-Contraceptive Distribution-
Taking Supplies to Villages and Households

SUMMARY

For family planning programs in developing countries, the principal challenge today is to reach the rural areas where 80 percent of the population lives. In most of the far-flung villages, widely separated by fields, valleys, rivers, and mountains, medical facilities are few and far between and transportation, at best poor, may be almost nonexistent. There may be only one physician for 10,000 to 100,000 people and even fewer nurses. A field worker in a national family planning program may have to serve as many as 5,000 families. Thus the traditional clinic- or physician-based approach to family planning cannot adequately provide supplies and services for the people.

One answer to this dilemma that is currently being explored in at least a dozen countries is extensive use of village or household distribution points for condoms, foams, and oral contraceptives. It is now recognized that these can be supplied without clinic procedures and with new, more flexible patterns of supervision. Variously referred to as community distribution, village and household availability, continuous motivation, contraceptive inundation, commercial distribution, subsidized sales, and social marketing, these new means of distribution have as their objective extending family planning services and supplies beyond the clinics and bringing them directly into the daily lives of the people where they will be easily available to everyone.

Indigenous Programs Vary

Some programs rely on part-time distributors who simply add contraceptive distribution to their usual work. Sometimes the distributors are paid. Sometimes they are volunteers who work as family planning counselors with a church or women's group. Sometimes they are village opinion leaders who operate part-time contraceptive supply centers so that friends can stop by at convenient times for the necessary supplies. The costs of these programs are usually less than costs of traditional clinic programs.

Some programs are established and operated by private family planning associations, but many of the most effective programs are linked to government efforts. In Pakistan, for example, the "contraceptive inundation" program, under government auspices, includes subsidized sales in village shops and door-to-door. The buyer pays only 2½ cents (US) for a cycle of pills or a dozen condoms. In Sri Lanka a subsidized condom marketing plan, now being expanded to include oral contraceptives, was initiated by a private organization, Population Services International, and will be administered by the International Planned Parenthood Federation.

Orals Without Prescription

Objections to distribution of oral contraceptives without medical prescription are being dispelled in a growing number of countries by recognition that serious side effects are rare; that side effects usually cannot be predicted for the individual woman; that effective supervision can be largely delegated to nonphysicians; and that the known benefits of avoiding unwanted pregnancy far outweigh the risks of oral contraception. Several countries, including Pakistan, Bangladesh, and the Philippines, now specifically authorize the distribution of oral contracep-

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HISTORY

Until about 50 years ago, methods of fertility regulation
throughout the world were more often a matter of folklore
and tradition than of medicine and science. Information
was passed from mother to daughter and from father to
son while local granny midwives, herbalists, and apothecari­
caries provided various potions to the community. Medical
practitioners were involved primarily in performing abor­
tions, which, although usually illegal, were demographi­
cally effective, and in dealing with complicated deliveries
(46,114).

Commercial distribution of various contraceptive products
flourished in the late 19th and in the 20th centuries as
people moved to the cities and began to feel the pressures
of urban crowding. Local inventors and entrepreneurs,
aware of community needs and sales to be made, often
both developed and distributed their own products. At
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The Role of the Clinic

The first family planning clinic was opened by Dr. Aletta
Jacobs in Holland in 1882 to provide some privacy and a
place where a trained person could fit a woman with the
proper size cervical cap or diaphragm. Dr. Jacobs’ clinic
served as a model for Margaret Sanger’s clinic in the USA
and Marie Stopes’ in the United Kingdom, and established
a pattern associating clinical examination and care with
the use of the diaphragm (92,104,114).

The shift from over-the-counter sales to clinics and greater
medical involvement in the distribution of contraceptives
came about not only in response to new methods like the
diaphragm and cap, but also as a reaction against the pub­
lic commercial promotion of ineffective or even dangerous
products and because of religious censure of family plan­
ning. To insure acceptance of the concept of family plan­
ing, birth control services came to be provided by phy­
sicians in clinical facilities—usually private offices or
maternal and child health centers—where they were asso­
ciated with routine medical care.
Medical supervision was also considered appropriate and necessary for the care of the IUD user. Early suspicions that IUDs carried a great risk of introducing bacteria into the uterus were difficult to overcome. Even those who favored IUDs felt it necessary at first to have the devices inserted only by physicians and only in clinical settings (34,51,94).

When oral contraceptives were first introduced, beginning around 1960, the formulations were relatively strong and the likelihood of severe side effects was unknown. Women using them were therefore advised to remain under close medical supervision (see Population Report A-2). Now time has passed, the hormonal content of the pill has been decreased, and the relative safety of these preparations has been widely studied and measured (8,50,79,86,87,88,96,101). In addition, it has become increasingly clear that there are too few medical personnel and facilities in the world to provide pills according to a strict clinical protocol to all women who want or might benefit from oral contraceptives (53) (see Table 1).

Family planning clinics, whether integrated with other health facilities or operating as free-standing units, have both advantages and disadvantages. Since they involve medical personnel within a fixed facility, they can offer a high level of care and multiple services, supplies, and equipment. They provide a measure of privacy and medical confidentiality. Also, since the medical profession is generally held in high esteem, a clinic setting can minimize controversy or political repercussions in countries where family planning is not yet fully accepted.

On the other hand, family planning clinics have certain disadvantages (103): firstly, users must travel to the premises, which are usually open only during certain hours. Repeated visits for advice or supplies may be necessary. This involves transportation costs, providing for the care of children or dependents, losing time from work, and long waits at the clinic. Since attendance at health and family planning facilities depends on how close the client lives to the clinic, stationary clinic facilities are intrin-

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sically limited in their ability to serve widely dispersed populations (18,60). Secondly, in some cultures women are embarrassed by clinic procedures: they may find the clinic intimidating or be nervous in the presence of an unfamiliar, highly educated physician who asks personal questions and performs vaginal or pelvic examinations. Also, they may be reluctant to be seen attending the clinic by other women (93,98). Thirdly, clinical programs are often limited by shortages of money and medical personnel and administrative backup, especially in developing countries and in rural areas. Fourthly, in a clinic setting family planning often receives second priority to more immediate needs for curative health care.

Laudable efforts have been made in recent years to adapt the clinic system to meet more effectively the needs of the communities they serve. Mobile clinics are one approach (6,48,64). Extensive use of paramedical personnel, intended to make clinics more efficient and economical, is another. Paramedics can distribute oral contraceptives, provide contraceptive and abortion counseling, and insert IUDs. In both developed and developing countries the role of the paraprofessional is expanding, and evaluations show that paraprofessionals are indeed effective in providing family planning services (11,65,66,86,87,88,111,115).

Clinics are adapting to better meet the needs of the community by providing abortion and sterilization services, which traditionally have been performed in hospitals by trained physicians. Nonhospital, outpatient abortion clinics are now providing safe, rapid, and relatively inexpensive early abortions. Male sterilizations are available in settings as varied as railway stations, churches, mass vasectomy camps, private physicians' offices, and clinics originally established to perform legal abortions (5). Even female sterilization, a more complex and potentially more hazardous procedure, is being performed on an outpatient basis under local anesthesia in both developed and developing countries in mobile field facilities as well as stationary clinics (63).

Nonclinical Distribution

While new clinic models are being developed, so, too, are new contraceptive distribution systems that do not require large investments of medical time or skill. One of the first efforts to make contraceptives more readily available in villages and households began in 1959 in Puerto Rico. In an island-wide program sponsored by the private Family Planning Association, community leader volunteers distributed in their own neighborhoods contraceptive foam free of charge (4). In India the Gandhiram Institute of Rural Health and Family Planning established a village based system of contraceptive distribution in the early 1960s. Village residents were selected and trained to distribute conventional contraceptives using their homes as supply points. These distributors also referred individuals who wanted IUDs or surgical sterilizations to area clinics (71).

As early as 1961, village women in Comilla, East Pakistan (now Bangladesh), were selected to sell condoms and foaming tablets door to door. Three years later an additional community distribution project began involving sales of the same methods for profit in small retail shops (20,102).

Some of the early programs had to cope not only with personnel, supply, and logistics problems but also with the hostility of the populace toward family planning. After a decade of effort, however, this hostility has been eliminated in most countries. Thus, current efforts to make contraceptive supplies available can operate in an environment of acceptance and support which enhance prospects for program success.

CONTRACEPTIVE DISTRIBUTION

PROGRAM COMPONENTS

Village and household oriented family planning distribution programs exist today in many different forms and in many different countries. A shopkeeper in Sri Lanka or Pakistan, a housewife in Colombia, a school teacher in Brazil, a traditional entertainer in Thailand, a "barefoot doctor" in China—all belong to indigenous distribution networks. These networks are:

- closely linked to the life of the community
- geographically convenient
- culturally acceptable
- designed especially to suit the convenience of the user.

A basic premise of these programs is that products or services that are readily available are more likely to be used than those which entail effort, expense, inconvenience, or embarrassment to obtain. A further premise is that familiar and regular contacts with the supplier provide a constant reminder to continue using the product. Thus, village and even house-to-house distribution are not radical departures from but a necessary complement to clinic programs. In fact, many of these programs either began as a clinic-outreach effort or quickly developed a system for referral to existing clinics. In this way clients with medical problems such as troublesome side effects from contraceptives, or who want a clinical method such as an IUD, sterilization, or abortion, can receive further attention.

Whatever their origin, these programs all have five major components, each of which can be adapted to suit the local situation. These are:
- personnel
- training
- contraceptive supplies
- information and education
- evaluation.

Personnel

An effective contraceptive distribution program requires strong leadership. Supervisors usually are carefully selected, highly competent, full-time family planning workers who perform all or most of the following tasks:

- select, train, and oversee distributors
- educate village leaders and groups and answer questions about methods and supplies

Mothers' clubs, formed in Korean villages by family planning workers in the late 1960s, have played a key role in the distribution of contraceptive supplies there. Club members distribute pills and condoms to women in their village and help to encourage other village women to use contraceptives (85).
Distributors, on the other hand, are usually local people with varying education and experience who perform all or most of the following tasks:

- convey contraceptives to retailers, households, and/or individuals
- provide information, recruit program participants, and teach correct use of contraceptives
- answer questions and refer clients who desire alternative (clinical) methods of family planning
- resupply established users
- keep basic records on supplies and use
- deal with or refer clients who have problems with chosen methods to appropriate sources of assistance.

In some programs distributors gather basic demographic data and/or carry on extensive educational work as well as supply contraceptives. Distributors can be rewarded for their efforts in various ways. They may keep all the money from sales or only a portion, turning over the remainder to the program. In some systems, especially those which work through church or women's groups, the distributors work as volunteers without compensation.

Training

The training of both supervisors and distributors is important to the success of nonclinical distribution programs. Basically, training should be designed to familiarize workers with the nature of the program, family planning methods, distribution of contraceptives, potential side effects, and record keeping. Many training techniques can be used: for example, lecture, discussion, and even role-playing, which helps prepare program workers for situations they will encounter on the job.

The training period for supervisors usually lasts from one week to one month, with refresher courses provided every six months or once a year. Although most supervisors will already have a substantial health or medical background, they are likely to receive further instruction in reproductive biology, basic demography, and human relationships.

Distributors, on the other hand, generally receive from one day's to two weeks' training before they begin to distribute contraceptives. This basic orientation should be supplemented by in-service training, either informally, at the time of a supervisor's visit, or through periodic sessions devoted entirely to instruction.

Contraceptive Supplies

Community distribution systems necessarily emphasize nonclinical methods, that is, those which require little or no medical involvement. Condoms, spermicides, and oral contraceptives are well suited to extensive distribution. IUD insertion, sterilization, and abortion, on the other hand, are clinical procedures, although information about them can be conveyed by the same people who distribute the simpler methods.

A crucial element in these distribution systems is an adequate supply of contraceptives. Experience in many countries during the last decade has revealed that assuring abundant supplies of contraceptives at the village and household level is a major logistical task that is not usually accomplished until a program has been operating for a number of years. Not until ample working supplies of contraceptives are on hand can distribution programs achieve general availability (78).
The United States Agency for International Development and public health officials calculate that appropriate initial supply goals for a program’s first year of operations are: a year’s supply of oral contraceptives for 10 percent of the women aged 15-49, a year’s supply of condoms for 5 percent of the men of equivalent age, and a year’s supply of spermicides for 1 percent of the women aged 15-49 (108). In a country of 100 million people, for example, the required initial order of oral contraceptives is:

\[
100,000,000 \text{ (total population)} \times 20 \% \text{ (approximate percentage of women aged 15-49)} \times 10 \% \text{ (goal for 1st year)} \times 13 \text{ (cycles per woman per year)} = 26 \text{ million cycles.}
\]

At a cost of $0.20 (US) per cycle, this would amount to $5.2 million (US) for the first year (108). A similar supply should be ordered for the second year, and thereafter orders should be adjusted to the rates and trends of utilization (52).

The initial order of condoms for the same population is:

\[
100,000,000 \text{ (total population)} \times 20 \% \text{ (approximate percentage of men aged 15-49)} \times 5 \% \text{ (goal for 1st year)} \times 100 \text{ (condoms per man per year)} = 100 \text{ million condoms.}
\]

At a cost of $0.03 (US) per condom this would amount to $3 million (US) for the first year (108).

Currently, intense demand for contraceptives in countries like Bangladesh and Pakistan is reflected in black market prices for oral contraceptives that are as much as 10 times higher than the subsidized price (57). Black markets, although sometimes criticized by auditors or donors, actually are proof of intense demand for contraceptives. They are not intrinsically bad, but they can be obliterated by making available an abundance of contraceptives to meet demand fully. Program administrators must be encouraged to order abundant supplies and to distribute them generously. Establishment and maintenance of adequate supply lines require farsighted action by many parties: larger budgets for population and family planning must be obtained by both donor and developing country agencies; larger proportions of those budgets must be allocated for purchase of contraceptives; and adequate working supplies of contraceptives must be made available for distribution to individuals before utilization of contraceptives can guide further purchase and distribution. To move more strongly in this direction USAID officials are budgeting more than $40 million for contraceptives in fiscal year 1976 (108) and are urging other donor agencies, the United Nations, and the governments of developing countries to give higher priority to assuring adequate working supplies of contraceptives.

The condom is the simplest contraceptive to distribute in a community-based system. In countries where men make most of the domestic decisions, the condom is usually more popular than methods for women (24). The condom is fairly effective, easy to use, traditionally available from nonmedical sources, and has the added advantage of helping to prevent venereal disease (see Population Reports H-1 and H-2). Although the manufacture of rubber condoms is a moderately complex process, they are now being made in several developing countries, including India, Korea, and Thailand, and plans are underway for their manufacture in Pakistan and Indonesia.

Spermicides, including aerosol foam and foaming tablets, which are not quite as effective as condoms in preventing pregnancy, are also sold through commercial channels (10). A very early program in Puerto Rico involved door-to-door distribution of foam at no cost to acceptors (4). In Africa many men are buying foam, presumably because they prefer that the women use foam rather than that they use condoms (107). The long-term demand for spermicides in developing countries has not been fully explored and may be greater than currently recognized (10). Spermicides cost slightly more than either condoms or pills, but spermicides may be preferred if sexual relations are infrequent.

Like condoms and spermicides, oral contraceptives have great potential for village and household distribution, but there is still debate over what degree of medical supervision is necessary. Recently extensive studies in the United Kingdom (91) and the United States (77) have helped put the side effects of oral contraceptives into better perspective and have highlighted beneficial effects as well as the few harmful side effects. Unfortunately, it is usually impossible, even after taking a careful medical history and doing a complete physical examination, to predict which individual woman is at risk of side effects (2,8,75, 79,97,101).

The Central Medical Committee of the International Planned Parenthood Federation recommended in April 1973 that "responsible, simple methods of nonmedical distribution of oral contraceptives can and should be devised" (53). In the last three years at least eight countries, including Antigua, Bangladesh, Chile, Fiji, Jamaica, Pakistan, the Philippines, and South Korea, have eliminated prescription requirements for oral contraceptives (35); several other governments including Ghana are considering similar action. In the Peoples Republic of China as well as in many Latin American countries, oral contraceptives are readily available without medical prescription. In Britain, following a forceful recommendation from a number of British medical leaders, the Minister of Health in April 1975 appointed an ad hoc committee to consider removing the requirement of a physician’s prescription for pills. Nurses, midwives, and other health personnel, working under the indirect guidance of doctors, have been suggested as distributors (2,97). This emerging consensus is giving powerful impetus to nonclinical community distribution projects in many countries.

The rhythm method, or periodic abstinence, although of limited effectiveness, can also be taught and encouraged through community networks, especially by other couples who have used the method successfully. In the Philippines and Mauritius, as well as in the USA and Canada, such programs have been operating for several years with some success (16,58,90,116). Guidance and encouragement are provided, usually by volunteer couples who meet frequently with other users, answer questions, and recruit new couples. The rhythm method is difficult to use successfully, and social networks intended to help couples learn and continue using it must be exceptionally strong.

The family planning distribution network should have as much medical backup as possible. Any woman using oral contraceptives, for example, who feels apprehensive and wants a medical consultation—thinks she has diabetes, tuberculosis, or liver disease; has pain or swelling in the
the various methods is usually appropriate. Often various other mass media have also helped to increase family planning and the advantages and disadvantages of posters, radio announcements, puppet shows, films, and duct is a sample of the product itself, community can be utilized. In some villages in Indonesia, essentials, additional information about the benefits of contraceptive by a special "family planning message" order to provide a high return to the retailer despite a reasonable low price for the consumer. Professional advertising skills are available in nearly all countries and represent an important, largely untapped potential in family planning education (61). It is likely, for some time at least, that governments or other agencies will have to subsidize information and publicity as well as the contraceptives themselves, even though a small user charge may cover most of the direct distribution costs (7).

In the earliest family planning projects, the most persuasive information was conveyed by word of mouth (59,89). As the subject has become more familiar and respectable, posters, radio announcements, puppet shows, films, and various other mass media have also helped to increase awareness of and to promote the practice of contraception. For commercial distribution, advertising is necessary for the creation of large markets with high sales volume in order to provide a high return to the retailer despite a reasonably low price for the consumer. Professional advertising skills are available in nearly all countries and represent an important, largely untapped potential in family planning education (61). It is likely, for some time at least, that governments or other agencies will have to subsidize information and publicity as well as the contraceptives themselves, even though a small user charge may cover most of the direct distribution costs (7).

Similarly, with noncommercial programs that include existing institutions, supply depots, or household distribution, information need not be restricted to word-of-mouth recommendations. All channels of communication in the community can be utilized. In some villages in Indonesia, for instance, women are reminded to take their oral contraceptive by a special "family planning message" sounded on the village drum each day at sundown (22). In the Philippines, the members of Iglesia ni Cristo hear sermons that encourage the practice of family planning and assure them that it is morally and socially acceptable (37,49).

Evaluation

Despite differences in method of evaluation from one country to another, all are concerned with three types of information:

- data on program inputs and outputs, including the number of distribution points in the system, the quantity of supplies delivered and/or sold, the number of new acceptors of each method per specified period, and the prevalence of use of each method at specified points in time.
- descriptive data on the characteristics of acceptors, including age, parity, methods used, followup and cost/efficacy of the program.
- demographic data which measure program impact, especially monthly or at least annual fertility rates.

The first type of data can be taken from simple records maintained by distributors and supervisors. The second and third types can be gathered only after the program has been in operation for some time.

In distribution systems based on institutions or village supply points, data for evaluation can be extracted from simple records that give the name, age, and address of each acceptor and the kind and quantity of contraceptives dispensed. The information about contraceptives can be collected either as tabulations on charts or by a simple count of the coupons collected with each distribution of contraceptives. Collecting data in programs which sell contraceptives requires a different approach. For example, names and addresses of customers are not recorded, but sales records should be available. Door-to-door programs, whether for sales or free distribution of contraceptives, can provide detailed demographic data for census and other purposes along with family planning program information.

Types of Programs

These five program components can be combined in various ways to meet community needs. Programs now in existence can be divided into four broad categories:

- subsidized sales of contraceptives through established retail outlets or directly to households
- distribution through churches, banks, and other institutions involved in various aspects of community life
- community or village distribution by residents who serve as suppliers
- household distribution, or provision of contraceptives door-to-door to anyone interested.

SUBSIDIZED SALES

From the consumer's point of view there is little difference between the subsidized sales of contraceptives and ordinary commercial sales except for the price. Both involve distribution through established retail outlets, but in subsidized programs contraceptives are sold at a price adjusted to increase sales to the community rather than to cover the full cost of the commodity, its promotion and distribution. This is possible because the government or some other donor subsidizes the cost of the product provided free or sold to the wholesaler and/or retailer. It is intended that the low sales price will eventually generate a high volume of sales and thus provide a satisfactory return to the retailer. Considerable external funds for advertising and commercial promotion may be needed, at least initially, to stimulate sales (7,13,61).

Subsidized sales programs can be administered either by the government, as in Pakistan, India, and Ghana, or by private organizations, as in Costa Rica, Kenya, and Sri Lanka. Programs make use of existing retail shops or recruit special personnel for door-to-door sales. Prices can be as low as 2 or 3 cents (US) for a dozen condoms or as high as 15 to 20 cents (US) per condom for luxury brands. Programs can be nationwide or regional. To date, condoms, pills, and sometimes spermicides have been distributed through subsidized programs.
The advantages of subsidizing commercial sales are numerous. In any country the number of retail outlets far exceeds the actual or even the potential number of clinics (see Table 2). Existing distributors and advertising firms can be used without establishing an extensive administrative bureaucracy. Therefore, distribution costs should be well below the costs of dispensing the same contraceptives in clinical programs. Evaluation is simple because distribution and sales figures provide a readily available indication of contraceptive coverage.

On the other hand, there are also disadvantages. If inadequately subsidized, the product may be too expensive for the poorest segment of the population. Also, because subsidized sales compete with ordinary commercial sales, drug manufacturers and retailers will often seek to inhibit the full operation of a subsidized sales program. Some retailers may prefer a high mark-up on a low volume of sales to a low mark-up on a high volume.

**Costa Rica**

In Costa Rica under direction of the National Population Council (CONAPO), close collaboration exists between the public and private agencies responsible for family planning. The Ministry of Health offers family planning services in more than 100 health centers. A woman selecting oral contraceptives at a government health center is given from one to six blue or green coupons which can be redeemed at any of 150 or so participating pharmacies. Ninety-five percent of the women are issued blue coupons, each good for the purchase of one cycle of oral contraceptives for $0.35 (US). This compares with a market price of $1.50 to $2.50 (US). If the social worker at the clinic determines that a woman cannot afford to pay even 35 cents, the client receives green coupons which entitle her to free pills. When all her coupons are used, the woman returns to the family planning clinic for additional coupons and for consultation.

The Costa Rican Demographic Association, a private family planning organization, receives free oral contraceptives from the International Planned Parenthood Federation. It sells them to the drugstores for 28 cents (US) per cycle, retaining the proceeds for other program uses. The pharmacy makes seven cents’ profit on each cycle of pills sold.

Although the pharmacy program in Costa Rica has not been formally evaluated, it appears to have contributed to the recent decline in Costa Rica’s birth rate, especially in rural areas, however, and the two-step coupon system may discourage many women from getting the pills they need.

**Antigua**

Antigua Planned Parenthood Association, a private family planning association, has established a subsidized contraceptive sales program utilizing pharmacies and other convenient retail outlets. As in Costa Rica, the program is based on a coupon system intended to minimize disruption of normal commercial sales.

Although like the Costa Rican program in many respects, the Antigua program differs in others. Contraceptives for both males and females are subsidized. Furthermore, any adult can buy subsidized contraceptives directly, without coupons, from about 25 designated pharmacies and retail stores. The cooperating stores sell a cycle of pills for $1.00 (US), 25 cents of which is kept by the retailer. (Although one-third less than the commercial price, a $1.00 (US) price is more than many women in developing countries can afford.) Condoms sell for 15 cents (US) a three-pack, from which five cents is retained by the retailers.

If the would-be purchaser finds the cost still prohibitive, he or she can stop at any of 17 locations—health centers, nurses’ offices or union headquarters—to pick up coupons redeemable for contraceptives at the stores. Stores accept one coupon plus 25 cents for a cycle of pills or 24 condoms. The retailer retains the whole 25 cents as profit. For those unable to pay even the 25 cents, special arrangements have been made so that they can receive pills or condoms free from the retail stores. The Antigua Planned Parenthood Association obtains the contraceptives free from IPPF.

Nationally broadcast radio messages promote the program, and retailers display counter-top signs and sometimes family planning posters. Village nurses and staff members of the family planning association do person-to-person educational work in the community.

A baseline survey in May 1973 and a follow-up study late in 1974 revealed that, although knowledge of contraception had increased in Antigua between 1973 and 1974, the new channels of distribution were not well known and contraceptive use had, in fact, decreased somewhat. A second and more precise field evaluation noted that (1) distribution of only one coupon at each visit forced the acceptor to make two trips for each monthly supply of contraceptives, one to pick up a coupon and another to get supplies; (2) advertising failed to provide specific enough information about methods, sales locations, and prices; (3) retailers and coupon distributors were not adequately supervised; and (4) import and sales taxes imposed by the government caused higher than necessary prices. The program evaluators judged the program to be conceptually sound, however, and these problems are now being corrected.

**India**

The Nilelath (condom) program in India was a prototype for subsidized marketing of contraceptives. A government sponsored effort, the program distributed condoms through several companies with established distribution networks for tea, soap, and other items to retailers, mainly in large and medium sized cities. The program...
reached a peak in fiscal year 1974 when 116 million condoms were sold—that is, a year’s contraceptive protection for slightly more than a million couples (109). This peak in sales was reached one year after an extensive advertising and publicity campaign.

In October 1974 the Government of India increased the price of three condoms from two to three cents (US). Also, the advertising budget for fiscal 1974 was cut in half. In 1975 government funds for advertising were discontinued and responsibility for publicity was transferred to the Mass Education and Media Division of the government family planning program (43). As a result of these program changes, Nirodh sales for fiscal year 1975 were estimated at about 60 million condoms, or half the 1974 level (42). The decline in sales may also be due to the fact that Nirodh condoms are neither lubricated nor colored and thus have less user appeal than the newer types. The Nirodh experience suggests that government funded marketing activities can be successful but that improved contraceptives and substantial promotion are needed in addition to subsidization.

Kenya

The Kenya program, launched in 1972, is identified with the bright pink package of the Kinga condom, which was sold initially through a pilot project in one district. Developed and implemented by a private firm, Population Services International (PSI), the program was based on market surveys, advertising, and vigorous promotional campaigns (24). Sales increased rapidly during the first year but the project was limited to a single district until late 1974 when a number of new districts and cities were added (44). The government of Kenya has not yet given its approval for a nationwide effort.

According to PSI the program is currently operating without government financial support but with a private subsidy of about $25,000 (US) per year. Sales have now reached about one-half million condoms per year. Various brands sell at prices ranging from 5 to 20 cents (US) per condom (43). If the Kinga project continues, it will be a useful test of whether a private, nongovernmental marketing plan can maintain itself without financial backing from either an international donor organization or the national government.

Sri Lanka

Subsidized condom sales in Sri Lanka began in 1973 under the direction of Population Services International with the support of the International Planned Parenthood Federation. The condoms were marketed under the brand name Preethi, which means “happiness” in the two local languages. During the first 18 months of the program, an estimated 5.1 million condoms were sold through over 4,000 small shops (see Fig. 1) at a cost of four cents (US) and by mail at five cents for a package of three condoms or were distributed as samples. Currently, distribution is averaging about 300,000 condoms per month. PSI estimates that 60,000 couples are now using Preethi (31). Less than one year after this program began, a survey of men aged 15-50 in Sri Lanka revealed that 88 percent knew about Preethi, 66 percent approved of the sales campaign, 13 percent were actually using condoms and, of these, 70 percent were using Preethi (72).

A second phase of this program began in December 1974. It involves direct advertising of oral contraceptives, called Mithuri, meaning “woman’s friend,” to women and to physicians and licensed pharmacists who might prescribe and/or distribute it. At this point, data with which to evaluate the project are few. During the first three months of this pilot project, 357 women purchased Mithuri either directly from private physicians, from licensed pharmacists by means of a preprinted prescription signed by a physician, or by mail from Population Services International. Packets containing two cycles of Mithuri cost $0.29 (US). This compares with a price of $0.45-0.65 (US) per cycle for other oral contraceptives sold by doctors and chemists in Sri Lanka. Approximately 80 percent of these 357 women were thought to be using oral contraceptives for the first time (30,32).

The pill project has had full support from physicians in Sri Lanka. It will become national in scope in mid-1975 when the management of both the Preethi and Mithuri schemes will be turned over by the Community Based Distribution Department of the International Planned Parenthood Federation (32).

Pakistan

The government of Pakistan, with assistance from the US Agency for International Development, has mounted a multifaceted effort to make contraceptives much more available throughout the country. Basically a subsidized sales scheme, the program utilizes both village shops and door-to-door distributors to sell orals and condoms. The new program began with modifications of the old, clinic based delivery system in September 1973, shortly after Pakistan dropped the prescription requirement for oral contraceptives. With the rapid increase in the number of outlets and the quantity of contraceptives available, this program, officially named the Expanded Population Planning Scheme, became known as the Contraceptive Invention Scheme. The United Nations, Norway, West Germany, the United Kingdom, and Australia have also come forward with assistance (95).

The door-to-door distribution teams, each, ideally, comprised of one man and one woman, both high school graduates, are recruited from the area they will serve—usually a population of about 10,000 with 1,200 to 1,500 fertile couples. To interested households the distribution teams sell pills at 2½ cents (US) a cycle or a dozen lubricated condoms for the same price (62,105). The money goes to the government. Included in the duties of the distribution teams are demographic registration, family planning education, and referral to the nearest clinic or hospital of couples interested in the IUD or sterilization. Each distributor is paid the equivalent of $20 (US) per month from the program budget. The staff of distributors has grown from about 1,600 in 1973 to 8,500 by mid-1975. They now serve about 74 percent of the population, concentrating on the most densely inhabited areas (62).

As well as distributing to households, the male partner in the team enlists keepers of small shops to sell contraceptives. Some 35,000 shops—pharmacies, tea stalls, general provision stores, and others—are currently registered to sell pills and condoms. The shopkeepers keep 40 percent of the price paid for the contraceptives; the remainder goes to the government. It is estimated that by the end of 1975 there will be at least one commercial supplier in each of Pakistan’s more than 40,000 villages (6,106).
Also part of the scheme are some 700 Family Welfare Clinics, which employ female high school graduates trained to insert IUDs, and provide oral contraceptives and condoms as well as simple medicines, all free of charge. Program employees also do educational work and distribute contraceptive supplies at approximately 400 government hospitals and at the 40 hospitals which operate postpartum family planning programs. In addition, some 2,000 cooperating physicians are provided orals and condoms by the government for free distribution to patients (62).

Radio advertising for the program mentions contraceptives by name and tells where they can be purchased. A simple pamphlet explaining the use of orals in both Urdu and Sindhi has been prepared by the Pakistan Population Planning Council and is distributed wherever pills are available (62) (see Fig. 2).

The value of using multiple distribution methods is reflected in statistics from the Pakistan program. In July 1974, 146,000 cycles of pills and 2.9 million condoms were sold; in May 1975, monthly sales had reached 293,000 cycles of orals and 9.4 million condoms (105,106).

**Ghana**

In Ghana, government subsidized sales of contraceptives began in 1971. The Ghana program promotes the sales of both condoms and foams through about 600 licensed pharmacies and the sale of condoms alone through an additional 1,500 outlets. The Ghana National Trading Corporation is the sales distributor. An early publicity campaign, which had the approval of an advisory board (including clergymen), evoked protest and had to be discontinued (41). Despite the lack of publicity, in the fiscal year ending June 1972, sales of foams totalled 120,000 bottles. Condom sales, however, reached only a half million pieces (41).

Since then, sales of aerosol foams such as Emko and Delfen have increased steadily. Many purchasers of aerosol foams are men, who buy the contraceptive for women because they prefer it to using condoms themselves (107). This mirrors the situation in Japan, where women often buy condoms for use by men (73).

The government of Ghana provides continuing support to the program and is now planning a more comprehensive distribution project utilizing both public and private distribution points in two regions of northern Ghana. This project will be similar to the "contraceptive inundation" program in Pakistan and is expected to start in 1975.

**Indonesia**

A subsidized distribution scheme has just been initiated in Indonesia under the guidance of the Yayasan Indonesia Sejahtera (Prosperous Indonesia Foundation), founded in 1974 "to stimulate development and to review and evaluate innovative, nonclinical contraceptive delivery systems." The organization provides condoms through jamu, Indonesia's extensive system of herbal medicine distribution (1,45,70).

Jamu, which for years has pervaded traditional Indonesian medical care, recently has modernized its manufacturing and distribution processes to promote sales for profit. Its approximately 100 products are popular throughout Indonesia. About half are "sex-related, serving as either cosmetics or aphrodisiacs" (45). To initiate the addition of condoms to this network, a small grant was supplied to Yayasan Indonesia Sejahtera by World Neighbors, a private voluntary organization.

Condoms donated by the US Agency for International Development are given to the foundation free of charge by the Indonesia National Family Planning Coordinating Board. They are then sold by Yayasan Indonesia Sejahtera to a large jamu manufacturer at a cost of about $0.015 (US) for three condoms. The manufacturer repackages the product in distinctive promotional wrappings which, like his other jamu products, bear the symbol of a rooster. He then distributes them through wholesalers to about 40,000-50,000 jamu retailers. A slight profit is made at each step, but the end product sells to the consumer for only about $0.05 (US) for three condoms—a price comparable to other jamu products and well within reach of most Indonesians (1,45,70).

While it is still too early to determine how successful the program will be, it combines the advantages of commercial sales techniques similar to those used in developed countries like Sweden, Germany, and Japan with a distribution concept well rooted in Indonesian community traditions and practice. If the program were expanded to include oral contraceptives in the network, its impact might be further enhanced (110).

**INSTITUTIONAL DISTRIBUTION**

Contraceptives can also be distributed through existing community institutions such as churches, clubs, factories, trade unions, banks, and organizations of school teachers. Members of these groups work together, play together, worship together, and participate in other group activities. They share interests and develop a sense of social solidarity. If their leaders become interested in family planning, it is likely that the group will also, and sometimes a leader's involvement will lead to promotional activities within the context of the group's regular activities. In this way individuals who might never have learned about family planning will become aware and involved. Institutional distribution has its limitations, however. Individuals who are not members of the group may not be reached by family planning information and services. Also, some individuals may resent the strong social pressures of the group and oppose the program.

Family Planning International Assistance (FPIA) of the Planned Parenthood Federation of America, in cooperation with Church World Service and with funding from USAID, is assisting in pilot programs testing institutional distribution.

**Philippines**

In the Philippines two nonhealth institutions which are encouraging and providing family planning at the community level are the Iglesia ni Cristo (Church of Christ), an indigenous religious movement, and the Rural Bank of San Luis. Despite their different approaches to family planning, both have established successful programs.

The Iglesia ni Cristo, an evangelical religious organization with a membership of about 4.4 million, or 10 percent of the
The Rural Family Planning Project of the Allahabad Agricultural Institute in Uttar Pradesh Province, India, is another example of an outreach program that links agricultural extension and family planning. It is one of the few in India to make all methods of family planning available. In four years, this project, sponsored by the Family Planning Association of India, has provided contraceptive services to 3,500 couples (27,28).

The project run by the Rural Bank of San Luis, called "Special Integrated Financing," offers low interest loans to farmers who improve sanitation, plant vegetable gardens, or initiate other developmental projects, and who, in addition, have no children during the year. The Bank is planning to distribute contraceptive supplies and services to loan holders at their facilities. This will be done with help from the national Institute of Maternal and Child Health (112).

The advantages of using influential and accessible community members-to stock and distribute contraceptives, to answer questions, and to make referrals to family planning facilities. Usually these people spend only part of their time at these tasks and carry on their usual activities the rest of the time. They may organize educational activities and meetings or they may cooperate with others who do educational work. Whether or not these individuals are paid does not seem to affect the quality of their work; nor does their educational level or training. Personal commitment appears to be the most important factor.

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Many village distribution systems depend on influential community members—village leaders, teachers, volunteers from the community, members of mothers' clubs or other groups—to stock and distribute contraceptives, to answer questions, and to make referrals to family planning facilities. Usually these people spend only part of their time at these tasks and carry on their usual activities the rest of the time. They may organize educational activities and meetings or they may cooperate with others who do educational work. Whether or not these individuals are paid does not seem to affect the quality of their work; nor does their educational level or training. Personal commitment appears to be the most important factor.

The advantages of using influential and accessible community members to distribute contraceptives are obvious. Because they are selected from and often by their own communities, the distributors feel a personal responsibility to their neighbors. They are readily accessible to provide supplies and to handle problems. A disadvantage of this type of distribution can be lack of anonymity; youthful or unmarried users and perhaps some older married couples may hesitate to request supplies from someone they know personally.
Systems of this type have been used for the distribution of condoms, vaginal contraceptives, and, especially recently, oral contraceptives. They have been effective in Asia and Latin America, and under both government and private sponsorship. Although also successful in urban areas, distribution by community workers is particularly appropriate to rural areas, where inhabitants know one another and where other sources of contraceptives and advice—whether medical or commercial—are inconvenient or impossible to obtain.

**Colombia**

One of the first programs utilizing distribution by influential or well-known citizens began in the state of Risaralda, Colombia, in 1970. Sponsored by Profamilia, the private Colombian family planning association, and the Coffee Growers Federal, the program depends on a close working relationship between the local distributors and the Profamilia field workers who serve as their immediate supervisors.

Most of the distributors are keepers of small shops, teachers, housewives, or heads of mothers' clubs who are chosen for their leadership abilities by the Profamilia supervisors. After a one- or two-day training course, distributors work out of their own shops or homes, where they display a green flag, symbol of the program (see Fig. 5). From the sale of pills, condoms, and vaginal tablets, the distributors retain approximately half of the amount paid by the buyer—$0.16 (US) per cycle for pills, for example—and the remainder goes to the program (36). Distributors refer women with side effects to the Profamilia supervisors, who may direct them to a clinic. Distributors do some educational work in the community, but this is primarily the responsibility of the supervisors (55).

The supervisors, who are selected from the area they will serve, receive an intensive three-week training course from Profamilia. In addition to recruiting distributors, the supervisors also make the initial contact with villagers. Each supervisor is responsible for distributors in 10 villages and visits each one every few weeks. While there, the supervisor holds meetings, recruits and educates new acceptors, counsels dropouts, resolves problems of the distributors, collects forms, and resupplies the distributors with contraceptives (36).

According to a careful evaluation done during 1973, the program is producing impressive results. In just two years following its initiation in the two states surveyed, the program had provided contraception to 6,700 women, or 21 percent of the women of fertile age in the villages with distribution centers. Ninety-six percent of these were orals and the overall continuation rate at 12 months was about 80 percent. The failure rate among pill users of 2.7 per 100 woman-years (Pearl formula) (9) compares favorably with rates in other developing countries (8). The program costs—$6.28 (US) per new acceptor and $10.84 (US) per woman-year of protection—were about half of those at the urban Profamilia clinics (9,55). In 1974, the program was operating through 370 distribution posts in six of Colombia's 22 states and had served about 12,400 families (36).

**Brazil**

A similar program using local suppliers is now operating in Brazil. In 1973, the governor of the state of Rio Grande do Norte, with the help of the Sociedade Civil de Bem-Estar Familiar no Brasil (BEMFAM), the private Brazilian family planning association, initiated a program to instruct community leaders and paramedical personnel about family planning and to organize them to distribute oral contraceptives free of charge in their communities. Before the project began there were only 13 family planning clinics in the state, which has a population of 1.5 million. The program, which began in 10 townships, "municipios," in August 1973, was expanded at the end of 1974 to include all the state's 150 townships. From the beginning the program has had the active cooperation of local leaders, including mayors and health and education officials (99).

Unpaid volunteers chosen from community leaders distribute oral contraceptives free of charge through 205 distribution posts (33). A woman receives one cycle of pills on her first visit and three cycles on each subsequent visit. Those experiencing side effects are referred to the nearest health clinic for evaluation and treatment.

A separate group of volunteers, comprised largely of primary school teachers, handles community education. These volunteers, using material provided by BEMFAM, conduct group meetings or home visits to discuss family planning. Potential acceptors are then referred to the nearest distribution point to receive their contraceptive supplies (55). Distributors and community educators take the same intensive three-day training course designed and run by BEMFAM (99).

Seven regional supervisors administer the program under the direction of a Program Coordinator who is based in Natal, the state capital. The regional supervisors, employed by the Secretariat of Health, are recruited from the regions in which they work. Their duties include supplying pills to distributors, collecting forms which report on acceptors, and helping to solve problems encountered by educators and distributors (33).

Between August 1973 and the end of 1974 about 35,000 women accepted pills from this program (99). It is estimated that, as of early 1975, 31,000, or 8 percent of the state's fertile-age women, were regularly using oral contraceptives.
The political impact of the project has been great, both within the state of Rio Grande do Norte and in the nation as a whole. Opposition from the Catholic Church to the distribution of oral contraceptives without medical prescription was minimized by recruiting 25 doctors for the project. Efforts are currently underway to amend the present legal requirement for a prescription. The project is highly visible and thus is being followed closely by other states and by the federal government. Several other governors have already expressed an interest in establishing similar programs in their states.

Initial judgment is that the program in Rio Grande do Norte is reaching rural women who heretofore have not been reached. Cost figures are not yet available. It is noteworthy that the pills are distributed free of charge and are well accepted, contradicting the truism that rural people do not value what they receive free. Also, there have been no reports of serious health problems arising from the pill.

**Thailand**

A similar program, initiated in Thailand in mid-1974 by a private IPPF-supported organization called Community Based Family Planning Services (CBFPS), recruits teachers and community leaders to encourage interest in family planning and to distribute oral contraceptives and condoms. Ultimately, this program will include a subsidized sales scheme for condoms, distribution through the 260,000-member Teachers Council of Thailand, and a village distribution network using community leaders as suppliers of pills and condoms.

To date, seminars and summer sessions have been organized for some 50,000 teachers, and more are being planned. About 3,600 teachers have been trained to distribute orals in villages (3), and 1,500 were actively doing so by December 1974 (54). In the village program, distributors are selected on the advice of local leaders. After one day of training by the district doctor, the distributors are blessed by the monk from the local temple to sanction their services. The distributors recruit new acceptors, supply condoms and resupply pills, keep simple records, reassure and refer people who have problems, and refer those who want IUDs or sterilization (96). By the end of February 1975 teacher and village distributors had recruited more than 28,500 acceptors (54).

Distributors sell contraceptive supplies at low prices, keeping a small portion for themselves and passing on the remainder to the program (113). Program planners hope to finance about 50 percent of its cost from its sales (84).

**Mauritius**

Unlike most family planning programs at the village level, which provide pills and condoms, a program in Mauritius promotes the rhythm method of periodic abstinence (90). Since 1967 this program, sponsored by Action Familiale and endorsed by the Catholic Church, has been encouraging use of the basal body temperature technique for predicting ovulation.

The program depends upon "autonomous couples," married couples who have had from three to 10 months of training and have demonstrated their motivation to use the basal body temperature method themselves. These couples, together with a small staff of field workers, recruit, teach, and help other couples learn the method. Groups of

**HOUSEHOLD DISTRIBUTION**

Distribution of contraceptives and information directly into each household is the ultimate step in achieving contraceptive availability. Pilot projects aimed at testing the effects of household distribution are underway in Taiwan, Egypt, and Korea with support from the US Agency for International Development. In these pilot studies, distributors deliver a free "get acquainted" supply of oral contraceptives and/or condoms, as well as information, to every household willing to receive them. Users then are resupplied from clinics, village supply depots, or commercial outlets.

Household distribution programs can be implemented at relatively low cost because paramedical or low-salary and volunteer nonprofessionals can be utilized and because a permanent facility is not required. At the same time, these programs can reach every household in an area with contraceptives and information which otherwise might not
have been sought by couples themselves. Just how much information and education should be provided at the time supplies are first delivered is not yet known. Utilization is measured by follow-up surveys and by watching trends in subsequent purchases of subsidized contraceptives from village resupply points.

Door-to-door contraceptive distribution has proved successful in countries like Japan and China. Evidence from the USAID-supported pilot studies suggests that this approach can be a valuable addition to clinic-based systems.

Taiwan

Household distribution of oral contraceptives and condoms is currently being tested in Taiwan in a cooperative venture of the government and Johns Hopkins University, with funding from USAID.

In 12 townships throughout Taiwan, family planning distributors visited in their homes women who were three months postpartum and gave each six cycles of pills and six dozen condoms. Of 3,355 women visited between April 20 and July 31, 1974, 74 percent had never used contraception previously. Ninety percent accepted the contraceptive supplies (81). During the initial visit, distributors leave resupply coupons and self-addressed postcards. The resupply coupons can either be mailed or taken in person to resupply depots to be exchanged for additional contraceptives (117). Women can mail the postcards to notify the program if they encounter problems related to contraceptive use (see Fig. 6).

In three months over 27,000 cycles of pills and 21,000 dozen condoms were distributed to households. Fifty-four percent of the 1,753 women who were revisited said they had used some of the pills or condoms and an additional 10 percent said they were using other methods. Of 546 who accepted condoms, 92 percent said they were still using them after three months. Of the 486 women who accepted pills, 65 percent said they were still using them after three months (82).

In 1975, the household distribution program was expanded in six of the 12 townships to include not only postpartum women but all married women aged 15-49—regardless of contraceptive or pregnancy status—a total of more than 20,000 women. These women were located through the township registers. By the end of April, 6,852 women had been visited and 61 percent had received pills or condoms. About 21 percent did not receive contraceptives either because they were currently protected by other methods or because they chose to obtain pills and condoms from commercial sources. An additional 19 percent did not accept contraception for a variety of other reasons, such as wanting more children, or dislike of methods offered (83, 84). A more comprehensive evaluation, comparing the study township with 12 similar control townships, will be conducted in 1976.

Egypt

Another USAID-funded pilot project for household distribution is now underway in a rural area of Egypt north of Cairo. Conducted by the Social Research Center of the American University in Cairo (AUC), the project employs literate women to canvass and distribute contraceptives in their own residential areas. After about two weeks of intensive training covering family planning, contraceptive methods, canvassing techniques, and practice in the field, the canvassers take on a dual responsibility: gathering basic fertility data and distributing contraceptives (110).

When the project began in November 1974, only orals were distributed, and they were not given to pregnant or lactating women. Now orals and condoms are being offered to all. Users go to the clinic for resupply. This household distribution project appears to be both culturally acceptable and logistically feasible in its present locale of about 14,000 people. The following table shows the increase in oral contraceptive use during the first four months of the project:


<table>
<thead>
<tr>
<th>Year of canvass</th>
<th>Households visited</th>
<th>Women aged 15-49 therein</th>
<th>Actual and potential* OC users</th>
</tr>
</thead>
<tbody>
<tr>
<td>November</td>
<td></td>
<td></td>
<td>Actuaral users of OCs at November canvass</td>
</tr>
<tr>
<td>March</td>
<td></td>
<td></td>
<td>Actual and potential* OC users in March</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Increase in number using OCs, November to March</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>1820</td>
<td>1146</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>233 (20.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1041</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>309 (29.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>46%</td>
</tr>
</tbody>
</table>

*Potential OC users were defined as married women, 15-48 years of age, not pregnant, not less than 3 months postpartum, not sterilized, not using an IUD, and with a husband present.

It is anticipated that the proportion of women using oral contraceptives in these Egyptian households will increase further before stabilizing at a high level.

Korea

In Korea the Population Institute of the East-West Center, University of Hawaii, with funding from USAID, is administering a project to evaluate several contraceptive distribution systems. In three rural communities, each of approximately 6,500 people, different systems have been set up. In the first community, locally recruited female canvassers visit each eligible woman and offer a three-month supply of free pills and/or condoms. In the second com-

Table 3—Action Familiale Service Statistics, Mauritius, 1972-1974

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of couples being supervised</th>
<th>Number of dropouts</th>
<th>Percent dropping out</th>
<th>Number of dropouts with unwanted pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>2,944</td>
<td>1,219</td>
<td>41</td>
<td>358</td>
</tr>
<tr>
<td>1973</td>
<td>2,892</td>
<td>1,054</td>
<td>36</td>
<td>296</td>
</tr>
<tr>
<td>1974</td>
<td>3,856</td>
<td>1,003</td>
<td>26</td>
<td>250</td>
</tr>
</tbody>
</table>

SOURCE: Bruneau (16, 17).
munity, each eligible woman is invited to a meeting during which family planning is discussed, questions are answered, and a three-month supply of pills and/or condoms is offered. Women who do not attend the meetings are later visited at their homes. In the third community, the local family planning worker chooses one woman out of every 10 eligible women to be a contraceptive distributor. Each distributor is given the names of nine other women and is asked to provide each of them with a three-month supply of contraceptives. In each village someone is specifically designated as a resupplier for pills and condoms so that users need never leave their village to get contraceptives (21,110).

The systems of distribution in the three communities have several common features. In each community all married women aged 15-44 who are not pregnant, breast-feeding, or three months or less postpartum are identified and offered family planning supplies. Women who desire IUDs are referred to the nearest clinic and their transportation costs are paid. In the rare instance that a woman experiences side effects from orals, she is referred to the clinic. Because the project has been underway only since February 1975, sufficient data for evaluation are not yet available.

Peoples Republic of China
A national program which appears to have had some success with household distribution of contraceptives is that of the Peoples Republic of China. China was one of the first developing countries to rely on paramedical personnel to perform many of the tasks traditionally carried out by doctors, including distribution of contraceptives. The contraceptives delivery system reportedly:

- frees the government to employ its regular fully trained medical doctors in tasks that genuinely require professional competence, such as inserting IUDs, performing induced abortion, tubal ligation and vasectomy, and treating side-effects of complications arising from contraceptive use (19).

In urban areas, oral and other contraceptives are supplied through neighborhood health stations. Housewives who volunteer their services as distributors come to these health stations for supplies, which they then distribute to the women in their own communities. In rural areas "barefoot doctors" deliver contraceptives free of charge to couples in their homes, rather than waiting for couples to take the initiative to come to clinics for contraception. In both rural and urban areas, women who have questions or problems and those who want IUDs, sterilizations or abortions are referred to appropriate personnel who are medically trained (19).

Fig. 6. Translations of postage-paid resupply (top) and consultation (bottom) postcards given to clients by distributors in the Taiwan household distribution project.

• Providing oral contraceptives without the direct supervision of a physician is appropriate, efficient, and acceptable in countries where physicians are scarce and where most of the population traditionally relies on midwives and paramedical personnel for health services.
• Distribution of nonclinical contraceptives to a population usually involves three phases: availability from clinics, as in many countries during the 1960s; availability in every village, as is now being achieved in a number of countries; and availability in every house-

As family planning programs in developing countries begin their second decade of operation, several conclusions can be drawn:

- Translating population policies into effective family planning programs that reach most of the fertile couples in a developing country is a difficult task. It can be accomplished rapidly only if innovations such as village and household distribution of contraceptives are implemented.

- Providing oral contraceptives without the direct supervision of a physician is appropriate, efficient, and acceptable in countries where physicians are scarce and where most of the population traditionally relies on midwives and paramedical personnel for health services.
- Distribution of nonclinical contraceptives to a population usually involves three phases: availability from clinics, as in many countries during the 1960s; availability in every village, as is now being achieved in a number of countries; and availability in every house-
hold, as is now being tested in a number of pilot projects.

- Achieving village and household availability requires innovative and flexible approaches to supervision, distribution, supply system, information, and evaluation.

- Winning acceptance and utilization of new distribution systems by the populace appears less difficult than overcoming opposition from conservative medical practitioners, competing commercial contraceptive distributors, or regular family planning personnel who may see the new projects as a threat to their jobs or incomes. Close links with influential leaders in the medical profession and in government should be developed to reduce this resistance.

- Although many of the innovative new distribution programs have not been in operation long enough for definitive evaluation, most show sufficient promise to justify additional support and replication where conditions are appropriate (see Table 4).

Family planning program directors should consider the contributions which each of the following innovations in distribution could make toward achieving general availability and utilization of contraceptives:

- subsidized sales by retail outlets, existing institutions, village supply depots, or door-to-door household distributors

- distribution of a free “get acquainted” supply of oral contraceptives, condoms, or spermicides, along with

More important than the particular program procedures, however, are those attributes successful programs have in common:

- dedicated and competent individuals to direct and supervise local programs

- distributors recruited from within the community

- a short and effective training session in family planning and contraception for program personnel

- delivery of contraceptives to the prospective user in her or his own village or household rather than dependence upon the individual to visit health centers or clinics

- establishment of a medical referral system for those who desire clinical or surgical procedures for contraception or abortion and for those who encounter problems in using contraceptives.

In the complex of factors which determine fertility and fertility control behavior, the availability of effective means of fertility control is at present usually the dominant factor (78). Once contraceptives are generally available in the village and household, then the role and strength of other factors, such as education, income, and employment, can

### Table 4—Evaluation Data Available for Selected Contraceptive Distribution Projects 1971-1975

<table>
<thead>
<tr>
<th>Country (Program)</th>
<th>Year</th>
<th>Ref. No.</th>
<th>Couple Years of Protection (CYP) (thousands)</th>
<th>Cost per CYP ($US)</th>
<th>Cost per Acceptor ($US)</th>
<th>Women 15-44 Reached (%)</th>
<th>Continuation Rates at 12 months (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUBSIDIZED SALES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India (Nirodh)</td>
<td>1974</td>
<td>109</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana (Foams)</td>
<td>1972</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Condoms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lanka (Preethi)</td>
<td>1974-1975</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INSTITUTIONAL DISTRIBUTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India (Allahabad)</td>
<td>1971-1974</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VILLAGE DISTRIBUTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia (rural Profamila)</td>
<td>Mid-1971-1973</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mauritius (Action Familiale)</td>
<td>1973</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HOUSEHOLD DISTRIBUTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan (all women-pilot study)</td>
<td>Jan.-Apr. 1975</td>
<td>83,84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Calculated from data in reference listed

*a1971 data

NOTE: Blank spaces in this table indicate there are no program data available for that column.
be assessed. While in the long run many population policies must be adjusted to achieve population and development goals, in the short run the simplest, surest, and least expensive way to achieve rapid reduction in fertility is to increase greatly the availability of the most effective means of fertility control.

The following organizations have been involved in the establishment and supervision of programs for the distribution of contraceptives to villages and households:

Family Planning International Assistance
810 Seventh Avenue
New York, N.Y. 10019
USA

International Planned Parenthood Federation
18-20 Lower Regent Street
London SW1Y 4PW
United Kingdom

Population Services International
Suite 1520
120 East 56th Street
New York, N.Y. 10022
USA

United States Agency for International Development
Office of Population
Washington, D.C. 20523
USA

World Neighbors
5116 North Portland
Oklahoma City, Oklahoma 73112
USA

BIBLIOGRAPHY

1. ANONYMOUS. Condoms, herbal medicine sold together in Indonesia. World Neighbors in Action 7(3E): 7. (Undated)

2. ANONYMOUS. Consultant says the pill should be available without prescription. The Times (London), May 15, 1975. p. 4.

3. ANONYMOUS. A local accent on distribution. IPPF News, April 1975. p. 3.


22. CLINTON, J. Brief overview of the Indonesian family planning program. May 23, 1975. 10 p. (United States Agency for International Development briefing)

23. CURTIS, B. (World Neighbors) Personal communication, May 9, 1975.


26. DAVID, L. H. Personal communication, April 9, 1975.


39. GABRIEL, M. P. Personal communication, April 17, 1975.


43. HARVEY, P. Personal communication, May 22, 1975.

44. HARVEY, P. Personal communication, June 20, 1975.


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