46 countries, thus implicitly assuming the current method mix in those programs (37). Whatever the method mix, in all projections the cost of service delivery exceeds the cost of supplies and commodities.

Most studies assume that cost per user will remain constant as use of family planning expands. This may not be the case, but data on costs are not reliable enough to project costs per user confidently. As programs expand into rural areas, the cost of reaching each user might be higher than in urban areas. In fact, however, a comparison of cost data from national surveys shows that family planning costs per user decline from about US$11 per user at 20% prevalence to about $6 at 50% prevalence (126). Also, as developing countries become more urbanized, more users may have more access to services at lower cost per user. The one projection that assumed declining cost per user, by Harriett Destler and colleagues, nevertheless estimates that costs of family planning will more than double by the year 2000 (63).

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