INFO Project Publications Toolkit

This toolkit hosts a library of print publications previously produced by K4Health?s predecessor Information & Knowledge for Optimal Health (INFO) Project and the Population Information Program of The Johns Hopkins Bloomberg School of Public Health?s Center for Communication Programs (CCP).

These publications are mainly for reference purposes and stand as a historical record. Researchers and others who want more up to date information about contraceptive methods and other reproductive health topics should visit Knowledge for Health Toolkits and the Family Planning: A Global Handbook for Providers website.

The toolkit is divided into the following publication series:

- **Global Health Technical Briefs** summarized the most important information on a timely reproductive health topic in two pages, and pinpointed the implications for public health programs. Each brief included background/definition of the topic, important recent findings or lessons learned in program application, implications for programs, and where to get more information.

- **INFO Reports** featured brief looks at special topics, newsworthy events, and important new research and program developments in family planning and related reproductive health.

- **Population Reports** provided accurate and authoritative overviews of important developments in family planning and related health topics. Download or browse 47 issues?some with links to Power Point presentations, Q & A?s, Quizzes, as well as Technical Briefs and INFO Reports.

For over 30 years the Johns Hopkins Bloomberg School of Public Health?s Center for Communication Programs (CCP) has been a key partner with USAID in sharing reproductive health knowledge worldwide, first through the Population Information Program (PIP) and INFO project and now through the K4Health project.

In 1973, USAID and CCP first forged this partnership under PIP. PIP offered developing countries new access to the emerging scientific literature on reproductive health. In collaboration with world renowned experts, PIP reached a large audience with evidence-based knowledge and ideas crucial to improving and expanding delivery of family planning and reproductive health (FP/RH) services. PIP?s publications, in particular the **Population Reports** series and the Essentials of Contraceptive Technology
handbook became common reference points for sharing evidence-based best practices, policies and guidelines, and effective program approaches. PIP became widely regarded as “the” standard reference on family planning for the developing world.

In 2002, CCP seized the opportunity offered by USAID to transition PIP into the INFO project, using the transformational power of Internet communication to share information quickly and pervasively. INFO’s products and services enabled more people to benefit from up-to-date knowledge about reproductive health. INFO brought together knowledge management and reproductive health experts from USAID and its cooperating agencies. Out of this collaboration was born an innovative approach to knowledge management for developing-country reproductive health programs. An exemplar collaborative information product, Family Planning: A Global Handbook for Providers, improved and expanded on its respected precursor, The Essentials of Contraceptive Technology. The Handbook was updated in 2011.

In 2008, CCP in partnership with USAID transformed INFO, an information and knowledge collection, synthesis, and dissemination project, into K4Health, a knowledge exchange and use project. To meet its goal of improving the provision of FP/RH and other health services in developing countries, K4Health goes beyond disseminating knowledge to health care decision-makers, program managers, and service providers. By harnessing the latest digital technology, K4Health starts with its audiences’ needs, provides an effective means for public health professionals to share their own experiences, safeguards the accuracy and effectiveness of lessons learned, provides tools for adaptation and localization, and measures impact. Our shift from print to electronic publications and delivery enables us to reach more clients efficiently and in real time. For audiences with little or no access to the Internet, we offer our materials on CD-ROM or flash drive.

**Population Reports**

*Population Reports* was the world’s most widely distributed journal on family planning and related health topics. It was designed to provide an accurate and authoritative overview of important developments in family planning and related health areas. The first issue was published in January 1973 and the last issue in 2008.

*(Please note: These reports are mainly for reference purposes and stand as a historical record. Researchers and others who want more up-to-date information about contraceptive methods and other reproductive health topics should visit Knowledge for Health eToolkits at www.k4health.org/toolkits, and Family planning: A Global Handbook for Providers at: https://www.fphandbook.org/.*
Series A: Oral Contraceptives

Resources:

- Oral contraceptives -- an update.

This paper reports developments in oral contraceptives (OCs). Four decades after the introduction of the pill, it was observed that more women than ever are using it. It became the top modern family planning method among married women because of its benefits. In fact, it is most popularly used among married women in Western Europe in contrast with those in China, India, and Japan. Since this method is widely used, it deserves continuing attention from health care programs, providers, and researchers. In this paper, the health benefits and risks of OCs, including emergency contraceptive pills, are discussed. Attention is also given to unresolved health issues associated with the use of OCs, particularly to the association between OC use and neoplasia of the cervix and breast.

- Helping Women Use the Pill

Around the world over 100 million women rely on oral contraceptives (OCs). They benefit from the effectiveness, safety, and convenience of the pill. Still, many women do not use the pill as successfully as possible. Programs can help women use OCs effectively. When taken properly, the pill is a highly effective contraceptive. Oral contraceptives are unique among family planning methods, however: Their full effectiveness requires the user's daily action. In part because some women have trouble taking the pill correctly, pregnancy rates are usually
much higher than if the pill were used perfectly. For combined OCs the perfect-use pregnancy rate is estimated at only 0.1 per 100 women in the first 12 months of use. In actual use pregnancy rates range from 1.7 to 10.5 pregnancies per 100 women in the first 12 months in 21 surveyed countries. Better pill use would make a big difference. Based on worldwide levels of pill use in 2000, for example, over 2 million women become pregnant unintentionally each year because they do not take the pill effectively. Also, women would be healthier, and medical costs would be less, since complications of pregnancy, childbirth, and unsafe abortion are among the leading causes of women's ill health and death in developing countries.

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**Lower-Dose Pills**

Over 60 million women around the world are now using oral contraceptives because it is very effective, easy to use, and safe for most women. Defined as containing less than 50 micrograms of estrogen, low-dose pills account for over 85% of pills sold in developed countries, almost 60% of pills sold in developing countries, and almost 80% of pills supplied by donor agencies. Lower-dose pills seem to cause fewer unpleasant side effects, such as nausea or dizziness. Research over 3 decades shows that the pill has noncontraceptive benefits and risks. It helps to prevent 2 major types of cancer—endometrial cancer and epithelial ovarian cancer. It also helps to prevent anemia, ectopic pregnancy, painful menstruation, certain benign breast tumors, and ovarian cysts. The pill increases the risk of certain circulatory system diseases, mainly thromboembolism but also stroke and heart disease, for some women, although this risk has been seen mainly in older women who smoked and used higher-dose pills. Little research on these issues have involved low-dose pills, which makes interpretation for today's pill users difficult. The biggest benefit of the pill is its effectiveness. Recent studies of breast cancer have produced confusing results. Concern is focused on women who took the pill while they were young or before having their 1st child. A plausible hypothesis now emerging is that the pill may accelerate breast cancer development in these women. While not every question is answered about the pill, it remains the method that many young women want for spacing their pregnancies.

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**Oral Contraceptives in the 1980s**

As of 1980-81 over 50 million women around the world use oral contraceptives (OCs). In developing countries users increased from 14 million in 1977 to 18 million in 1980. Sales in developed countries fell from a peak of 287 million cycles in 1975 to 253 million in 1979 and have remained stable. Sales in Latin American countries increased by 50% since 1975. Between 1976-80 the number of new acceptors provided with OCs through government programs increased in several Asian countries. Highest use based on sales is Australia, Austria, Belgium, France, West Germany, the Netherlands, and New Zealand with over 20% of all women of reproductive age using OCs. Main government suppliers are the U.S.
Agency for International Development (100 million cycles annually), the Pathfinder Fund, the International Planned Parenthood Federation, and the UN. Knowledge of beneficial effects of OCs has recently grown. They include protection against: 1) pelvic inflammatory disease, 2) ectopic pregnancy, 3) endometrial cancer, 4) benign breast diseases, and 5) menstrual disorders. In February 1982 the U.S. Food and Drug Administration recommended that instructions on each pill package list OC benefits. The greatest risk associated with the pill is circulatory system disease among women over 35 who smoke. OC use has been found to increase the risk of venous thromboembolism, ischemic heart disease, cerebrovascular disease, and hypertension. No increase in breast cancer has been demonstrated nor has greater incidence of cervical cancer, melanoma, or pituitary tumors. Return of fecundability is delayed after discontinuation. Doubts about the applicability of OC test results to all women exist, especially regarding developing countries. OCs may reduce the volume of milk in breastfeeding mothers but use of OCs with 50 mcg or less of estrogen has not been shown to effect infant growth. Findings conflict about effects of OCs on urinary tract infections, gallbladder disease, nutrition, acne, and some endemic diseases. OCs have been found to protect against rheumatoid arthritis. New OCs being researched are: 1) low-dose OCs, 2) biphasic and triphasic pills, 3) morning after pills, 4) natural vs. synthetic estrogens, 5) new progestins, 6) paper pills, 7) once a week pills, and 8) slow release pills. For most women in developing countries using OCs for a year is less dangerous than using no contraception and risking pregnancy, even if they are over 35 and smoke. Family planning programs must encourage older women who smoke, however, to use alternate methods. Greater effort is needed to make OCs more widely available and to be sure they are used correctly.

OCs--Update on Usage, Safety, and Side Effects

At this time, oral contraceptives (OCs) are the most popular reversible method of contraception in the world. Marketing statistics gathered from at least 31 countries show that about 325 million cycles of OCs were sold in 1977. This quantity of pills would supply 25 million women for a 1-year period; about 21 million of these women are in developed countries with 4 million in developing nations. Sales are increasing rapidly in Asia and Latin America, while they are leveling off or declining somewhat in Western Europe and the U.S. National family planning programs in developing countries provide OCs on a free or subsidized basis to about 9 million women (excluding the People's Republic of China). It is estimated that about 54 million women throughout the world were using OCs in 1977. Regarding OC safety, data from 3 major cohort studies in Britain and the U.S. provide new information on the relationships between OC use and circulatory system disease. A study of 46,000 British women by the Royal College of General Practitioners found that: 1) OC users experienced higher death rates from circulatory system disease than women who had never used OCs; 2) OC users faced a greater range of circulatory diseases than was originally suspected, including arterial and venous disorders; 3) women who used OCs for 5 years or longer faced a 10-fold greater risk of death from circulatory disease than women who never used the OC; and 4) these risks do not apply to all women equally -- women over age 35 and women who smoke face the greatest risks. WHO researchers have found that improving
death rate trends for women aged 35-44 were associated with trends of increasing OC usage. No definitive new data are available regarding OC use and cancer. Investigations of other possible side effects have revealed no substantial new risks associated with OC use. Virtually all the data on serious side effects of OCs come from developed countries. The risks of using OCs are outweighed in the developing countries by the greater risks of pregnancy and childbirth.

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Debate on Oral Contraceptives and Neoplasia Continues; Answers Remain Elusive

Literature pertaining to the possible association between oral contraceptive (OC) use and the development of neoplasia is reviewed. Methodological problems in the epidemiological study of the causes of neoplasia are discussed. Selected animal and epidemiological studies of the relationship of OCs to breast neoplasms, cervical neoplasms, neoplasms of the uterine corpus, neoplasms of the pituitary and ovary, and liver tumors in various species and humans are summarized. The relationship of benign neoplasms to subsequent cancer is also discussed. So far, there is no clear evidence that establishes a causal relation between OC use and any form of cancer. OCs have been shown to have a "protective" effect against benign breast tumors. Although rare, there appears to be a higher incidence of benign liver tumors among OC users than nonusers. Sequential OCs have been removed from the U.S. market because of a disturbing number of young women developing endometrial cancer. This has not been warranted for combined OCs. Also, older women with endometrial cancer are more likely than those without the disease to have used estrogens. Although some studies have linked OC use with an increased incidence of cervical or breast cancer, it is difficult to interpret their meaning.

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Data on U.S. morbidity and mortality trends related to oral contraceptive (OC) use (1955-1975) and Danish morbidity trends (1953-1972) are tabulated. 24 charts present data for: 1) the estimated number and minimum percentage of U.S. women, age 15-44, using OCs (1964-1976); 2) mortality rates from complications of pregnancy, childbirth, and the puerperium for U.S. women, age 10-49, by 5-year age groups (1955-1975); 3) mortality from malignant neoplasms of all sites, in both sexes, age 25 and older, by 5-year age groups (U.S., 1955-1975); 4) mortality from malignant neoplasms of all sites for females, age 25 and older, and males, age 1-4 and 20 and older, by 5-year age groups (U.S., 1955-1975); 6) the incidence of breast cancer in females, age 25-84, by 10-year age groups, using 3-year moving averages (Connecticut, 1955-1975, and Puerto Rico, 1955-1974); 7) the incidence of breast

Minipill -- A Limited Alternative for Certain Women

The minipill, once hailed as the successor to combination-type oral contraceptives (OCs), is used by no more than several hundred thousand women of the 50 million women estimated to be using OCs. It consists of a progestogen dose of .5 mg or less taken daily, even during menstruation. Its action is apparently through a combination of effects which include changes in tubal motility and the functioning of the corpus luteum, alterations of the endometrium, and in some cycles, prevention of ovulation. Field trials have revealed that although the minipill produces fewer side effects than the combined-type OC, it is less effective in preventing pregnancy and especially ectopic pregnancy, more likely to cause menstrual irregularities, and more likely to fail if just 1 or 2 pills are missed. Because it does not contain estrogen, the minipill is recommended for women with a history of thromboembolic incidents, although the degree of risk associated with the minipill is not yet known. It is also recommended for women who are breast-feeding or who suffer from estrogen-related side effects.

Oral Contraceptives - 50 million Users

This report provides data on worldwide distribution of oral contraceptives (OCs) over the last
decade. Marketing figures and information on government and international distribution programs were provided by AID, the Swedish International Development Authority, UNICEF, and IPPF. It is noted that in at least 5 developed countries (Canada, Australia, West Germany, the Netherlands, and New Zealand) 25% or more of all women aged 15-44 are regularly purchasing OCs from pharmacies. If women receiving supplies from family planning programs are included, the U.S. and the United Kingdom are now close to the 20% level. The highest usage rate is in the Netherlands where nearly 30% of the fecund women bought OCs regularly in 1972 and 37% in the first half of 1973. The hazards of OCs publicized in 1969 and 1970 caused noticeably reduced purchases. In Australia 15-22% of the women taking OCs discontinued their use following adverse reports. By 1971 when further evaluations put earlier warnings into a more reassuring perspective and lower dosage formulations became available, sales in developed countries substantially exceeded previous levels.

Series B: Intrauterine Devices

Resources:

- New Attention to the IUD
Modern intrauterine devices (IUDs) are safe, effective, and quickly reversible long-term contraceptives that require little attention after insertion. Yet safety concerns and programmatic challenges have held back IUD services in many countries. New assessment of research findings, recently translated into guidance by the World Health Organization, should help reassure providers that most women can use IUDs safely.

**IUDs-- An Update**

Current generation IUDs offer almost complete protection from pregnancy. Some models are effective longer than any other reversible family planning method and when correctly inserted, are safe for women at low risk of sexually transmitted disease. Since IUDs prevent pregnancy so effectively, they save many lives. This paper is divided into sections on the following topics: long-term IUD effectiveness, the clearer understanding of the risk of pelvic inflammatory disease associated with IUD use, the provider's crucial role, the background of IUDs, IUD performance, how IUDs prevent pregnancy, the lifespan of copper IUDs, IUD insertion, procedures for providing IUDs, removal, infection, the characteristics and distribution of widely used IUDs, infection prevention for IUD insertion and removal, clinical signs of genital infections, worldwide use, IUDs in family planning programs, important information about the TCu-380A IUD, the GATHER approach to counseling about IUDs, and the World Health Organization Scientific Group's updated eligibility guidelines for copper IUDs.

**IUDs-- A New Look**

Use of the IUD is safer than pregnancy and more effective in preventing pregnancy than oral contraceptives, condoms, spermicides, barrier methods, or natural family planning. The current generation of IUDs is safe for most women and about 99% effective over 1 year of use. Not all women should use IUDs. The provider must screen potential users, insert the IUD correctly, and follow up the users. Background information, IUD performance data, description of complications and insertion and removal procedures, provider medical information, descriptions and photographs of various types of IUDs, discussion of IUD distribution and use internationally and the role of the device in family planning programs, as well as highlighted guidelines in the choice of an IUD, the warning signs, and the counseling of users are provided in this report.

**IUDs: An appropriate contraceptive for many women**
This discussion of IUDs covers the following: usage shifts to copper IUDs; issues for the 1980s; comparing the Lippes Loop and copper IUDs; life span of copper devices; steroid releasing IUDs; donor agency supplies; types of devices used; insertion and removal (timing of interval insertion, postpartum insertion, postabortion insertion, postcoital insertion, measuring the uterus, removal, and insertion by nurse midwives and paramedicals); bleeding (risk of anemia, limited bleeding); infection (mechanisms of infection, prevention, treatment, actinomycetes); pregnancy (uterine pregnancies, ectopic pregnancies, differences among devices, and subsequent fertility); product and packaging issues (manufacture in developing countries, prices, bulk and individual packaging, methods of sterilizing IUDs, and storage). At this time about 60 million women worldwide are using IUDs, including over 40 million in China. In recent years the total number of users has remained relatively stable. The life table event rates per 100 women, by which IUDs are usually evaluated, are approximately as follows after 1 year of use in large, multicenter studies: pregnancy, 0.5-5; expulsion, 5-15; removal for bleeding/pain (5-15); removal for other medical reasons, 3-9; and removal for personal reasons, 1-6. Continuation rates 1 year after insertion tend to range from 50-85%, high rates for a reversible method. Some shift in usage occurred in the late 1970s from unmedicated Lippes Loop to copper releasing IUDs and to a lesser extent to IUDs that release prostagens into the uterine cavity. Copper devices now have captured much of the market in the US and Western Europe and amount to about 2/3 of the supplies provided by donor agencies to many developing countries. During the 1980s attention should probably focus less on the search for an ideal device and more on the need for family planning programs to identify suitable candidates for IUDs, encourage better health service support for IUD insertion and follow-up, and the newer IUDs more widely available to individuals and national programs. In most developing countries the great majority of IUDs are supplied by various national and international donor agencies that purchase large quantities at the lowest possible price and ship them to government and private programs. No data are available on the number of each type of IUD currently in use. Proper insertion of an IUD is important. Insertion can affect all major events that determine success. While there are several different techniques for inserting IUDs, with each the skill of the operator is critical. Recent studies fo about 10,000 women show that there is no one preferable time for insertion.

IUDs- Update on Safety, Effectiveness, and Research

Competitive After nearly two decades of use, the IUD remains "a generally safe, effective and useful form of birth control". With fewer than six pregnancies per 100 woman-years of use and fewer than ten deaths per one million woman-years of use, according to a comprehensive new review by the United States Food and Drug Administration, the IUD has an important place in modern family planning programs. The number of women using IUDs is growing slowly but steadily. Most extensive use is in the People's Republic of China, where visitors have been told that half or more of all those using contraception have accepted IUDs. In Korea and Taiwan, where successful programs have been underway since the mid-1960s, the IUD is also the principal method. In about a dozen other developing countries more than 5 percent of all married women of reproductive age use IUDs. In Europe IUD use ranges from
less than 5 percent in Italy to as high as 20 percent in Scandinavian countries. In the USA about 6 percent of married women of reproductive age have IUDs. Worldwide, approximately 50 to 60 million devices may be in use, 40 million or more in China and 15 million in the rest of the world.

**IUDs Reassessed: A decade of experience**

A decade of international experience with the intrauterine device (I UD) is reviewed. It is estimated that 15 million IUDs are being worn throughout the world. The Lippes loop D is perhaps the most effective IUD in use. The Copper T and Cu-7 devices are appropriate for nulliparous women. The IUD apparently has a differing mode of action from species to species. In humans, the IUD does not interfere with ovulation, corpus luteum formation, or, to some extent, sperm transport and fertilization. However, they do seem to inhibit implantation, possibly through a non-inflammatory cell reaction in the uterus. IUDs are the primary contraceptive method in at least 10 countries, including Taiwan and Korea. However, the experience in India and Pakistan has not met initial expectations. The insertion procedure and equipment used are described. The ideal time for insertion is after abortion or pregnancy. Otherwise, the last few days of menstruation is the best time. General or local anesthesia, paracervical block, or analgesia are not required for IUD insertion, since the procedure is generally not painful. Perforation of the uterus is the most frequent complication during insertion. Net pregnancy rates for IUDs range from 0-5.6 per 100 women during the 1st year of use. The tendency now is to remove an IUD if pregnancy occurs. IUD expulsion rates range from .7-19.3 per 100 insertions after 1 year of use. Removals in the 1st year for bleeding and/or pain range from 4-14.7 per 100 women-years of use. Pelvic inflammatory disease (PID) is the 2nd most frequent reason for removal of an IUD. It is not clear whether the IUD increases the risk of PID. In the United States, pelvic infection is the most common IUD-related symptom requiring hospitalization. 7 of 10 deaths associated with an IUD were the result of pelvic infection. The Dalkon Shield poses the most serious risks related to septic abortion, and is no longer being distributed. The USAID distributed 5,367,310 IUDs during 1969-1974. The new copper-bearing IUDs cause less bleeding than inert devices. The replacement of copper wire with copper sleeves lengthens the life of copper-bearing IUDs. Some of the new devices being tested include Progestasert (progesterone-releasing), the intrauterine membrane, the Spring Coil and the spring steel Ypsilon. Photographs of and data on various IUDs are appended.

**Intrauterine Devices: Copper IUDs-performance to date**

The current status of research and development with copper IUDs is reviewed in this report. A copper IUD resembles other IUDs except that a copper wire is twisted around the plastic device. The 3 configurations tested with copper have been the T, the 7, and the Lippes loop. Zipper demonstrated the antifertility effects of copper in 1969. Although early reports were
very encouraging, 2-year cumulative gross event rates showed that although removals for bleeding and pain were slightly lower with the copper IUD in the shape of the T or 7, pregnancies and expulsions were in the same range for the copper IUDs and the Lippes loop. For young nulliparas, the copper T and 7 may offer some advantage over the Lippes loop. Some 1-year studies show rates of pregnancy, expulsion, and removal for bleeding and pain in nulliparas using the copper IUD that are at least comparable to the rates in multiparas with inert devices. The copper devices may also be easier to insert and produce less bleeding than the loop. In order to retain contraceptive efficacy, the copper IUD needs to be replaced when the copper is exhausted, usually after about 2 years. This may preclude its use for women who are not able to have a medical follow-up. Age and parity remain major determinants of IUD effectiveness. The copper IUDs have not eliminated the continuing IUD problem of accidental pregnancy, expulsion, or removal for bleeding and pain. Although the copper IUDs are useful especially for younger nulliparous women, for general family planning program use with parous women, the Lippes loop remains the standard.

Series C: Female Sterilization

Resources:

- Voluntary Female Sterilization: Number One and Growing

Around 16% of all married women of reproductive age (MWRA) in the world have voluntarily undergone female sterilization which equals about 1’38 million women (123 million in developing countries). Moreover, it has increased 45% since 1984. Researchers estimate
that the number of women wishing to be sterilized in developing countries will increase an additional 67 million by 2000. Thus female sterilization is the leading family planning (FP) method in the world. Indeed it leads the list of FP methods used in at least 20 countries. It is also 1 of the fastest growing methods. Expanding safe, efficient, and convenient services, especially in developing countries, is the major reason it is the fastest growing method. In Kenya, for example, female sterilization grew rapidly from about 68 women in 1982 to >11,000 women in 1990. In 1982, physicians at only 2 hospitals in Kenya performed female sterilization, but by 1990, health providers performed them at least 50 sites (not including providers in private practice). Of developed countries, female sterilization is most prevalent (23% of MWRA) and growing the fastest in the US. A challenge for FP programs is to continue providing safe, high quality services to all women wanting to undergo female sterilization. They must also assure voluntarism and informed choice. FP programs should use all channels of communication, especially the mass media, to clearly and accurately inform the public females sterilization. They should also have well trained staff who can counsel clients objectively and empathetically. Health practitioners should minimize risks by using local anesthesia. They should also be able to perform sterilization in as many places possible for as many women possible thus making sterilization accessible to all women who want it. Finally, health professionals must undergo special training and be monitored and supervised frequently.

- Minilaparotomy and Laparoscopy: Safe, effective, widely used

About 95 million couples are currently protected from unwanted pregnancy by voluntary female sterilization, making this the most widely used contraceptive method in the world. The rapid spread of voluntary female sterilization over the past decade has been facilitated by the surgical methods of minilaparotomy and laparoscopy. Both methods are quick, highly effective, and safe. Either procedure can be performed under local anesthesia on an outpatient basis. Minilaparotomy is the most appropriate method for use after childbirth. Laparoscopy is best suited to large urban hospitals with specially trained surgeons and many clients. Pregnancy rates after 1 year are less than 1/1000 women, and major complications occur in fewer than 1% of cases. Recent research has failed to produce evidence that menstrual cycles are altered as a result of sterilization. Sterilization reversal is most successful in cases where less than 3 cm of the tube was damaged. In many areas, the demand for female sterilization far exceeds the availability of services. The challenge to health care providers and family planning programs is to meet this growing demand in ways that conform both to medical standards assuring safety and to ethical standards assuring voluntary and informed individual choice. Medical policies that restrict sterilization to women who have had a specified number of children or whose health would be damaged by further pregnancies should be dropped. There is a need for more surgeons to be trained to perform minilaparotomy or laparoscopy. Multiple channels for services, including private physicians, large urban referral centers, rural clinics, and mobile teams, should be encouraged. Women should be ensured opportunities for both postpartum and interval sterilization, and financial
support should be available for such services. The mass media, as well as personal communication, should be used to inform potential acceptors about voluntary sterilization. Finally, the quality and availability of sterilization services should be regularly evaluated.

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Reversing Female Sterilization

The chance of reversing female sterilization has recently improved due to the use of microsurgical reversal techniques and the development of new sterilization procedures which reduce tubal destruction; however, reversal odds are still low and women should be advised that sterilization is a permanent form of contraception. In 18 recent studies, covering 560 cases of sterilization reversals performed with magnification and atraumatic techniques, 56% of the patients subsequently gave birth to live infants. In 3 series, covering 88 cases of sterilization performed with atraumatic techniques, but not with magnification, 48% of the women later had live births. The risk of ectopic pregnancy among microsurgery reversal patients was 3% and among patients who had convention reversals the risk was 7%. Microsurgical techniques involve 1) the use of an operating microscope; 2) electrocoagulation to control bleeding; 3) careful alignment of the tubes; 4) the use of fine suture materials to join the tubes; and 5) constant irrigation. Sterilization techniques differ in regard to their reversibility potential. Electrocautery destroys about 4 cm of tube and offers little chance for reversal while the Pomeroy ligation method destroys about 3 cm of tubes and offers better reversal odds. The use of clips and rings may facilitate reversal, and recent experiments using silastic pouch to encase the fimbria and silastic plugs to block the tubes may offer even better reversal odds. At the present time the demand for reversal is small; however, the demand will probably increase as the number of women accepting sterilization increases. In developed countries, most of the women who seek reversals do so because of remarriage while in the developing countries, women are more likely to seek reversals because of the death of a child. The cost of reversing sterilization is high, and governments must consider the effect on other health needs if a portion of the health budget is used to provide reversal services. Microsurgery can be performed most effectively by experienced surgeons working in specialized centers. Microsurgery training and data collection centers, supported by U.S. Agency for International Development, are currently operating in 15 developing countries. Indication and contraindications for anastomosis were listed and a description of the physiology and function of the fallopian tube was provided. Tables compared the pregnancy outcomes for reversal procedures in selected studies for 1948-1980 and provided information on women who regretted sterilization and on the demand for reversal.

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Tubal Sterilization: Review of methods

Methods available for female tubal sterilization are reviewed. The development of endoscopic equipment and special cannulae has permitted a variety of approaches to female sterilization. Laparotomy, which requires a large abdominal incision, has been replaced by minilaparotomy
(small abdominal incision), laparoscopy (abdominal puncture), colpotomy and culdoscopy (vaginal approach), or hysteroscopy (transcervical approach). Procedures reviewed involving tubal ligation include simple ligation, the Madlener technique, the Irving technique, the Wood technique, salpingectomy, the Pomeroy technique, fimbriectomy, cornual resection, and the Uchida technique. Laparoscopic and hysteroscopic fulguration, tubal occlusion with tantalum clips, spring-loaded clips, plastic clips, and the falope ring, plugs, chemical tubal occlusion (quinacrine, silver nitrate, silastic, methyl 1-2-cyanoacrylate, gelatin-resorcinol-formaldehyde), and experimental methods such as fimbriectomy and carbon dioxide laser are reviewed, and their advantages and disadvantages are outlined. Endoscopic techniques generally require more skill and training than other techniques, while transcervical approaches are considered to be in the experimental stage. Electrocautery and some chemical methods are more likely to damage structures adjacent to the tubes than other methods. Infection occurs more frequently with vaginal methods than abdominal methods. Morbidity is more frequently associated with ligation techniques than those in which the continuity of the tube is maintained. Anastomosis is most successful in cases of tubal ligation, though a full assessment of plugs in this respect has not been done.

**Female Sterilization Using the Culdoscope**

The culdoscopic method of female sterilization is discussed. The method employs the vaginal approach, and has several advantages over other methods; it leaves no external scar, may be performed with only local anesthesia and analgesia on an outpatient basis, does not require highly sophisticated equipment, can be performed in 10 minutes or less, and is associated with few surgical complications and low postoperative morbidity. Preoperative, operative, and postoperative procedures are described. Any method of tubal occlusion can be combined with culdoscopy, though ligation methods seem simpler and safer than electrocoagulation. It is best to perform culdoscopy 5-6 weeks after childbirth or 2-4 weeks after induced abortion. Major contraindications to the procedure are listed. The few operative complications that may occur include intestinal perforation, bleeding, shock or hypotension, apnea or respiratory difficulties, separation of the 2 layers of the cul-de-sac, and incomplete puncture of the cul-de-sac. Postoperative complications that may occur include shoulder and abdominal pain, fever, infection, abscesses, bleeding, and pelvic inflammatory disease, with pain being the predominant side effect. The reported failure rates for the procedure are 0-2%. Inadequate tubal occlusion accounted for the majority of the failures. Equipment required for the method, and requirements for entering the training programs at Kandang Kerbau Hospital, the University of the West Indies, and the University of Miami are reviewed.

**Laparoscopic Sterilization with Clips**

This Population Report summarizes a two-day workshop on female sterilization performed by laparoscopic application of the Hulka-Clemens spring clip to the fallopian tubes. Organized by
the International Fertility Research Program of the University of North Carolina, the workshop, which was held on December 14-15, 1973 in Chapel Hill, North Carolina, reviewed current investigations and recommended improvements in equipment.

- **Female Sterilization by Mini-laparotomy**

  The minilaparotomy technique for female sterilization is discussed. Preoperative, operative, and postoperative procedures, and the use of anesthesia, are reviewed. Minilaparotomy can be used with any method of tubal occlusion, but the Pomeroy or modified Pomeroy ligation technique, the Madlener technique, excision of the ampullary portion of the tube, or electrocautery are the methods usually used. The contraindications to minilaparotomy are essentially the same as those for other female sterilization procedures. The incidence of complications reported for 2800 procedures performed by 112 surgeons at 50 different locations in Thailand ranged from .4-1%. Organization that may be contacted for information on a "minilap" kit, centers for training in minilaparotomy, and funding sources for research on the value of the procedure are list.

- **Laparoscopic Sterilization: A new technique**

  This report discusses the current practice of laparoscopic sterilization - new techniques and new technology. Most of the information contained herein is based upon a review of the professional literature over the past five years, supplemented by personal interviews and correspondence.

- **Colpotomy: The vaginal approach**

  Colpotomy, a technique of female sterilization which dates back to the early 19th century, has recently begun to attract new interest. By definition an incision in the vagina rather than the abdomen, colpotomy has proven particularly effective for large-scale female tubectomy camps in India.

- **The World's Laws on Voluntary Sterilization for Family Planning Purposes**

  This short monograph was prepared in an effort to assist the Second International Conference on Voluntary Sterilization, February 25 - March 1, 1973, in Geneva. In view of the
uncertain state of the world's laws on voluntary contraceptive sterilization, it is hoped that this monograph, by pointing out the facts of the situation as it exists, may lead to some improvement. The Conference provides an excellent opportunity to draw attention to the facts. It is also hoped that this collection of legislation will be of practical assistance to people working in this field of fast growing importance.

Selected Bibliography with Abstracts on Voluntary Sterilization

This bibliography with abstracts represents a preliminary compilation of periodical articles, papers, book chapters, abstracts, and personal communications reporting on male and female sterilization - surgical procedures, legal issues, and new developments - during 1970, 1971, and 1972. Animal studies have not been included except where tests or experimental methods may have a direct relevance for human use. An expanded data base, fully indexed, will be available for computerized retrieval later in the year. This publication is being distributed in the hope that comments will be made on the content, format, and abstracts which can be taken into account in the final computerized file. Anyone whose work may have been inadvertently omitted is invited to send copies for inclusion. On a trial basis, copies of the articles cited can be provided in limited numbers to qualified researchers, medical personnel, or officials in developing countries. No more than five copies will be sent with each request. Please identify each request by the six-digit number found at the end of the abstract.

Series D: Male Sterilization

Resources:
Vasectomy: Reaching out to new users

This issue of Population Reports can help managers of family planning and reproductive health programs to: Identify and address the barriers that discourage men from choosing vasectomy; Improve the quality of vasectomy services by adopting the safest and most effective surgical techniques; Select effective communication channels and design persuasive messages to promote vasectomy; Compare and assess different approaches to delivering vasectomy services; Develop training programs for providers who counsel clients on vasectomy and providers who perform the procedure; Plan how to introduce and scale up vasectomy services.

Vasectomy: New opportunities

This report examines how timely developments have opened up opportunities for promoting vasectomy, an extremely effective but rarely used family planning method. One of the safest and most effective contraceptive methods, vasectomy involves a single minor surgical procedure that usually takes no more than 10 minutes. There is little risk of complications involved with this permanent contraceptive method, and the procedure has no long-term effects on the man's health or sexual performance. Despite the great advantages offered by this method, only 42 million couples worldwide rely on vasectomy, compared to nearly 140 million who rely on female sterilization. Vasectomy is a major family planning method in only 6 developed countries and 3 developing countries. Recent developments, however, offer hope of increasing the use of vasectomy. The first section of the report examines improved vasectomy techniques, principally the no-scalpel vasectomy. This new technique makes a safe procedure even safer. With the no-scalpel vasectomy, there is little or no bleeding, fewer infections, less postoperative pain, and just as effective contraception. The second section considers data that shows that increasing the availability of vasectomy services especially high-quality services--does attracts clients. Studies have shown that high quality services must be conveniently located, designed to make men feel comfortable, staffed by well-trained personnel, and supported by good counseling. As section 3 explains, mass-media publicity and person-to-person communication can greatly increase the use of vasectomy services. The report concludes with current information concerning the worldwide, regional, and country use of vasectomy services.

Population Reports Quick Guide to Vasectomy Counseling -- Vasectomy is quick and easy!

Having a vasectomy is quick and easy. The steps are as follows: Registering at the clinic;
Meeting with a counselor to learn more about vasectomy and other family planning methods and to make sure vasectomy is the right choice; An injection of medicine that prevents pain but does not cause sleep; A small opening is made in the scrotum, and the tubes inside are blocked; Leaving the clinic, usually in less than an hour. The tubes inside the scrotum are cut and blocked in a vasectomy. Sperm cannot travel from the testicles, where they are made into the ejaculate, which is made in the seminal vesicle and the prostate.

**Vasectomy--safe and simple**

This review on vasectomy examines operating methods, effectiveness, short- and longterm side effects, prospects for reversal, prevalence, and program issues. Although vasectomy is 1 of the safest, simplest, and most effective methods of contraception, it has been neglected in much of the world and even where it has been widespread the number of procedures has been declining. The tendency to blame low prevalence of vasectomy on male attitudes is changing to a focus on the negative attitudes of family planning providers. 4 countries, the US, UK, India, and China, account for most of the 33 million married couples of fertile age who use vasectomy worldwide. Vasectomy is also the contraceptive method of 4-15% of couples in Thailand, South Korea, Canada, the Netherlands, and New Zealand. Possible explanations for recent declines in vasectomy procedures, apart from lack of interest of family planning providers, include increasing availability of other methods, safer and simpler female sterilization, publicity about longterm side effects in monkeys, and possible rising divorce rates. Vasectomy procedures have changed little in the past decade and few medical problems have arisen. Fewer than 1 operation in 100 fails. Surgical risks are small and serious side effects are rare. Minor swelling, bruising, or pain may be experienced but they pass quickly. Infections and deaths could be virtually eliminated if sterile procedures were followed and men were carefully counseled about what symptoms require medical attention. Large scale epidemiologic studies have proven that vasectomized men do not face increased risks of heart disease. The largest study of the pathogenic effects of vasectomy involved over 10,500 vasectomy users and controls and showed that vasectomized men had no excess risk of heart attacks, cancer, or immune system diseases, and in fact vasectomized men experienced significantly fewer deaths during the study period than the controls. Many vasectomized men develop antibodies to sperm but there is no evidence to date that sperm antibodies impair immunity to disease. Despite much research, reversal procedures remain difficult, costly, uncertain, and not widely available, and vasectomy should be considered a permanent method. Factors that have been identified as crucial to the success of vasectomy programs include strong and enthusiastic leadership, focused program design with vasectomy services separate from female methods, attention to the special needs of men in counseling and other aspects, appropriate training strategies, community based orientation with local services and personnel, and special care in screening, sterile medical procedures, and sympathetic and respectful follow-up.

**Vasectomy Reversibility: A status report**
The current status of the reversibility of the effects of vasectomy is reported. A very small percentage of vasectomized men seek restoration of fertility. Among those who do, remarriage after divorce or death of wife, death of a child, improved economic situation, and psychological considerations of adverse effects from vasectomy are the most often cited reasons. A successful reversibility technic may increase the popularity and acceptability of vasectomy, and could help remove some of the religious and cultural objections to vasectomy. The techniques of vasectomy and anastomosis are major factors in the success of reversibility, as well as the skill of the surgeon. The rate of success, as determined by the reappearance of sperm, varies from 40 to 90%, while success, as determined by subsequent pregnancy, varies from 18 to 60%. Reasons for anatomical failure include spermatic granulomas, obstructions, misalignment of the vas ends, and choice of technique. Injury to the testes, epididymides, or sympathetic nerve endings, low prevasectomy fertility, and, possibly, sperm antibodies are some reasons for functional failure. Vas anastomosis is presently the most widely practiced method. Recently, mucosa-to-mucosa anastomosis with a splint, and performed under an operating microscope, has been attracting attention. Vas occlusive devices, such as plugs, clips, intravasal thread, and vas valves are in the experimental stage. Another approach to reversibility is the storage of frozen semen, though this is also in the experimental stage because of its high cost, limited availability, and uncertain results. Research priorities in the development of improved anastomosis techniques and vas occlusive devices include a better understanding of male physiology and suitable animal models for testing.

**Vasectomy: What are the problems?**

Complications that may occur after vasectomy and their management are discussed. Local infections and systemic blood disorders are the major contraindications to vasectomy. Inguinal hernia, orchiopexy, hydrocele, varicocele, preexisting scrotal lesions, or a thick, tough scrotum may make vasectomy difficult to perform. Skin discoloration, swelling, and pain are the most common, and the least serious, complications associated with vasectomy. Postoperative pain and swelling can be reduced by prior treatment with steroids. Treatment with an oral enzyme (Chymoral) has markedly reduced bruising, edema, hematomas and postoperative disability. The operative technique used may affect the degree of swelling and pain. Hematoma develops in less than 4% of all vasectomy patients. Hematoma is best prevented by paying careful attention to hemostasis during the operation. The application of ice packs usually stops the bleeding, though reopening of the scrotum and tying of the bleeding vessel may be required. Infection generally occurs in 1-7% of all vasectomy patients. It is estimated that the incidence of sperm granulomas, which are caused by leakage of sperm into surrounding tissues may be as high as 20% in the vas and 15% in the epididymis. Vas fulguration apparently decreases the incidence of sperm granulomas. Epididymitis can be treated by the application of heat and the wearing of a suspensory. Vasectomy has no permanent systemic effects and does not markedly alter testicular function of hormone levels. 50-70% of vasectomized men develop antibodies to sperm through an autoimmune response. These antibodies are of either the agglutinating or immobilizing type.
However, some patients develop a cell-mediated immunity to sperm. Failure rates for vasectomy have been as high as 4%, though more effective and less traumatic operative techniques have reduced this rate to less than 1%. Spontaneous rejoining of the ends of the vas is the most common cause for failure of vasectomy. Crushing and tying of the vas may increase the likelihood of recanalization, while the use of tantalum clips may reduce the incidence. Fulguration may be more effective than vas ligation. Vasectomy failure may also result from occlusion of the wrong structure, inadequate occlusion, unprotected coitus following the operation, or an undetected 3rd vasa. There is no physiological evidence that vasectomy affects the body in general or sexual capability. However psychological problems may contraindicate vasectomy. Studies of sexual response after vasectomy are reviewed and tabulated.

• The World's Laws on Voluntary Sterilization for Family Planning Purposes

This short monograph was prepared in an effort to assist the Second International Conference on Voluntary Sterilization, February 25 - March 1, 1973, in Geneva. In view of the uncertain state of the world's laws on voluntary contraceptive sterilization, it is hoped that this monograph, by pointing out the facts of the situation as it exists, may lead to some improvement. The Conference provides an excellent opportunity to draw attention to the facts. It is also hoped that this collection of legislation will be of practical assistance to people working in this field of fast growing importance.

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Sterilization: Vasectomy--old and new techniques

This is an extensive report on vasectomy or male sterilization, an increasingly popular form of voluntary family planning. Included in the report are the history, preoperative preparation, anesthesia, procedure, postoperative care, equipment, and effectiveness of the vasectomy. Also included is an extensive bibliography. The operation involves the cutting or blocking of each vas deferens, the 2 tubes that carry sperm from the testes to the penis. Through a small incision in the scrotum the surgeon cuts, ties, coagulates, and/or clips the vasa. Local anesthesia is commonly used, and the patient is, after a brief rest, ambulatory.

Series E: Law and Policy

Resources:

- Laws and Policies Affecting Fertility: A decade of change

In the last decade over 50 countries have strengthened laws or policies relating to fertility. Approximately 40 developing countries have issued explicit statements on population policy emphasizing the relationship to national development. In several countries constitutional amendments have been passed reflecting a more positive attitude toward family planning. High-level units, e.g. small technical units, interministerial councils and coordinating councils
have been established to formulate policies or coordinate programs. Other actions relating to fertility include: increased resources for family planning programs, both in the public and in the private sector; elimination of restrictions on family planning information, services and supplies; special benefits for family planning acceptors or couples with small families, and measures to improve the status of women, which indirectly affects childbearing patterns. The recognition that policies, laws and programs to influence fertility are an integral part of efforts to promote social and economic development was reaffirmed at the International Conference on Population in Mexico City in 1984. 147 governments expressed their support for voluntary programs to help people control their fertility. Governments cite at least 4 reasons for increased attention to policies affecting fertility and family planning. Some of these are the desire to slow population growth to achieve national development objectives, concern for maternal and child health, support for the basic human right to determine family size, and equity in the provision of health services. In addition to the strongest laws and policies to lower fertility in Asia, legal changes are occurring in Latin America, Africa, and the Middle East. Family planning programs, laws on contraceptives and voluntary sterilization, compensation, incentives and disincentives, the legal status of women and fertility and policy-making and implementation are reviewed, as well as equal employment, education, political and civil rights and equality of women within marriage and the family.

- Legal Trends and Issues in Voluntary Sterilization

This review considers the current legal status of sterilization in the countries of the world (legal by special statute, legal by lack of prohibition, illegal, and legal status unclear) and the issues in voluntary sterilization -- approaches to law reform; personal choice; therapeutic considerations; spousal consent; age and parity restrictions; assuring availability; informed consent; waiting periods; consent by institutionalized, minor, and incompetent persons; incentives and disincentives; and rights and liabilities of providers. In both developing and developed countries, new legislation, court decisions, government policy statements, and ministerial regulations increasingly leave the sterilization decision to the individuals involved rather than to medical experts or government officials. These legal changes confirm that voluntary sterilization is an acceptable means of fertility regulation and a legitimate medical procedure. In some countries barriers still exist making it difficult for poor and rural populations to obtain voluntary sterilization. These obstacles arise when voluntary sterilization is excluded from national health and family planning programs and from private insurance plans. Countries which explicitly declares that voluntary sterilization is legal include Singapore, Panama, Japan, the Scandinaivan countries, 2 republics of Yugoslavia, and some US states. Countries where voluntary sterilization is legal because no law forbids it include, among others, China, South Korea, and most countries that derive their laws from English, or common law, including India, most other Commonwealth countries, and most US states. Criminal statutes prohibiting sterilization continue in Burma, Somalia, Spain, and Turkey. Saudi Arabia banned all contraception, including voluntary sterilization, in 1975. Countries where the legal status of voluntary sterilization is unclear include France, Belgium, Eastern Europe, Francophone Africa, and some Latin American countries. Because
sterilization is elective and its effect on fertility is usually irreversible, new statutes and regulations often define conditions for the choice of voluntary sterilization. These conditions vary from country to country, but virtually all these new laws accept voluntary sterilization as a legitimate family planning method, distinct from both involuntary sterilization and therapeutic sterilization. Recent laws and regulations in the US and Europe try to assure that the choice of voluntary sterilization is made by the individual concerned and that it is made after receiving complete information about risks, benefits, and alternative contraceptive methods. Overall, recent law reforms have dual considerations: to remove the procedure from criminal code and to place it within the realm of family planning programs and health law, as 1 of several options available to regulate fertility; and to assure voluntary and informed personal consent to the procedure.

- **The Twenty-Ninth Day: Accommodating human needs and numbers to the earth's resources**

In France a riddle is used to instruct schoolchildren in the nature of exponential growth. The riddle starts with a single leaf in the lily pond, with the number of leaves doubling each day. The teacher asks when is the pond 1/2 full if it is full on the 30th day, and the answer is "on the 29th day." The world, now with a population of 4 billion, may already be at least 1/2 full. If doubling of population occurs within the next generation, the "pond" could be entirely full. A doubling of population would mean that a great majority of countries will be confronted with ecological, economic, and political stresses that may be unmanageable. Signs of stress on the world's principal biological systems and energy resources indicate that in many places they have already reached their limit and simply cannot withstand a tripling or quadrupling of population pressures. Population growth multiplies the number of people who are in need of social essentials at the same time it reduces the resources able to satisfy them. Attention here is focused on understanding the threat of population growth, the dimensions of ecological stresses and the consequences, the impact of population growth on food needs, and economic stresses. The question remains as to how humankind will accommodate to the earth's natural systems and resources. Although analysts can define the elements of accommodation and prepare the timetables for making the required changes, only governments have sufficient power to implement them by means of legislation, budgetary and fiscal policies, taxation, and the analytical and educational capacities of government institutions.

- **Recent law and policy changes in fertility control**

Over 40 countries have either updated or initiated laws and policies related to family planning since mid 1974. These changes reveal a continuing trend towards the liberalization of attitudes and practices related to fertility control and have occurred in the areas of national plans and programs, contraceptive methods and distribution, voluntary sterilization, and the
use of economic incentives and disincentives. The countries of Australia, Belgium, Chile, Ecuador, Egypt, El Salvador, and New Zealand have established commissions or councils to study all phases of family planning law and services and to recommend new programs or ways to make existing programs more effective. Mexico and Thailand have added provisions to their constitutions, emphasizing government support at the federal level for information programs and services. Italy’s parliament has given local municipalities authority to establish counseling and information centers on contraceptive methods and services. Over 12 countries have instituted legal changes concerning contraceptive distribution programs by using existing family planning clinics and non physicians. The Philippines, Pakistan, Bangladesh, and the Federal Republic of Germany have approved the sale of condoms through commercial or retail outlets. Iran, Iraq, and the Philippines removed prescription requirements for oral contraceptives. Japan, for the 1st time, approved the use of IUDs. In Chile, non physicians have obtained permission to insert IUDs and to distribute oral contraceptives.

• **World Plan of Action and Health Strategy Approved at Population Conferences**

An account of the principles and policies adopted at the World Population Conference (Bucharest, August 19-30, 1974) and at the conference on The Physician and Population Change (Stockholm, September 4-6, 1974) is presented. The Plan of Action that emerged from the Bucharest conference called for increased socioeconomic development and decreased fertility, improvement in the status of women, better health care services research and training, and increased international support for all population related activities. At the Stockholm conference, the participants agreed that physicians should be more active in promoting better health care for the entire community, that auxiliary medical personnel should be more fully utilized to make existing services more accessible to the community, and that family planning services must be incorporated into existing health services and also extended to rural populations. The World Population Plan of Action is summarized and the text of the Strategy for Action issued at the Stockholm conference is presented.

• **Eighteen Months of Legal Change (Fertility control)**

In most countries there have been recent shifts of legal policy in support of family planning as an integral part of national programs. Restrictions on abortion and sterilization have been eased in some countries. Bulgaria, Czechoslovakia, and Hungary have narrowed the relatively broad eligibility for abortion but called for added emphasis on family planning education. In June 1974 an international symposium on Law and Population organized by the International Advisory Committee on Population and Law, UNFPA, and other international groups was held in Tunis. It recommended a number of legal changes intended to assist in
the extension of family planning information and services which is essential if every couple is to exercise the basic human right to determine freely and responsibly the number and spacing of their offspring. Effective methods of contraception must readily be available also. This has been happening in several European countries through effective legislation. Also, several countries are now taking legal action to alter the economic advantages and disadvantages of having children. Tables in this report show changes in law or policy which have taken place in various countries between January 1973 - June 1974 relating to family planning information and services, contraceptive methods, voluntary sterilization, abortion, and economic incentives and disincentives.

Series H: Barrier Methods

Resources:

- Closing the Condom Gap

Consistent condom use by nonmonogamous sex partners could protect millions of people from HIV infection and other sexually transmitted diseases (STDs) and reduce the enormous costs associated with STDs. Condom use needs to increase to about 15 billion/year (from 8-10 billion/year) to prevent STDs. An estimated 33 million people live with HIV/AIDS worldwide, and an estimated 16,000 people are infected with the virus each day. In 12 out of 15 countries surveyed, more than 75% of never-married men have changed their sex behavior in response to HIV/AIDS. While condom use remains low within marriages (approximately 7%), some married couples use condoms in combination with another contraceptive. Recent surveys of sexually active, unmarried people have found rates of
condom use of 2-17% among African women, 7-50% among African men, <1-36% among Latin American women, and 27-64% among Latin American men. Many unmarried, sexually active people continue to practice risky sex behavior—even when they know about STDs and condoms—because of mistaken beliefs that they are not at risk and/or because social norms discourage condom use and encourage high-risk male sex behavior. Traditional gender roles and fear of violent reactions inhibit women from talking about sex with their partners or negotiating condom use. Promotion, advocacy, communication campaigns, and counseling can change social norms and inform people about risks. Governments must help close the condom gap by adopting policies that make condoms widely available and universally accepted. Donors must also provide adequate funds and technical assistance to meet this challenge.

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Condoms -- Now more than ever

Around 60% of married condom users in the world dwell in developed countries, especially in Japan where 45% of married women of reproductive age use condoms. In developing countries, only 4% of married condom users use them for family planning. In 1990, couples having sexual relations may have used an estimated 6000 million condoms, but this number falls very short of the >13,000 million condoms needed to protect people from unwanted pregnancy, sexually transmitted diseases and/or AIDS. The public health community is faced with closing the gap between use and need. The gap entails public access to, demand for, and use of condoms. Therefore public health professionals need to promote condom use. In Thailand, for example, humorous condom promotion has led to an increase in condom usage and in its availability. They also must counsel and inform individuals so that they can use condoms correctly and consistently. Obstacles to use exist, however, such as embarrassment in buying condoms. Condoms should be university available at affordable prices. For example, family planning clinics, job sites, public facilities, vending machines, and clients could distribute condoms. Manufacturers must produce more condoms as the need arises and ensure their quality. All condoms should at least meet the international standards set in 1990. Some of the many ways to increase condom use involve policy makers who should eliminate all barriers to import or manufacture of condoms, government agencies which should provide condoms free of charge to those who cannot afford them, and the communication industry which should eliminate restrictions on condom advertising.

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New Developments in Vaginal Contraception

This review on new developments in vaginal contraception examines the history and usage of vaginal methods, assesses the effectiveness, proper use, and safety of spermicides, contraceptive sponges, diaphragms, and cervical caps, discusses the disease prevention effects of vaginal methods, and explores some program issues. The female vaginal methods are less effective than oral contraceptives, IUDs, or voluntary sterilization, and may entail
high risks of accidental pregnancy, especially among women who are not conscientious users. Although they have almost no side effects, they may be awkward to use. They provide some protection against sexually transmitted diseases. Spermicides are increasingly available throughout the world and require no prescription. They come as jellies, creams, foams, foaming tablets or suppositories, melting suppositories, or soluble film. They contain different spermicidal ingredients, of which nonoxynol-9, octoxynol-9, and menfegol are the most common. Evaluation studies show that 1-30% of spermicide users become pregnant in each year of use, but careful and consistent users have low pregnancy rates. A few US studies which raised the possibility that spermicide use in early pregnancy might cause congenital defects have been criticized on technical grounds and their findings have not been confirmed. The new contraceptive sponge "Today", manufactured by the VLI Corporation, is made of polyurethane and impregnated with nonoxynol-9. The sponge is assumed to work by releasing spermicide, absorbing semen, and blocking the cervical opening. It can be kept in place for 24 hours, is less messy than other vaginal methods, and can be sold over-the-counter. 9-27% of users became pregnant in the 1st year of use in international trials. There is little evidence concerning longterm safety or infection. Diaphragms come in 3 major designs, flat spring, coil-spring, and arcing, which make it possible to fit anatomically dissimilar women. Careful instruction in insertion and use are necessary for new users. Failure rates of 2-23%/year have been reported. Cervical caps are held in place over the cervix by suction and must be carefully fitted. 1st year failure rates range from 8-20%. Many women have difficulty using caps because of fitting problems or because of difficulty of insertion and removal. Other disadvantages include possible dislodgement during sex, odor, and possible vaginal laceration with 1 type of cap. The future prospects of vaginal methods in developing countries are uncertain because of their high cost and low effectiveness relative to other methods.

Update on Condoms--Products, Protection, Promotion

An overview of condom use, promotion, and manufacture is presented. Theoretical effectiveness of condoms is estimated to range from .5-2 pregnancies/100 couple years of use. Although data are not available on breakage rates during use, estimates of 1/1000 for good quality condoms and 1/100 for poor quality condoms have been offered. Use-effectiveness rates vary widely; pregnancy rates of .8-22/100 couple years of use have been reported. Use-effectiveness has been related to age, motivation to space and prevent births, family income, levels of educational attainment, length of marriage, and experience with the method. Use of spermicides with condoms slightly improves effectiveness. Continuation rates are lower for condoms than for IUDs or oral contraceptives, and lower in developing than developed countries. Inconsistent use or unwillingness to use condoms indicates that the method may not be as acceptable as other methods. The results of several studies indicate that consistent use may reduce the risk of contracting a sexually transmitted disease from an infected partner. Condom use has also been linked to protection in women against PID, against amniotic fluid infections in late pregnancy and to a preventive or therapeutic effect on cervical cell abnormalities. Some evidence suggests that condoms may be useful in
treating women who become infertile because they produce sperm antibodies. Surveys of representative population samples estimate that almost 4 million people use condoms. The highest percentage of users are in developed countries, China accounts for 18% of the users, other Asian countries, 13%; Latin American and Caribbean countries, 3%; and Africa and the Middle East, 1%. There are 4 ways that condoms reach users: commercial channels, family planning clinics and physicians, community-based or household distribution programs, and social marketing (government subsidized) programs, which combine low cost with wider availability. National and international agencies also supply condoms for developing country programs. Traditionally promotional activities have been aimed at men. Recently, women and adolescents have become important targets. Studies of consumer preferences are guiding the manufacture of different types of condoms and the design of packaging. Highly visible advertising and promotion does boost condom sales. Originally condoms were made of animal membranes. The development of the vulcanization process made the production of rubber condoms possible. Latex is currently the raw material used for most condoms. Manufacturing procedures vary slightly and 2/3 are produced in developed countries. Local packaging in developing countries may be economically feasible and desirable. Most countries manufacturing condoms have national quality control standards. Adoption of proposed international standards may eliminate problems associated with multiple import-export testing. These standards are presented.

Spermicides: Simplicity and safety are major assets

The answer is yes to all 3 of the following questions concerning vaginal chemical spermicides: 1) are they effective; 2) do they make a useful contribution to voluntary family planning programs; and 3) is there any role for vaginal chemical spermicides. If used properly, spermicides can be more than 95% effective, and they are about 85% effective even if they are not used properly all the time. They also meet the following important needs that other methods may fail to meet: 1) they are safe, with no proven systemic side effects or even any serious local reactions; 2) they are readily available from commercial sources; 3) they are useful as a simple and easily understood introduction to fertility control; 4) they are convenient for use by couples who have intercourse frequently; 5) they are appropriate for short-term use or for adjunct use with other methods; 6) they are acceptable to women who might not otherwise use family planning; and 7) they are probably to some degree protective against venereal disease and certain other sexually related infections. The spermicidal products that are available come in 5 different forms: creams, jellies, foams in pressurized containers, foaming tablets, and suppositories. Each consists of a relatively inert base material which physically blocks the passage of sperm and simultaneously serves as a carrier for a chemically active ingredient which incapacitates the sperm before it can reach the ovum. Discussion focus is on history, usage, acceptability, measuring effectiveness, protection against infection, and research and development.

The Diaphragm and Other Intravaginal Barriers: A review
Literature on the vaginal diaphragm and other intravaginal barrier devices is reviewed. Although use of the diaphragm in the U.S. has declined considerably since the early 1960's, there is some evidence that this trend is being reversed due to disillusionment with oral contraceptives (OC) and the IUD, though this apparent reversal has yet to be established. Generally, the vaginal diaphragm is ignored as a contraceptive method in developing countries. The diaphragm is a good alternative method for women who cannot use OCs or the IUD. It is also advantageous during lactation as it does not interfere with the production of milk. The 4 most widely used diaphragms are the coil-spring, flat-spring (Mensinga), arcing (Findlay), and Matrisalus. Once fitted into the vagina, the device blocks sperm transport to the cervix. It is held in place by spring tension exerted from the rim, the woman's muscle tone, and the pubic bone. Since the diaphragm does not fit tightly enough to prevent sperm passing around the rim, a spermicide should be used with the device. Procedures for the fitting of the diaphragm, its insertion and removal, and guidelines for its use are described. Failure rates with the device range from 6-25 per 100 woman-years of use. Failure can be due to improper insertion, improper fit, displacement during coitus, and defects in the diaphragm. The diaphragm has recently been used for administering abortion-inducing prostaglandin E2. Manufacturing standards and procedures are reviewed. Cervical caps, which are similar to diaphragms in many aspects of use and effectiveness, except that they cover only the cervix and are held in place by suction, are discussed.

Vaginal Contraceptives: A time for reappraisal?

Literature on vaginal chemical contraceptive agents is reviewed. Vaginal contraceptives have been in use for more than 2 centuries, and homemade spermicides are still used among some populations. There are basically 4 types of vaginal chemical contraceptives: 1) creams, jellies, and pastes which are squeezed from a tube, 2) suppositories which dissolve in the vagina, 3) aerosol or tablet foams, and 4) water-soluble plastic film (C-film) containing a spermicide. The spermicidal actions of vaginal chemical contraceptives are various. Surface active agents are thought to attach to sperm, thereby inhibiting oxygen uptake and fructolysis. Bactericidal agents, such as phenyl mercuric acetate, quinine compounds, quartenary compounds, and ricinoleic acid and its compounds, act by combining with sulphur and hydrogen bonds in spermatozoa, thus interfering with their metabolism. Surface and bactericidal agents often act synergistically. Highly acidic agents include lactic acid, boric acid, tartaric and citric acids, and gum acacia. FDA standards for the safety and effectiveness of over-the-counter (OTC) drugs are presented. In vitro studies are the 1st phase in testing the effectiveness of a spermicide. The IPPF tests approves spermicidal preparations if 1 ml of a 1:11 solution immobilizes all sperm in .2 ml of semen within 40 seconds after mixing. However, it is questionable whether in vitro tests assure clinical effectiveness. In an in vivo study, only Delfen cream and Emko foam provided full protection after a second insemination. The effectiveness of spermicides in clinical tests is highly variable. Pregnancy rates per 100 woman-years of use as low as 1.75 and as high as 38.3 have been reported. Pregnancy rates for C-film reportedly range from 5.3 to 62 per 100 woman-years of use. The IPPF has estimated that 1,041,500,000 doses of spermicides were
distributed in 1971. 1.5-4 million women in the U.S. are estimated to use vaginal foams. However, the introduction of oral contraceptives and the IUD has substantially reduced the number of users of spermicides. The promotion and sale, costs, USAID shipments, and distribution of spermicides are reviewed. Preliminary studies of the in vitro inhibition of N. gonorrhea growth by vaginal chemical contraceptives have been promising.

- **The Modern Condom: A quality product for effective contraception**

  The report comprehensively summarizes the use of the condom as a contraceptive and prophylactic. The nature and history of condoms is discussed and the modern manufacture of latex condoms is described in detail including pricing and material costs. Industry quality control testing procedures are given and national standards for sampling and test procedures for strength and aging are outlined in detail. Condom standards by country, testing methods, and sampling standards in the U.S. are given in tables. Packaging inspection and standards are described and national standards for condom dimensions are tabularized and discussed. The effectiveness of standards is examined and a provisional condom standard agreed to by the International Planned Parenthood Federation Working Group on Condomes, London, 1972, is set out. Skin and plastic condoms are discussed and the direct relation of condom use to decreased venereal disease rates is noted. The effectiveness of condoms as a contraceptive is examined and reasons for its failure in this function are discussed. The results of studies measuring pregnancy rates per 100 years of exposure with condoms are presented in a table.

- **Condom -- An old method meets a new social need**

  This report covers in detail the history, usage, and marketing of the condom as a means of contraception. Worldwide estimates of usage range from 19 to 25 million couples using them as their only birth control method or in combination with other methods. Japan leads the world in usage; condoms are used there by nearly 70% of couples who employ contraceptive means. To expand distribution of condoms, new trends in marketing and promotion are being tried worldwide. The condom, also called a rubber, sheath, or prophylatic, has many advantages including: low cost, reliability, compactness, easy disposability, requirement of no supervision or medical examination or follow-up, no side effects, protection against venereal diseases, and visible postcoital evidence of effectiveness. There are 2 kinds of condoms, latex and skin made from the caecum of sheep. Included are reports on condom usage, marketing, and distribution in India, Kenya, Thailand, Jamaica, Antigua, Japan, Sweden, Germany, Austria, The United Kingdom, and the United States. Also included is an extensive bibliography.
Series I: Periodic Abstinence

Periodic Abstinence: How well do new approaches work?

This report discusses the effectiveness, acceptability and feasibility of periodic abstinence in family planning programs. The concept of periodic abstinence had its beginnings during the 1930's when Drs. Ogino of Japan and Knaus of Australia independently identified the time of ovulation in relation to the menstrual cycle and helped develop what became known as the calendar rhythm. Over the years, different techniques of periodic abstinence were developed, (rhythm came to be known by the term natural family planning or NFP), including, in addition to Ogino-Klaus' calendar rhythm, the 1) temperature, or thermal method, 2) cervical mucus method, and 3) sympto-thermal method (STM). These methods do not depend on regular menstrual cycles but on signs and symptoms of fertility. Periodic abstinence is the only birth control method approved by the Roman Catholic Church. Several factors affect the effectiveness of these methods: 1) obvious differences between new and experienced use, 2) differences in groups studied and differences in definitions and study design, 3) strength of motivation to avoid pregnancy, 4) quality and type of teaching and follow-up, and 5) the physiological characteristics of women, particularly when they are lactating, adolescent, or premenopausal. Continuation rates for periodic abstinence methods are lower than those for pills and IUDs. Studies using life-table analysis in the last decade showed that between 1/3 and 3/4 of acceptors discontinue practicing NFP methods within 1 year; this compares with about 20% to 30% discontinuing IUD use after 1 year. Users of periodic abstinence methods tend to be couples who do not want to use other methods because of religious and philosophical reasons and fear of side effects, or couples who do
not have access to other methods. Complications associated with these methods include unplanned pregnancy with its attendant risk of maternal mortality, especially in developing countries; spontaneous abortion, and birth defects. The use of periodic abstinence has markedly declined in the last few decades throughout the world, and program administrators are faced with scientific, behavioral and programmatic challenges if use of these methods is to continue.

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**Sex Preselection Not Yet Practical**

A report on the state of knowledge, current research, and potential effects of sex preselection in humans is presented. The chromosomal mechanism by which the male gamete determines the sex of the offspring is reviewed. Theoretically, the sex ratio should be 1:1, though there is a slight preponderance of males to females in the world birthrate. More than 30 variables have been associated with the variations in the sex ratio. Variations in the sex ratio imply that conditions in the female/male reproductive tracts favor fertilization by sperm with a particular sex, and that conditions in the uterus may favor implantation or fetal survival of a particular sex. Current research on sex preselection has focused on the timing of coitus (or artificial insemination) in relation to ovulation; precoital pH douching to alter the vaginal environment; the separation of X- and Y-bearing chromosomes by sedimentation, centrifugation, natural sperm motility, and electrophoresis; immunological methods; and fetal sex identification by amniocentesis with subsequent induced abortion. Though considerable headway has been made by in utero sex determination, the techniques for sex determination have been either unsuccessful, difficult to standardize, or impractical for sex preselection. The argument that sex determination would reduce population because of the desire for more sons, and consequently, fewer daughters, is noted. The argument is supported in part by attitude surveys, but other surveys indicate that more sons may encourage larger families because of increased family wealth. Generally, the evidence seems to indicate a strong preference for sons in some developing countries, no apparent preference in other developing countries, and a desire for at least 1 child of each sex in developed countries. The demographic effects of sex control, or an unbalanced sex ratio, cannot be assessed. Extreme social consequences as a result of sex preselection have been predicted by both proponents and opponents of sex determination should an effective, practicable method become available.

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**Birth Control Without Contraceptives**

Despite the advances of modern medicine, the only method of birth control which is completely safe and completely effective is complete sexual abstinence. For millenia individuals trying to control their own fertility as well as institutions trying to control social mores have experimented with various forms of culturally enforced sexual abstinence such as late marriage, long lactation without intercourse, celibacy for the clergy, isotation of
women, and strong taboos associated with menstruation, childbirth, and close blood ties. Some of these have undoubtedly checked population growth. Others may have increased birth rates by restricting intercourse to those times when the woman was most likely to conceive. Only in the last half century has knowledge of female reproductive physiology been systematically applied to the development of a technique for birth control in which sexual abstinence is timed to coincide with the fertile phase of the woman’s menstrual cycle. Variously referred to as rhythm, periodic abstinence, natural family planning, or the safe period, this method usually requires that couples abstain from intercourse for at least eight days approximately at midcycle between the menses.

Series J: Family Planning Programs

Resources:

- Elements of Success in Family Planning Programming

This Population Reports issue is the flagship publication of the "Elements of Family Planning Success" initiative that identified the top 10 elements most important to the success of family planning programs in coordination with health care professionals from around the world. The report synthesizes online discussions about these elements and highlights program experiences, best practices, and evidence-based guidance derived from nearly six decades in international family planning. The lessons identified in this report can help family planning program managers, donor agency staff, policy makers, and other family planning professionals to plan new programs, improve existing programs, and prepare for future developments and challenges.
Communication for Better Health

This issue of Population Reports can help managers of family planning and reproductive health programs to: advocate inclusion of BCC in family planning programs, a crucial element that has had a low cost for each new contraceptive user; learn how to apply theories of behavior to help choose the most appropriate BCC strategies and messages; learn the key factors contributing to effective BCC programs; oversee the steps in planning, carrying out, and monitoring and evaluating a BCC program; make sure that monitoring and evaluation collect information that helps guide the program; compare and assess different approaches to developing capacity for BCC programming and to scaling up BCC activities.

• Developing a Continuing-Client Strategy: How to meeting clients' changing family planning needs

Family planning programs conventionally have paid primary attention to attracting new clients. Yet, each new family planning user is also a potential continuing client. As more and more people use family planning, continuing clients outnumber new clients by a widening margin. A family planning program that focuses on clients not only when they first choose a contraceptive method but also throughout their reproductive lives can offer better care than one that focuses on new clients alone. People's family planning needs last for a reproductive lifetime, and often change as their life stage changes (11). Adopting a life-stage perspective can help programs identify clients' continuing family planning needs and thus provide information and services as their needs change. This perspective can form the basis for a continuing-client program strategy.

• When Contraceptives Change Monthly Bleeding: How family planning providers and programs can help clients choose and use suitable methods

Monthly bleeding changes are common with hormonal family planning methods and IUDs. They are rarely harmful, and they do not signify underlying or impending illness. These family planning methods also are the most effective reversible methods, and many women choose them for their effectiveness. Nonetheless, many women are concerned when a contraceptive method changes monthly bleeding. In fact, bleeding changes make up women's most commonly reported method-related reason -- and sometimes the most common reason overall -- for discontinuing hormonal methods and IUDs. Addressing bleeding changes may be the most important way that family planning providers can help users of these methods.
choose and use suitable methods. This issue of Population Reports can help family planning providers inform and counsel clients about possible bleeding changes with these methods so that they can choose methods that suit them and know what to expect. Being aware of bleeding changes ahead of time helps women avoid unnecessary worry and increases women's satisfaction with their chosen method.

• **Coping with Crises: How providers can meet reproductive health need in crisis situations**

  Know what to do. The materials that guide international humanitarian relief providers—particularly the Inter-Agency Field Manual and its Minimum Initial Service Package (MISP)—can inform local providers of the reproductive health care needs of refugees. Kits of supplies that are part of the MISP can be ordered. Disaster preparedness training courses can help providers and government officials respond effectively when crises occur. Plan ahead. Make emergency preparedness plans that consider staffing, logistics, supplies, infrastructure, establishing relationships with news media, and coordination with other organizations. Plan for contingencies. Offer care immediately if a crisis occurs. Coordination is desirable but takes time, while health needs are urgent and great.

• **Performance Improvement**

  Performance Improvement (PI), a process pioneered in industry, is now helping to strengthen reproductive health organizations. PI focuses on meeting the needs of service providers and other staff members. When programs enable and inspire staff to do their best, the quality of care improves. This document discusses features and benefits of the performance improvement approach in strengthening and expanding the choices of RH organizations that seek improvement of services.

• **Family Planning Logistics: Strengthening the supply chain**

  For family planning (FP) programs, a consistent supply of contraceptives are needed. Consistent supply results from a well-managed logistics system and from adequate and reliable funding. This publication highlights the importance of FP logistics in strengthening the supply chain. In family planning programs, the term "logistics" refers to activities concerned with selecting, financing, delivering, and distributing contraceptives and other supplies. With better logistics, FP programs can make contraceptives more available, improve the quality of care, and stretch resources further—ultimately helping clients achieve their FP intentions.
better. In strengthening logistics systems, this document presents practical tips which include: focus on meeting client's needs; improving staff performance; highlighting the benefits of logistics to policy-makers; improving forecasting; and improving distribution. Also, a checklist is presented for assessing how the supply chain functions.

- Informed Choice in Family Planning: Helping people decide

The best decisions about family planning are those that people make for themselves, based on accurate information and a range of contraceptive options. People who make informed choices are better able to use family planning safely and effectively. Providers and programs have a responsibility to help people make informed family planning choices. Decisions about childbearing and contraceptive use are most likely to meet a person's needs when they reflect individual desires and values, are based on accurate, relevant information, and are medically appropriate—that is, when they are informed choices. To make informed choices, people need to know about family planning, to have access to a range of methods, and to have support for individual choice from social policies and community norms. Informed choice offers many benefits. People use family planning longer if they choose methods for themselves. Also, access to a range of methods makes it easier for people to choose a method they like and to switch methods when they want. People's ability to make informed choices invites a trusting partnership between clients and providers and encourages people to take more responsibility for their own health. Enabling clients to make informed choices is a key to good-quality family planning services.

- Why Family Planning Matters

This Population Reports issue focuses on family planning and the importance of advocacy in family planning programs. Key evidences supporting family planning programs are summarized. This article presents the importance of advocacy for the improvement of the family planning programs in developing countries. Advocacy for family planning is becoming crucial as demand for reproductive health care grows. As many as 600 million people have used contraception, and millions more would do so with better access to good-quality services. Although fertility levels are falling in much of the world, rapid population growth remains a critical issue in most developing countries. This is where advocacy is very much needed. Through advocacy, many individuals and countries will benefit especially in the area of family planning. The benefits include saving the lives of women and children; offering women more choices; and encouraging adoption of safer sexual behavior. Through effective family planning programs, population growth will also be affected. Slower population growth helps protect the environment and it aids development.
GATHER Guide to Counseling

Counseling about family planning (FP) and other reproductive health issues requires a set of specific skills designed to facilitate informed decision-making. The GATHER approach to counseling--Greet, Ask, Tell, Help, Explain, and Return--has documented effectiveness in FP programs. The more of the GATHER elements a counselor uses, the more satisfied clients are with their care and the more likely they are to use contraception. This guide provides detailed information on each of the 6 elements of the GATHER model, including key phrases, sample provider actions, and teaching exercises. A chart presents information on available FP methods--mechanism of action, advantages, disadvantages, use requirements, and follow-up. Special sections address topics such as FP for women who are breast feeding, emergency oral contraception, and counseling adolescents. Other sections offer guidelines on responding to a client's feelings, "active listening," talking about sex comfortably, and advising without being controlling. Finally, a checklist is included so counselors can rate themselves on each of the GATHER skills. An earlier version of this guide has been used around the world for the past 10 years.

Reproductive Health: New perspectives on men's participation

This Population Reports issue offers new perspectives that can help achieve the important goal of increasing the commitment of men to reproductive health (RH) and family planning (FP). These perspectives recognize the facts that 1) men often make decisions that are crucial to women's RH; 2) men are interested in FP but need targeted communication and services; 3) it is important to understand and influence the balance of power between the sexes to improve RH behavior; and 4) couples who communicate about FP/RH make better, healthier decisions. The first section of the report reviews the evolution in thinking that has resulted in new attention being paid to men and the ramifications of this change. Next, the report explains why men make a difference and presents the results of surveys revealing that many men favor FP and are concerned about RH. After considering the impact of gender relations and couple communication on RH, the report offers nine major lessons learned about ways to increase male participation by reaching male audiences with appropriate messages, using communication to promote behavior changes, and offering information and services that men want. Highlighted sections provide additional details on male participation, efforts to reduce the spread of HIV/AIDS, the urgency of addressing young men, how gender roles can harm health, the fact that couples rarely discuss contraception, ways to reach male audiences, using communication to change behavior, and meeting men's needs for information and services.
People Who Move: New reproductive health focus

People move for many different reasons, and their circumstances vary widely. Still, they are alike in three important ways: 1) Disruption: Most have left behind the support of traditional values, extended families, friends, and familiar ways of life. With limited means, they face new and uncertain situations. 2) Differences: Culture and language often set them apart from their new neighbors. Reproductive attitudes and behavior often differ as well. 3) Difficulties of access: Many are ineligible for health care benefits, unfamiliar with family planning programs, and unable to obtain information easily. An estimated 16 million people migrate each year from rural to urban areas of developing countries, excluding China, accounting for about half of recent urban growth. In addition, about 2 to 4 million people migrate internationally each year. Another 18 million people--over five times the number 20 years ago--have fled their own countries, as refugees. Also, about 20 million people are internally displaced. They have fled their communities and sought safety elsewhere within their own countries.

Meeting Unmet Need: New strategies

This issue of "Population Reports" explores the concept of "unmet need" for family planning (FP) and presents new strategies FP programs can use to meet this need. To focus on unmet need, FP programs solicit the statements of women through surveys, identify the groups most likely to be interested in accepting contraception, and attempt to reach these groups with services. Unmet need affects over 100 million women in developing countries (a third of them in India) and an average of 20% of all married women of reproductive age in the developing world. Strategies to address unmet need should 1) maximize access to good quality services, 2) emphasize communication, 3) focus on men as well as women, and 4) collaborate with other services for new mothers and young children. This report opens with an introductory summary and then focuses on the relationship of unmet need and FP programs through a consideration of the concept and measurement of unmet need, the extent of unmet need, trends in unmet need, abortion as an indicator of unmet need, and unmet need versus demand for contraception. The second major section addresses the reasons for unmet need (which include health concerns and side effects, lack of information, family and community opposition, a perception that there is little risk of pregnancy, and apparent ambivalence). The third section considers who has unmet need and discusses unmet need levels by women’s characteristics as well as differences among women with unmet need. The next section details the program implications and strategies mentioned above. Finally, a process to address unmet need is presented that depends upon analysis, strategic design, implementation, and monitoring/evaluation. Among the highlighted information is a checklist of possible programmatic steps to address the most common reasons for unmet need.
Family Planning Methods: New guidance

Presented in this report are the recommendations of two expert groups, the Technical Guidance/Competence Working Group of the US Agency for International Development’s Maximizing Access and Quality Initiative and the World Health Organization’s Family Planning and Population Unit, regarding currently available family planning methods. The former group addressed key biomedical questions and formulated recommendations about 11 groups of family planning methods: combined oral contraceptives, progestin-only pills during breast feeding, progestin-only injectables, combined injectable contraceptives, Norplant implants, copper-bearing IUDs, tubal occlusion, vasectomy, lactational amenorrhea method, natural family planning, and barrier methods. A table presents the relative importance, by method, of procedures such as pelvic exam, blood pressure reading, breast exam, and screening for sexually transmitted diseases and cervical cancer. The medical eligibility recommendations for each method are also presented in tabular form, with four categories for temporary methods: 1) no restrictions on use, 2) advantages generally outweigh theoretical or proven risks, 3) theoretical or proven risks usually outweigh the advantages, and 4) unacceptable health risks. Included among the 41 conditions for which eligibility criteria are specified are age, smoking, thromboembolic disorder, headaches, irregular vaginal bleeding, family history of breast cancer, obesity, drug interactions, parity, breast feeding, postpartum, and postabortion. The new guidance presented in this report enables providers to give family planning clients expanded contraceptive choices while ensuring method safety and effectiveness.

Helping the New Media Cover Family Planning

To make informed choices about family planning (FP), women and men need accurate information in the media as well as in the clinic. In turn, the media are looking for news important to the millions of people they reach each day. This issue of Population Reports includes several articles that instruct and encourage FP programs to help the news media cover FP fully and accurately. Topics include how to build a strategic news media relations program, how to tell a FP story, how to develop materials that attract and keep the attention of journalists, and how to deal with controversy. There are also tips on how to write feature stories and news releases and how to give a successful interview. The document also stresses the importance of matching the message to the needs of the particular medium. Several examples of FP media stories and a bibliography are also provided.

Reaching Young Adults Through Entertainment

Many young people learn about love, romance, and sex through popular mass media
entertainment, but the behavior that is promoted through most mass media leads to serious health risks. Efforts are underway throughout the world to use this means of reaching a youthful audience to provide examples which young people can follow to adopt healthful behavior. The "enter-educate" approach used for health messages is popular, persuasive, practical, and profitable and has been proven effective. Examples of communication materials designed to promote healthy behavior in young people can be obtained from the 25,000 item collection in the Media/Materials Clearinghouse at the Johns Hopkins School of Public Health, Center for Communication Programs. To request a free copy of any item to be used for educational purposes by health care professionals in developing countries, state the desired medium, intended audience, specific subject, and language. The service can also provide a bibliography, a periodic newsletter reporting recent acquisitions, and a series of 17 packets of sample materials and materials development guidelines. Inquiries should be addressed to: Manager, Media/Materials Clearinghouse, Johns Hopkins School of Public Health, Center for Communication Programs, 111 Market Place, Suite 310, Baltimore, Maryland 21202-4012, USA; fax 410-659-6266; e-mail mmc@jhu.edu.

Female Genital Mutilation: A reproductive health concern

The practice of female genital mutilation (FGM) is thought to be 2000 years old and continues today in many areas of Africa, the Mid-East, and Asia. An estimated 100-132 million women have undergone the procedure, and 2 million more are subjected to it each year during infancy, childhood, or adolescence. The World Health Organization has defined four categories of FGM. Type 1 entails removal of the prepuce and, sometimes, all or part of the clitoris. In type 2, the clitoris is removed along with all or part of the labia minora. Type 3 (infibulation) involves removal of the clitoris, some or all of the labia minora, and the sealing of the labia majora with only a small opening remaining for the flow of urine and blood. Type 4 is a general category that includes other operations on the external genitalia as well as procedures done to the vagina. The FGM procedure itself can lead to shock, death, and infection. Long-term physical effects of infibulation include difficulty in urinating, in having sexual intercourse, and in delivering a baby. The psychological and psychosexual consequences of FGM remain to be identified. FGM is still practiced because it affords status to women in certain cultures. Efforts to eradicate the practice have been made by international agencies, governments, and grassroots community advocates. Public education as well as legislative action are important tactics as are working to educate health care providers and providing alternatives to FGM as well as alternative employment opportunities to FGM practitioners. In Western countries, anti-FGM efforts are centered on women in immigrant and refugee communities. Research efforts are underway in order to provide an understanding of FGM that will allow the design of effective eradication strategies. Community input will be vital in designing and conducting such campaigns.

Family Planning Lessons and Challenges: Making
programs work

Information gathered from a new survey and from a review of family planning (FP) research and program findings has revealed ten keys to FP program success. 1) Programs succeed because they are fulfilling personal needs (most people want to plan their families). 2) Success is tied to maximizing access by overcoming geographic, social, economic, informational, psychological, and administrative barriers. 3) Successful programs offer a choice of contraceptive methods. 4) Success increases as quality of care increases in a climate of respect for the client. 5) Communication campaigns (both media and interpersonal) are used by successful programs to increase awareness of options and help people make informed choices. 6) Motivated, well-trained providers deliver services better and, thus, improve quality of care and client satisfaction. 7) The leadership of successful programs is strong and stable and provides strategic management, defines goals, attracts resources, builds support, overcomes obstacles, and adapts to change. 8) Performance analysis improves programs. 9) Political commitment gives FP programs high priority, assures adequate resources, and confirms that FP is the norm. 10) Well-funded FP programs accomplish more and accomplish it better; the level of funding determines the extent of coverage, the number of service delivery approaches, and the number of methods available. The challenges which FP programs must meet and opportunities they must take are 1) providing for unmet need as more people want FP and the reproductive age population grows larger, 2) providing youth with new services delivered with new attitudes through new policies and approaches, 3) offering broader reproductive health services, and 4) finding adequate funding.

Paying for Family Planning

This report discusses the challenges and costs involved in meeting the future needs for family planning in developing countries. Estimates of current expenditures for family planning go as high as $4.5 billion. According to a UNFPA report, developing country governments contribute 75% of the payments for family planning, with donor agencies contributing 15%, and users paying for 10%. Although current expenditures cover the needs of about 315 million couples of reproductive age in developing countries, this number of couples accounts for only 44% of all married women of reproductive age. Meeting all current contraceptive needs would require an additional $1 to $1.4 billion. By the year 2000, as many as 600 million couples could require family planning, costing as much as $11 billion a year. While the brunt of the responsibility for covering these costs will remain in the hand of governments and donor agencies (governments spend only 0.4% of their total budget on family planning and only 1% of all development assistance goes towards family planning), a wide array of approaches can be utilized to help meet costs. The report provides detailed discussions on the following approaches: 1) retail sales and fee-for-services providers, which involves an expanded role for the commercial sector and an increased emphasis on marketing; 2) 3rd-party coverage, which means paying for family planning service through social security
institutions, insurance plans, etc.; 3) public-private collaboration (social marketing, employment-based services, etc.); 4) cost recovery, such as instituting fees in public and private nonprofit family planning clinics; and 5) improvements in efficiency.

- **Lights! Camera! Action! Promoting Family Planning with TV, Video, and Film**

The use of television, videotape, and film entertainment to promote family planning messages or services has proven to be an effective, efficient approach in developing countries. For example, a televised vasectomy promotion spot in Brazil increased the number of vasectomies performed at the featured clinics by 80%. 240,000 women in Turkey are estimated to have adopted or switched to modern methods of contraception as a result of humorous spots, dramas, motivational, and documentary programs on television. Over 150,000 Filipino youths have called a sexual responsibility hotline promoted in television videos featuring musical stars. Research has found that mass media is most likely to change behavior when it is targeted at a specific audience, comes from a credible source, provides a personally relevant and engaging message, and is coordinated with locally available services. As with any type of communication campaign, use of the mass media requires careful planning, audience research, message development, pretesting, dissemination strategy, evaluation, and coordination with existing services. Linking mass media approaches with interpersonal communication can have a multiplicative effect on family planning acceptance, as can use of a combination of print and broadcast media. The case studies included in this document--from Latin America and the Caribbean, Asia, Near Asia and North Africa, and Africa--document the value of the emerging enter-educate concept. In past decades, the focus of family planning communication programs has been on creating awareness and generating approval. The task for the 1990s is to make family planning a household word, a community norm, and an informed individual choice--all of which can be achieved through greater use of television, video, and film.

- **Counseling Makes a Difference**

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**Radio-- Spreading the word on family planning**

Radio reaches almost everybody. Worldwide, there are an estimated 1600 million radio receivers--1 for every 3 people--and nearly 32,000 radio stations. Thus radio has great potential to being family planning and related health messages to the world's people. A number of new projects are putting radio to work for family planning. In Latin America songs by 2 popular young artists, Tatiana and Johnny, encourage sexual responsibility among young people. In Jamaica Naseberry Street, a soap opera set in a family planning clinic, attracts a large and loyal audience. In Costa Rica Dialogo, a long-running, popular show uses interviews, dramatizations, panel discussions, and listeners' letters to discuss family planning and family relationships. Family planning broadcasts are having an impact. For example, they have increased inquiries to youth guidance centers in Latin America, lengthened contraceptive use in Honduras, increased clinic attendance in Nigeria, improved attitudes toward condoms in Columbia, and brought clients to private sector services in Hong Kong and Egypt. Producing persuasive family planning materials for radio requires good quality in both content and presentation. Mass media communication is a process consisting of initial research and analysis, design, message development, pre-testing, implementation, and evaluation. Audience research and constant feedback are essential throughout. Family planning organizations can develop useful radio projects with big or small budgets. Communication efforts that use multiple media reach the most people and best reinforce the message. The role of radio, together with press, television, billboards, print materials, and personal communication, depends on goals, costs, access to broadcasting, and how well radio reaches intended audiences. But radio is always an attractive medium because almost everyone listens to radio; radio has an attention-getting immediacy that makes it convincing; and radio programing is flexible. If family planning communicators learn how to use radio better, radio can play a bigger role in child spacing, and child survival.

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**Men-- New focus for family planning programs**
Family planning programs are beginning to recognize that men, too, are vital and interested participants in family planning. With mass media promotion tailored to this new audience, these programs are reaching men with messages and methods that encourage them to support family planning actively. It is often assumed that men have little interest in responsible parenthood. The few surveys available report otherwise. They suggest that many men favor family planning. Even in Africa--once considered the stronghold of male opposition--recent surveys in Burkina Faso, Nigeria, Kenya, and Sudan find that a substantial majority of men approve. Worldwide, at least 1/3 of all couples who practice family planning use a method that requires male participation or cooperation. Condoms are used by an estimated 46 million men with wives of reproductive age. Vasectomy--voluntary male sterilization--is a permanent method used by some 41 million men. Withdrawal is used by an estimated 35 million couples. Pregnancy rates are often high, but the method is always available. Periodic abstinence can be effective if a woman can monitor signs of the fertile period and if she and her husband cooperate in abstaining from sex when indicated. Increasingly, family planning programs are trying to reach men--to offer male-oriented methods and to stimulate men to take more responsibility for family planning. For condoms, commercial sales remain the largest source, and sales may be increasing. Social marketing programs also sell contraceptives through retailers, but support from government or donor agencies permits lower prices. At first, vasectomies were primarily performed by government programs in Asia; now in Latin America small private programs are revealing a demand for vasectomy. With the encouragement of a growing number of family planning programs around the world, men are showing a new concern over family size and child spacing. They also are recognizing the benefits that they as well as their wives and children can derive from family planning.

Operations research: lessons for policy and programs.

Operations research has become a major tool that family planning and related health programs use to improve service delivery. To date, operations research has focused on community-based distribution of family planning and other selected primary health services and the cost-effectiveness of different approaches. Some important findings from operations research are: 1) a variety of people, selected from the community and trained briefly but intensively, can distribute contraceptives in effective, efficient, and acceptable ways to increase use, especially in rural areas; 2) community-based distribution of oral contraceptives is safe and creates no additional hazards to women's health; 3) specially trained nurse-midwives and auxiliary nurse-midwives can insert IUDs as safely as physicians can; 4) adding new contraceptive methods to a family planning program can increase contraceptive use; 5) satisfied users can work with program personnel to stimulate increased use of family planning; 6) training is an important determinant of community workers' knowledge; 7) it is not always necessary to offer basic health services along with family planning to increase contraceptive use; 8) charging a small fee for services or supplies does not necessarily decrease their use; 9) phasing in a small number of new services over time is a feasible way to implement an integrated community-based program; and 10) adding health measures to a
family planning program makes the family planning services less cost-effective but may add to health benefits.

- **Contraceptive Social Marketing: Lessons from experience**

Contraceptive social marketing (CSM) programs use commercial marketing techniques, mass media, and existing commercial networks to distribute, promote, and sell products. These programs now sell condoms, pills, and other contraceptives at subsidized prices, through retail stores, in 13 countries. A well-managed, publicized, and adapted program can usually reach 5-15% of all reproductive age couples; but programs in Bangladesh, Colombia, and Egypt reach 30% of current family planning users. The other major CSM programs, having sold products for 6-16 years, are in India, Sri Lanka, Jamaica, Thailand, El Salvador, Nepal, and Mexico. Programs were begun in the 1970s in Ghana, Indonesia, Kenya, and Tunisia, but did not continue. The Caribbean (Barbados, St. Vincent, and St. Lucia), Honduras, and Guatemala began sales in 1984-1985; new programs are about to begin in Costa Rica, Nigeria, and Peru, and are planned for the Dominican Republic, Ghana, India, Indonesia, Kenya, Mexico, Pakistan, and Panama. This article examines CSM program achievements by looking at such program elements as: 1) potential customers, 2) products, 3) prices, 4) market research, 5) distribution, and 6) promotion, and by discussing program management in terms of its 2 goals, 1) making contraceptives more widely available, and 2) recovering some program costs. The author emphasizes the lessons that have been learned about each program element and provides many examples of program successes and failures. A discussion of the marketing of oral rehydration therapy (ORT) demonstrates how social marketing techniques may be used to sell other products. The article provides cost analysis for programs in Sri Lanka, Bangladesh, and Egypt, as well as ranking the 10 programs in terms of 1) sales, 2) couple years of protection (CYP), 3) coverage estimates, and 4) cost per CYP. A discussion follows of the most successful programs.

- **The Impact of Family Planning Programs on Fertility**

Family planning programs, first undertaken nationally in the 1960s, have lowered fertility even when other factors such as lower death rates have worked to increase population growth. Socioeconomic conditions, such as higher literacy and greater urbanization, also influence fertility directly by increasing personal motivation to have smaller families. A dozen major cross-national studies have compared the effects of family planning programs and socioeconomic indicators on fertility; the most recent, by Mauldin and Lapham, analyzes fertility declines in nearly 100 developing countries from 1965-1980. The findings show that strong national family planning programs lower fertility independently of socioeconomic setting. The impact is greater, though, when socioeconomic variables are favorable. Researchers use 8 techniques to assess the family planning program's role in fertility decline: standardization or decomposition, trend analysis, standard couple-years of protection,
After contraception: dispelling rumors about later childbearing

Clearly, modern methods of reversible contraception -- oral contraceptives (OCs), injectables, condoms, spermicides, and IUDs -- are reversible. Despite rumors of infertility or birth defects, recent large studies provide evidence that couples become fertile again and have healthy children after using modern family planning methods. More than 20 years of research with thousands of women have shown that hormonal contraceptives -- OCs and injectables such as Depo-Provera -- do not cause permanent infertility. There may be a delay of 1-3 months before regular ovulation resumes, yet most women who have used OCs conceive rapidly after this slight delay, at about the same rates as women not contracepting. Injectables are designed to be long-acting contraceptive methods, but eventually the contraceptive effect disappears. Inert or copper IUDs do not stop ovulation, and most women conceive soon after the IUD is removed. IUDs may increase the risk of developing pelvic inflammatory disease (PID), and this can impair fertility. Compared with women using no contraception, IUD users are 1.5-2 times more likely to develop PID. Even an apparently mild or unnoticed episode of PID can damage the fallopian tubes and cause infertility. Women who choose IUDs need to be informed of the symptoms of PID and where to find medical attention quickly. Some contraceptive methods actually protect future fertility. Barrier methods -- condoms, spermiciddes, diaphragms, and cervical caps -- reduce the risk of contracting sexually transmitted diseases (STDs) and PID because they block the passage of microorganisms into the cervix and fallopian tubes. OCs may protect against some types of PID, primarily by thickening cervical mucus so that fewer microorganisms enter the cervix. Large epidemiologic studies have disproved fears that contraception could harm pregnancies or cause birth defects. Prospective studies among women using OCs or depo medroxyprogesterone acetate (DMPA) suggest that children conceived during or after use of these contraceptives are at no greater risk of birth defects, low birth weight, spontaneous reproduct
abortion, or prematurity than children off women who had not been using contraceptives. Women who become pregnant after an IUD is removed face no greater risks of complications than women who have never used contraception. A pregnancy with an IUD still in place is more likely to end in spontaneous 1st or 2nd trimester abortion. The most common causes of infertility are STDs in men and women, infections after childbirth or surgery that damage reproductive organs, varicocele, hormonal disorders, increasing age of the woman, and reduced frequency of intercourse. A great need exists for effective communication campaigns that inform people about contraceptives and change negative attitudes about family planning. Specific strategies are outlined.

**Healthier Mothers and Children Through Family Planning**

Because family planning meets individual and community needs, it can be effectively incorporated into primary health care programs. Most, if not all, methods of contraceptives can be supplied by nonphysicians, including nurses, paramedics, and trained lay workers. Family planning can effectively reduce high maternal and infant mortality rates. When compared with other drugs and surgical procedures and when compared with childbearing, family planning methods are safe and free from substantial risk of major complications. However, numerous problems, including logistic and economic ones, must be considered in running an effective family planning program. Primary health care includes education, promotion of food supply and proper nutrition, an adequate supply of safe water, basic sanitation, maternal and child care, immunization, prevention and control of locally endemic diseases, and provision of essential drugs. Given limited resources, health services must be based on importance of a given health problem, effectiveness of a given solution, safety of a drug or treatment in the hands of health workers and users, ease of delivery of services, and cost effectiveness. Supplies for family planning need to be available on a regular basis and in sufficient quantity. Their durability must be taken into account. The cost of family planning can be calculated both in terms of relative cost and absolute cost. Relative cost compares the costs of different health care measures within the same primary health care project. Absolute costs are often expressed as cost/year of protection against pregnancy/couple.

**Sources of Population and Family Planning Assistance**

This document assesses the current status of population and family planning assistance throughout the world and provides brief sketches of the available sources including national governments, intergovernmental agencies such as the UNFPA and other UN entities, and nongovernmental funding, technical assistance, or funding and technical assistance organizations. The descriptions of aid-granting organizations describe their purposes, sources of funding, and activities, and give addresses where further information may be sought. At present about $100 million of the US $1 billion spent for family planning in developing countries each year comes from individuals paying for their own supplies and
services, over $400 million is spent by national governments on their own programs, and about $450 million comes from developed country governments and private agencies. Over half of external assistance appears to be channeled through international agencies, and only a few countries provide a substantial proportion of aid bilaterally. In the past decade several governments, particularly in Asia, significantly increased the share of program costs they assumed themselves, and the most populous developing countries, China, India, and Indonesia, now contribute most of the funding for their own programs. Although at least 130 countries have provided population aid at some time, most is given by 12 industrialized countries. The US Agency for International Development (USAID) is the largest single donor, but the US share of population assistance has declined to 50% of all assistance in 1981 from 60% in the early 1970s. Governments of Communist bloc countries have made only small contributions to international population assistance. Most governmental assistance is in cash grant form, but loans, grants in kind, and technical assistance are also provided. Private organizations give assistance primarily to other private organizations in developing countries, and have been major innovators in research, training and service delivery. Loan assistance is provided by the World Bank for combined health, nutrition, and population projects as well as population education. Although international population assistance from donor governments and private organizations increased from about $165 million in 1971 to about $445 million in 1980, the increase in constant value was only about 10% after inflation. About 2/3 of international assistance goes to family planning services and contraceptives; other activities receiving support are basic data collection, research, and IEC. Greatly increased expenditures will be needed if population stability is to be achieved.

Population and Birth Planning in the People's Republic of China

Focus is on the following areas in this examination of population and birth planning in the People's Republic of China: organization of the birth planning program (decentralized policy implementation and the health care delivery system); the 3rd birth planning campaign (reproductive norms and numerical targets and the use of persuasion and education); contraceptive methods and their use (IUDs, sterilization, steroidal contraceptives, condoms, abortion, and new male methods); birth planning program results (quality of the data, birth planning statistics, the late marriage rate, and the variation in results); the 1 child campaign (the 1 child policy, changing contraceptive use, incentives, penalties, results of and problems with the 1 child campaign); current policies (changes in age at marriage and the full responsibility system); demographic projections; and program implications (information and persuasion, accessibility, and shared responsibilities. The People's Republic of China, with a population of about 1 billion in 1981, is the 1st country in the world to undertake a deliberate and comprehensive policy to reach zero population growth by the year 2000 or as soon as possible. The policy stresses late marriage, universal use of contraception, and the 1 child family. With this policy, China has reduced its birthrate from 34/1000 in 1970 to 18/1000 in 1979. By 1980, as a result of the recent campaign for 1 child families, an estimated 51% of all births in China were 1st births. By 1981 over 1/2 of all couples with 1 child had pledged not to
The primary features of the Chinese birth planning program are: strong commitment by national leadership; a highly organized social structure with strong political control, in which leaders at all levels are held responsible for birth planning activities, and families are rewarded or punished depending on their compliance with reproductive norms; continuing information, education, and motivation campaigns; and the wide availability of a variety of fertility control methods. Much of the success of the birth planning program is attributed to the country’s administrative and political structure and the fact that birth planning is an integral part of the structure.

**Films for Family Planning Programs**

This Population Report examines films which may be used as a component of family planning programs. Films are categorized as general, informational, instructional, and motivational and have certain advantages over written or spoken material. Films have the capacity to be entertaining and can increase knowledge by teaching facts to people at various levels; they are also useful in trying to alter attitudes or behaviors. For example, a motivational family planning film could inspire some viewers to accept contraception. Films have been used to introduce the concept of family planning before organized programs have begun, can bring various population problems to the attention of policymakers, and can demonstrate new procedures on health care personnel. As with any media, films do have certain limitations and their cost is often a barrier to use in a family planning program. Films must be appropriately selected and utilized in order to derive the most benefit from them; especially important is to recognize that different audiences require different levels of language, language complexity, and message. It is important that program staff preview the film and in order to assure that a film has the intended impact, it should be preceded by an introduction and followed by discussion. National distribution networks, television, schools, and theaters can be involved in the distribution of family planning films. Process, impact, and outcome are 3 levels of evaluation for this type of film. A catalogue of films is presented in this report and each entry presents 11 items describing the film: title, producer, distributor, language, audience, setting, format, length, date, price, and commentary. Also included are a list of producers and distributors and a list of holdings of selected family planning organizations.

**Breast-feeding, Fertility, and Family Planning**

Studies show that breastfeeding is ideal for infant nutrition and is an important means of spacing births. Breast milk provides some immunological protection to the infant, protects against infection and malnutrition, satisfies the infant's nutritional needs, and costs less than other feeding substitutes. Breastfeeding also protects against pregnancy, although the length of the contraceptive effect cannot be predicted. Analysis of breastfeeding trends and patterns shows that although most women in developing countries initially breastfeed their children, the length of breastfeeding is declining, especially in urban areas. The practice of
breastfeeding in contrast appears to be increasing in some developed countries after several decades of decline. Breastfeeding trends and patterns may be influenced by the following sociodemographic factors: 1) urban-rural residence, 2) parental education and socioeconomic status, 3) mother's age and parity, 4) support from family and friends, 5) mother's employment, and 6) contraceptive use. Biological scientists and demographers are unanimous in concluding that although breastfeeding substantially contributes to birth spacing and fertility control in many areas, it is an unreliable means of contraception. Breastfeeding women are therefore advised to seek alternative means of contraception to avoid pregnancy. The effects of hormonal contraception on breastfeeding have not been established but the following points can be made: 1) combined estrogen-progestin oral pills decrease milk volume in some cases, 2) progestin-only contraception does not affect milk volume or increase it, 3) small doses of hormones used for contraception do not appear to prevent initiation of lactation, and 4) minute amounts of hormones are transmitted to the infant in breast milk and although no serious effects have been observed, the long-term effects are unknown. Determining the appropriate contraception during breastfeeding requires consideration of the woman’s personal preference, availability and convenience of various methods, impact on fertility of starting different methods at different times after delivery, and possible effects on lactation. Implications for family planning programs and research needs are also discussed.

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Traditional Midwives and Family Planning

Between 60-80% of deliveries in the developing world are attended by traditional midwives, usually nonliterate, older women who learned their skills through apprenticeship and experience rather than formal education and training. Even where countries have tried to replace them with young, literate, trained health personnel, traditional midwives continue to practice and their services to be demanded. Midwives can and do learn new concepts if they are presented in an appropriate way, and some will encourage family planning practice. They are rarely active recruiters outside their own clientele and cannot act as principle agents of change in a national program. However, as attitudes change, midwives can distribute family planning supplies, especially to women not reached by other services. The first attempts to involve midwives in family planning failed in India, Pakistan, and Bangladesh. Program participants received little supervision; midwives' social status was not high in those areas. 8 factors are identified as determining the success of a midwife program: 1) government and/or health system support; 2) community support; 3) family planning role and contraceptive methods; 4) selection of traditional midwives; 5) training; 6) supervision; 7) remuneration; and 8) evaluation.

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Social Marketing: Does it work?

The goal of social marketing projects is the development of a mass market for contraceptives
sold at the lowest feasible prices. Experiences of more than 30 social marketing programs in 27 countries show that social marketing projects, a hybrid of health oriented-social action-commercial marketing programs, do work. At least 50% of a dozen projects with 3 or more years experience were able to improve contraceptive availability and sales of contraceptive products. In addition, they were able to spread family planning knowledge, stimulate wider contraceptive use, and provide a substantial measure of protection against unwanted pregnancy at a cost below that of most other programs. The key elements of social marketing programs are: 1) management and operating procedures; 2) products to be marketed; 3) target population; 4) packaging; 5) pricing; 6) sales outlets; 7) distribution system; and 8) promotion. Social marketing is not cheap, easy or unobtrusive. Some projects have failed because of lack of funds, strong indigenous support or governmental support in the face of public criticism. Still others have failed due to poor management, lack of clear decision-making authority, or bureaucratic reluctance to support a vigorous advertising campaign. Nevertheless, social marketing projects are useful and cost-effective adjuncts to other family planning programs.

Community-based and Commercial Contraceptive Distribution: An inventory and appraisal

Nonclinical delivery systems have been developed primarily because of the need to provide greater access to a majority of the people, particularly in rural areas and urban poor neighborhoods. Poor distribution of appropriately trained health personnel and physical limitations have prevented the clinic-based system to expand. Nonclinical delivery systems are designed to minimize service delivery costs and such barriers to clients as distance, costs to clients, administrative difficulties, and ignorance of contraception. Personnel with limited family planning training have been utilized, and community involvement has been increasingly encouraged. The belief that there is an unmet need for family planning services, and that if services were made available in these areas they would be used, underlies the development of nonclinical services. This report provides an overview on community-based and commercial distribution projects--describing projects, the services they provide, their evaluation design, and their results, in 36 countries in Asia, Latin America, and Africa. It also discusses the intermediate effectiveness (volume of contraceptives distributed, number of acceptors, continuation, and prevalence), the impact on fertility decline, the cost effectiveness, and the replicability of such efforts. A case study of the Indonesian experience is offered.

Filling Family Planning Gaps

For more than half the world's couples the fundamental decision whether or when to have a child is seldom a real decision at all. Despite the progress of the last decade, few of these 600 million men and women have adequate information about the health implications of ill-
timed childbearing; few receive feedback on the impact of their fertility decisions on their community; and few have access to modern family planning methods. To narrow these family planning gaps, many governments have begun to expand family planning programs, extending services at the community level and using peer pressure to promote the acceptance of contraception and of small families. It is true that more couples are effectively planning their family size than ever before. In the first half of this decade, the use of oral contraceptives, intrauterine devices (IUDs), and both male and female sterilization—the three most effective means of preventing unwanted pregnancies rose markedly in both rich and poor countries. Yet, despite dramatic progress, a majority of couples still do not use these methods. Primitive contraceptive practices and old prejudices against contraception remain, Archaic laws make contraceptives and safe abortion difficult to obtain. Family planning’s disenfranchised minorities—the poor, the young, and the rural—still cannot time their childbearing effectively.

- **World Population Trends: Signs of hope, signs of stress**

    During the 1970s some changes have occurred in the area of population policies and trends. There has been both progress and failure. The growth in world population has begun to slow in both developed and developing nations. The apparent decline in the birthrate of China between 1970-1975 is the most rapid of any country on record and may be regarded as family planning’s greatest success story. It reveals what a government committed to reducing fertility can accomplish when it deals with the problem on several fronts simultaneously. Another hopeful sign is the decline by 1/3 in the U.S. population growth rate between 1970-1975. Although most of the slowdown in the global population growth stems from declining birthrates, in some poor countries population growth is being periodically checked by hunger-induced rises in death rates. The recent upturns in the national death rates represent a reversal of postwar trends. In some situations population growth now acts as a double-edge sword, simultaneously contributing to growth in food demand and to reduced food output. It has become clear during the 1970s that land-based food systems can give as did oceanic fisheries under intense pressure. Population growth along with the lesser effect of rising affluence has pushed food consumption ahead of production in recent years and has become a major preoccupation for the entire world. In a world without an adequate system of food reserves, increasing world food prices translate into increasing death rates among the poorest people. Crop failure in a rich country has an economic impact, but in a poor country it can also have a measurable demographic impact. Attention is specifically focused on population trends, 1970-1975; countries that are achieving or approaching stability; the tragic rise of death rates; and the population prospect.

- **A Guide to Sources of Family Planning Program Assistance**
This edition on Population Reports is intended to serve family planning administrators as a general guide to the major sources of assistance for ongoing program activities. Others seeking assistance for new programs may also find it useful. This guide also describes the major components of effective family planning services, indicates some of the sources that provide funds for each of them, and describes briefly the objectives and funding priorities of major assistance agencies.

• **Service Statistics: Aid to more effective FP program management.**

An accurate and timely service statistics system allows administrators to manage and evaluate family planning (FP) programs and plan for future needs; the final test of such an information system is whether it is useful to them in improving the program. As examples, the systems used in Indonesia, Mexico, Colombia, Brazil, and the Dominican Republic (covering both clinic- and community-based distribution of FP services) are described in some detail, including general organization and purposes, forms used, procedures for data collection and processing, types of reports generated, personnel, and cost. Among recommendations given for the design of service statistics systems are: 1) data collection should not be burdensome to clients or distributors; 2) a cross- or spot-checking system should be used to verify data; 3) statistics should be combined with data from the census and other programs for full coverage; and 4) opportunity for feedback from FP clients should be part of the system.

• **Health: The family planning factor**

Medical studies have revealed that family planning is an essential component of health strategies. Women who bear children too early or too late in life, women who bear too many children, and those who bear children too close together, put themselves and their children in danger. Reproduction-related risks would be minimized if: 1) women did not bear children before reaching the age of 18-20, 2) births were spaced at least 2 years apart, 3) no woman had more than 4 children, 4) women did not bear children after age 35, and 5) people who have completed their families minimized contraceptive related risks by choosing sterilization. If individuals would follow the safest reproductive pattern, the national birthrate and the population growth rate would drop considerably in many countries. Governments can undertake this task of educating people about the health benefits of family planning and assure that contraceptive alternatives and legal abortions are available.

• **Population family planning media communications in 25 countries**
This report presents data on six media and their use in population/family planning information campaigns: telephone, mailings, newspapers, film, radio, and television. The report is based on a selection of available materials from 25 countries. Reports of programs were included if they had explicit objectives and an action component, if they measured the effects of action against objectives.

- **World fertility patterns. Age-specific fertility rates and other demographic data for countries and regions of the world.**

This set of tables and graphs contains 4 parts: 1) A graphic presentation of age-specific fertility rates available in the 1960s and the most recent date for all countries and territories of the world having at least 20 thousand inhabitants in 1975. Empirical data assembled since 1960 from complete vital registration systems, censuses, or surveys was found for 143 (74%) of the 192 countries included. Estimates of population size and crude birth rate for 1975 are given for the 49 countries, mainly in Africa and Asia, with grossly inadequate or nonexistent data on age-specific fertility rates. 2) A table containing fertility statistics used in the chart for indicated years and total fertility rates along with data codes for the countries of the world indicating whether the data were provided by birth registration, census, or survey. 3) A listing of sources from which fertility statistics were obtained or derived for each country. 4) A table presenting the estimated population, crude birth and death rates, and rate of natural increase for every country and region of the world in 1975. Despite variations in quality of statistics, the data indicate a substantial global trend toward lower fertility, particularly in countries where organized efforts were made to lower fertility. Total fertility rates fell below replacement level in at least 13 developed countries in the early 1970s.

- **Postcoital Contraception: An appraisal**

For prevention of pregnancy after coitus, the ineffectiveness of douching is recognized because sperm can be out of reach of douches and spermicides too quickly. The nonsteroidal estrogen diethylstilbestrol (DES) has been used most often. Steroidal estrogens, e.g., ethinyl estradiol and conjugated estrogens, are also effective. Progestogens may also be effective. Hormone administration should begin as soon after coitus as possible but never later than 72 hours. Estrogens are given orally, usually for 5 consecutive days in doses of 50 mg/day. The ethinyl estradiol dose is 5 mg/day; conjugated estrogens, 20-25 mg/day; and estradiol benzoate, 30 mg/day for 5 days has been given by injection. These methods have been approved for emergency use only. Pregnancies have followed in not more than 2.4%. Some studies have reported no failures and others as low as .04%. The estrogen is thought to interfere with implantation of the blastocyst in the endometrium. A copper IUD might
prevent pregnancy if inserted within 5 days after coitus. Folk methods, of which most depend on magic, are described. Douching has been used since ancient times with wide range of agents. When diaphragms or spermicides are also used, postcoital douching should not be done within 6 or 7 hours. When postcoital estrogens fail, the resulting pregnancy is ectopic in 10% of cases as compared with .5% of normal pregnancies. A high percentage of ectopic pregnancies also follow IUD or minipill failures. There is no likelihood that DES or other estrogens administered postcoitally will lead to genital cancer in female offspring if the treatment fails. A single case of acute pulmonary edema has been reported. Nausea and vomiting may occur, and menstrual patterns may be altered. Trials have shown that the progestogens d-norgestrel and quingestanol acetate are effective postcoital contraceptives. Combined estrogens and progestogens have been used successfully as postcoital contraceptives. Postcoital insertion of a copper IUD has been tried with apparent success. Further evaluation is recommended. Postcoital methods fill an important gap in fertility control services.

- **Adolescent Fertility: Risks and consequences**

The risks and consequences of adolescent fertility are discussed. Childbirth before the age of 20 is more dangerous to the mother and infant than it is for older women. A growing proportion of all births is attributable to women under 20, menarche appears to be occurring earlier, but the age at marriage is increasing. The effect of urbanization on traditional customs and the lack of family planning services have contributed to the increase in early births. Pregnancy during adolescence poses an increased risk if maternal and infant morbidity and mortality results in an increase in cumulative fertility, and restricts the opportunity for socioeconomic advancement. Legal and social restraints often hinder an unmarried adolescent in obtaining family planning services. The attitude in developed countries, however, is changing to allow adolescents greater access to contraception and abortion services. Contraceptive methods that may be used by adolescents include periodic abstinence, coitus interruptus, oral contraceptives, vaginal diaphragms, condoms, IUDs, and postcoital methods. Recently, more and more abortions are being performed on adolescent women in most countries. Obstacles to and recommendations for sex education for adolescents are reviewed, and sources for sex education materials are listed.

- **World Fertility, 1976: An analysis of data sources and trends**

Fertility levels and trends are analyzed for all countries according to type of data available, i.e.: for countries and territories with complete birth registrations (76; 43 developed and 33 developing), for those with systems other than civil registration (37), and for those with no available national statistical data on fertility since 1970 (86). Declines in birthrates have been registered in all 3 categories, each of which represents approximately 1/3 of the world's
population. The effects of family planning programs on fertility are contrasted in 32 countries and territories with vigorous programs (Singapore, Mauritius, Taiwan, Costa Rica, Hong Kong, South Korea, Fiji, Colombia, Sri Lanka, Trinidad and Tobago, Barbados, Chile, West Malaysia, Thailand, Egypt, and Indonesia) and 16 without vigorous programs (Algeria, Bangladesh, Belize, Bolivia, Brazil, Ecuador, Ethiopia, Ivory Coast, Jordan, Kenya, Mexico, Nicaragua, Pakistan, Peru, Syria, and Uganda). The data presented indicate that of the former group, Singapore and Mauritius had declines of over 50% in TFRs between 1960 and 1973-1974; Taiwan, Costa Rica, Hong Kong, and South Korea had declines of over 40% for the same time period, while Colombia, Sri Lanka, and Trinidad and Tobago experienced drops of over 30%. Fertility silhouettes charting ASFRs by time are provided for the 32 above-mentioned countries and territories and for 105 additional ones. Also included are a world population map classifying nations by CBRs and 2 graphs detailing changes in CBRs and in the absolute number of births between 1965-1974 for approximately 100 countries and territories. The case of China is discussed in detail and varying estimates of its past and present birthrates and fertility levels compared. The demographic transition theory, believed by many to be relevant to current efforts at fertility reduction, is discussed.

- Twenty-Two Dimensions of the Population Problem

22 related aspects of the world population problem are briefly dealt with: literacy, ocean fisheries, natural recreational areas, pollution, inflation, environmental illnesses, hunger, housing, climate change, overgrazing, crowding, income, urbanization, deforestation, political conflict, minerals, health services, water, unemployment, endangered species, energy, and individual freedom. Inflation, climatic change, and ocean pollution are 3 of the most global consequences of the problem, but there are many more. The analysis suggests that population growth deserves more worldwide attention than it is now getting.

- Pregnancy Tests: The current status

Traditionally, diagnosis of pregnancy is based on missed menstrual periods, nausea, and observation of the visible signs and symptoms of pregnancy. Scientific testing supplements these, but none currently available is suitable for use in rural areas. The immunologic slide tests are easier to transport, rapid to perform, and relatively inexpensive but less capable of early diagnosis than tube tests. The soft cannula vacuum aspiration of the uterine contents cannot usually be done by the time these tests first become positive. Radioimmunoassays (RIAs) are capable of very early diagnosis of pregnancy. The basis for most pregnancy tests involves the increase of chorionic gonadotropin (HCG) produced by the placenta. It is detected in the blood or urine. HCG production begins within 48 hours after implantation and reaches a peak at 50-90 days after the 1st day of the last menstrual period. A lower level is maintained throughout pregnancy and then ceases 3-10 days after delivery. Injection of the patient's blood or urine into test animals was the beginning of bioassays. In women with
delayed menstruation, repeated doses of an estrogen-progestogen preparation during a 3-5 day period and then withdrawing the therapy will cause menstruation in nonpregnant patients but not in those who are pregnant. Because of the danger of producing fetal malformations if pregnancy is present, this test is no longer advised. Immunological tests are based on the capability of HCG to stimulate antibody production in test animals. In vitro tests can detect antibodies to HCG in the animals' blood. These antibodies are capable of neutralizing HCG in blood and urine samples from pregnant women. In addition to the tube test with red blood cells, a slide test has been devised with latex particles coated with HCG. Inhibition of agglutination suggests pregnancy. RIAs are based on the same principle as immunosassays. False-positive tests are rare. False-negative tests are more common. For family planning programs, false-negative tests are more important because necessary measures would be delayed, particularly if ectopic pregnancy or threatened abortion were present. These have low HCG levels. Pregnancy tests can also be of value for identifying HCG-producing tumors, as hydatidiform mole and choriocarcinoma which produce abnormally high levels of HCG; and in monitoring the response of these tumors to chemotherapy or as follow-up after surgery to detect recurrence. Testicular malignancy in men may be detected by pregnancy tests as some of these tumors secrete HCG. Bioassays are accurate but time-consuming and expensive. Hormonal tests are unreliable and possible unsafe. Immunoassays are accurate, convenient, and inexpensive. The most convenient pregnancy test is the Pregnosticon Dri-Dot test which is a slide method.

Effects of Childbearing on Maternal Health

Factors that increase maternal health risks include high parity, short interpregnancy intervals, and pregnancy at both extremes of reproductive life. In some countries, chronic malnutrition, excessive work, infectious diseases, poor environmental conditions, and inadequate medical care are added risks. In these countries, death rates associated with childbearing are as high as 740/100,000 live births. This is almost 50 times as high as in developed countries. About 40% of women in developing countries have 4 or more children because they lack the knowledge or means to control their reproduction. About 70% of those questioned stated that they wanted to limit the size of their families. Only about 20% of rural populations have access to modern health services. Many throughout the world turn to illegal abortion. It is considered that the magnitude of maternal health problems in rural areas has been underestimated. Until women have total reproductive freedom they cannot significantly improve their status. For this reason family planning programs should permit adequate spacing between births and number of children born. The optimal childbearing years are between the ages or 20 and 30. In the U.S., the death rate from pregnancy and childbirth increases 10-12% for each year the mother is past the optimum age. The shorter the birth interval, the greater the risk of mortality for both mother and child. Also, high parity contributes to high maternal and infant mortality even in developed countries. The decline in prolonged breast-feeding and lack of availability of effective contraceptives contribute to short birth intervals. In some developing countries the death rate for women during their reproductive years is higher than for men of the same age. This increased mortality results
primarily from complications and of pregnancy and childbearing. Physiological changes in pregnant women anticipate the needs of the developing fetus. Nutritional needs are therefore increased. After delivery, the mother's body needs at least 2 years and adequate nutrition to fully recuperate. Nutritional anemia, vitamin deficiencies, and endemic goiter may follow frequent pregnancies. Protein and iron deficiencies are especially common. Inadequate diet, infections, and other diseases contribute to these conditions. Food taboos and weight-reducing regimens may add difficulties to proper nutrition. Malaria and worm infestation in some countries are added complications. Oral contraceptives, by reducing menstrual bleeding, reduce iron loss. Some also contain an iron compound. Although parity aggravates existing diabetes and may cause temporary biochemical evidence during pregnancy, more often than others develop diabetes in later years. Most studies have not related cervical cancer to parity.

Breast-feeding - Aid to infant health and fertility control

A report on breast-feeding and lactation is presented. Breast-feeding physiologically depends on the development of milk-producing tissues in the breast during pregnancy, the initiation of milk production, the maintenance of milk production, and milk ejection (let-down reflex). Prolactin and human growth hormone are of primary importance in the hormonal complex controlling the processes during lactation. If the let-down reflex fails, lactation soon ceases. Most breast-feeding problems are psychological in nature. The failure of the let-down reflex, nipple abnormalities, mastitis, and breast engorgement impede breast-feeding and milk removal. In undernourished women with inadequate nutritional stores developed during pregnancy, breast-feeding may deplete maternal tissues, with possibly serious consequences for maternal health. A nursing mother should increase her fluid, caloric, and protein intake. Maternal milk can satisfy the total nutritional needs of the infant during the first 4-6 months of life and can also help protect against polio, staphylococcus infection, and bacteria-caused diarrhea. The practice of breast-feeding is declining all over the world, especially in urban areas, and among the poor infant mortality, morbidity, and malnutrition rises. Breast-feeding reduces the chances of conception during postpartum amenorrhea. Anovulation lasts for about 7 months, on the average, in lactating women. Lactating women have a considerably longer period of postpartum amenorrhea than do nonlactating women. A definite effect of the length of lactation on the birthrate has been demonstrated. It appears that the desire not to breast-feed has as much an effect on milk quality and the duration of lactation as the estrogen content of oral contraceptives. Estrogen has only a minimal effect on milk composition. Progestogen-only contraception does not seem to have adverse effects on the quantity or quality of milk and may, in some women, increase the volume of milk and extend the duration of lactation. Thyrotropin-releasing hormone therapy, which increases milk production and acts as a contraceptive, apparently has no adverse metabolic or endocrine effects on the lactating mother or infant. The importance of breast-feeding and its implications for family planning programs should be carefully considered.
Training Nonphysicians in Family Planning Services and a Directory of Training Programs

The training and use of nonphysicians (paramedicals, auxiliary and traditional workers) in the delivery of family planning services is reviewed. Some advantages of utilizing nonphysicians include: 1) physician time is freed from routine tasks, 2) nonphysicians with specialized training may perform a particular task better than a nonspecialized physician, 3) they are widely accepted in many countries, 4) they are competent when thoroughly trained and well supervised, 5) their services can be applied in areas where physicians are scarce, 6) their services are inexpensive, and 7) they understand the customs and attitudes of the people they serve. The distribution of condoms and oral contraceptives, administration of injectable contraceptives, the fitting of diaphragms and cervical caps, insertion of intrauterine devices, performing pregnancy terminations, and the performing of sterilizations are some of the services nonphysicians are providing. It is rare to find nonphysicians performing sterilizations, though in some countries this is accepted after extensive training. In several countries nonphysicians are being trained to perform vasectomy. A directory of selected regional and international nonphysician training agencies, with details of each program, is appended.

Contraceptive Distribution: Taking supplies to villages and households

In a report on village and household distribution of contraceptives, the extension of family planning services into the daily lives of the people of developing nations is described, and the major requirements for a successful program listed. The history of contraceptive distribution from over-the-counter sales to clinic distribution and finally to the nonclinical distribution that requires less investment of medical time and skill is covered in an effort to show the changes and growth toward meeting the needs of the people. The components of a contraceptive distribution program, each of which can be adapted to suit the local situation are: personnel, training, contraceptive supplies, information and education, and evaluation. These programs are closely linked to the life of the community, geographically convenient, culturally acceptable and designed especially to suit the convenience of the user. Programs now in existence can be divided into 4 categories: 1) subsidized sales (described in Costa Rica, Antigua, India, Kenya, Sri Lanka, Pakistan, Ghana, and Indonesia); 2) distribution through churches banks and other institutions involved in the various aspects of the community (as described in the Philippines and the Allahabad Family Planning Project of India); 3) community or village distribution by residents serving as suppliers (as described in Colombia, Brazil, Thailand and Mauritius); and 4) household distribution, or provision of contraceptives door-to-door to anyone interested (as described in Taiwan, Egypt, Korea, and the Peoples Republic of China). Issues that have developed through this program along with attributes
successful programs have in common are listed. The organizations involved in the establishment and supervision of this program are listed. A bibliography of 117 related articles is included.

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**World Fertility Trends, 1974**

Evidence is emerging that fertility rates are declining in many countries, both rich and poor, on every continent. Through the technique of "fertility silhouettes," age-specific fertility rates—the number of live births per thousand women by 5-year groups from ages 14 to 59—can be charted at different points in time. Thus, one can view proportionate change in fertility at various ages and relate such changes to what is known concerning the time, strategy, and technology of family planning programs in those countries. 10 charts depict age-specific fertility rates for countries in all parts of the world. There is also a chart depicting changes in crude birth rates since 1960 and a map showing world fertility pattern in 1972. From the latest available data it is possible to contrast fertility changes during the 1960s in 12 developing countries with relatively vigorous family planning programs with 12 countries without such programs for most of this period. It is clear that a rapid fertility decrease did occur in the 12 countries with strong family planning programs. In the 12 without, fertility did not decline despite considerable economic and social improvement in a number of these countries. The data strongly suggest that over the short run, the most important factor in sharp fertility decline is the availability of effective methods of contraception distributed throughout the nation. The geographic distribution of high and low fertility is distinctive, with a band of high fertility around the Equator and with the lowest fertility areas mostly in the far northern hemisphere. In most southerly regions, areas of medium fertility appear interspersed throughout Asia and Latin America. High fertility prevails in Africa. All countries with low levels of fertility are highly developed. Yet latest fertility data suggest that many less developed countries may soon move into the lower fertility category before they become truly developed. The general movement toward fertility decrease is apparent everywhere but is most striking in East Asia.

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**Advanced Training in Fertility Management**
Training programs in Advanced Techniques for Management of Fertility (ATMF), now administered by a corporation affiliated with the John Hopkins University, are reviewed. The programs discussed are those at the Johns Hopkins University, the University of Pittsburgh, the Western Pennsylvania Hospital, Washington University, and the American University of Beirut. The programs are designed to provide physicians and medical personnel with the knowledge, skills, and techniques for the detection, diagnosis, treatment, and prevention of reproductive system disorders. Cultural and political characteristics of the participating countries are given special attention. The program also aims to support home educational programs and provide administrative support and ongoing education for graduates.

- Family Planning Programs and Fertility Patterns

The principal determinant of fertility in developing countries appears to be availability and knowledge of means for fertility control. Family planning programs have attempted to meet these demands by supplying services and supplies. This report analyzes family planning programs and fertility data for 42 developing countries. Silhouettes formed by plotting age specific fertility rates for different years show large declines in fertility during the 1960s for Hong Kong, Taiwan, Singapore, South Korea, Chile, Trinidad and Tobago, and Costa Rica. These fertility declines have been influenced by different program strategies, such as the emphasis on the IUD in Taiwan, and on the oral contraceptives in Singapore and Korea. In the developed countries the impact of oral contraceptives and abortion is evidenced by the stabilized low levels of fertility. The data illustrate that national family planning programs have helped to decrease fertility in the 1960s.

Series K: Injectables & Implants
Family planning programs around the world are introducing the new one- or two-rod implant systems Implanon®, Jadelle®, and in some countries Sino-Implant (II)®. By 2008 Norplant®, the six-capsule implant system, first introduced in mid-1980s, will no longer be available. Like Norplant, the new implants are highly effective, and like Norplant, they alter bleeding patterns. Their most important improvement over Norplant is easier and quicker insertion and removal. Sino-Implant (II) may also cost much less than other implants. The new implants are recommended for as much as three to five years of use, depending on the make. Thus they are particularly suitable for women who want to space births. Indeed, for many women implants are a convenient method. Once inserted into a woman's arm, the implants do not require any action by the user. Since implants do not contain estrogen, they do not decrease production of breast milk and thus are suitable for breastfeeding women. They are also a good choice for women who do not want more children but are not ready to opt for sterilization, which is permanent. With new implants making the method easier to provide, more programs may want to begin offering implants. Programs currently offering Norplant will need to consider how to make the transition to the newer implants and to meet possibly greater demand.
More and more women are using injectable contraceptives today, and very likely even more will use this method in the future as it becomes increasingly available. Women choose injectables because they are effective, long-lasting, and private. For family planning programs, meeting increasing demand while maintaining good quality will be the key to success with injectables. Between 1995 and 2005 the number of women worldwide using injectable contraceptives more than doubled. About 12 million married women used injectables in 1995. In 2005 over 32 million were using injectables. Injectables are the fourth most popular method worldwide, after female sterilization, the intrauterine device (IUD), and oral contraceptives. In sub-Saharan Africa, injectables are the most popular method, chosen by 38% of women using modern methods. By 2015 worldwide use is projected to reach nearly 40 million—more than triple the 1995 level. Greater access largely explains this rapid growth in use. Approval of the progestin-only injectable DMPA (depot medroxyprogesterone acetate) in the United States in 1992 removed a constraint to access and a source of controversy in many countries over providing a drug that was not approved for contraception in the United States. Also, approval in the United States enabled the U.S. Agency for International Development (USAID) to supply DMPA to developing countries. As of 2006 DMPA was registered in 179 countries, an increase from 106 countries in 1995. Several countries, including Ghana, Vietnam, and Zambia are introducing or scaling up DMPA services as part of a package of reproductive or primary health care services.

• New Era for Injectables

There are approximately 12 million current users of injectable contraceptives worldwide. Progestin-only injectables are the most widely used. The first injectables were developed soon after oral contraceptives, but limited availability constrained their use in all but a few countries, such as Indonesia and Thailand. Over the next few years, however, millions of couples throughout the world will be offered a choice of injectable contraceptives. Reassuring World Health Organization (WHO) research findings, the US approval in 1992 of the three-month DMPA injectable, and the introduction of new monthly injectables promise broader access. Whether expanding services or offering injectables for the first time, programs have a new opportunity and challenge to provide good care which responds to client need. This paper considers the user’s perspective, introducing or expanding services, research and regulatory approval, the use of injectables, method effectiveness and reversibility, side effects and complications, WHO cancer study findings, noncontraceptive health benefits, maximizing access and quality, and new injection systems to help prevent infection.

• DMPA at a Glance: Lessons learned about injectables

Maximizing access and quality of services for injectable contraceptives requires well-planned
introduction of the method, through training, balanced and extensive communication with the public, application of scientific medical guidelines for provision and use, and informative and sensitive counseling. For policy-makers: if not already done, register injectable contraceptives; ensure that injectables are offered in family planning programs; and avoid restrictions based on age and parity. There are no medical reasons to require users of injectables to have reached a certain age or to have had children or a certain number of children.

Population Reports GATHER approach to counseling about injectables: Depo-Provera and Noristerat

Injectable contraceptives are convenient, private, and very effective. This guide will help you, the family planning provider, tell your clients about the 3-month injectable called Depo-Provera (DMPA) or the 2-month injectable called Noristerat (NET EN). Counseling is a step-by-step discussion between you and the client. Counseling helps each client choose and use the family planning method that best suits that person’s needs. Good counseling involves friendly, open talk with the client to find out politely what she wants and what concerns her. The letters in the word GATHER stand for the steps in counseling a client about choosing a family planning method: G: Greet clients; A: Ask clients about themselves; T: Tell clients about available methods including injectables; H: Help clients choose a method; E: Explain how to use that method; R: Return visits should be planned.

Decisions for Norplant programs

This issue of Population Reports is dedicated to Norplant, a new contraceptive. Norplant is either widely available or its use is quickly increasing in 14 countries, especially Indonesia, Thailand, and the US. Almost 1.8 million women use Norplant. 23 countries have approved its use. Norplant consists of 6 capsules inserted subdermally in the upper arm. These
capsules slowly release levonorgestrel continuously over 5 years. The first-year pregnancy rate is .2% and the 5-year rate is 4%. Implant removal restores fertility rapidly. Women best suited for Norplant are those who want to avoid pregnancy for several years, those who want to stop childbearing but either cannot secure or do not want sterilization, those who want effective hormonal contraception but want to avoid side effects of estrogen, those who do not want to be concerned about taking a pill each day, and those who live far away from dependable supplies of contraceptives. Family planning programs that provide Norplant must be dedicated to meeting client needs. These needs are a free and informed choice among a variety of methods, mass media information, individual counseling to help clients to learn about Norplant and decide whether they should use it, convenient services, listening to clients and paying them the attention they require, and avoidance of unnecessary obstacles such as eligibility criteria. Program managers must plan for introducing Norplant into their programs. This positioning exercise includes determining what are the most significant qualities of Norplant and comparing those qualities with those of other methods and identifying the target audience (e.g., women who want long-term, reversible contraception). Program staff should not coerce any client to choose or to continue Norplant. Inserts entitled Norplant at a Glance and Guide to Norplant Counseling accompany this issue of Population Reports. Highlighted are Norplant use in Colombia, Indonesia, and Thailand.

**Norplant at a Glance**

Norplant is a set of contraceptive implants-six capsules filled with levonorgestrel, one of the hormones most widely used in birth control pills. The capsules do not contain estrogen. A specially trained health care provider places the capsules just under the skin in a woman's upper arm and later also removes them. Insertion and removal are minor surgical procedures done under local anesthetic. No stitches are needed. Various Women Might Choose Norplant: women who do not want a child for several years but may want a child later; women who do not want any more children but do not want sterilization; women who can accept changes in menstrual bleeding patterns; women who want nothing to remember daily or before sexual relations; and women who are troubled by estrogen side effects of pills.

**Hormonal Contraception: New long-acting methods**

Before the year 2000 women around the world may have up to 5 new family planning methods to choose from. All will be very effective, convenient to use, and long-acting -- from 1 month to 5 years. All use a progestin, a type of female hormone that is also used in birth control pills. Norplant implants which have already been approved in 7 countries, are placed just under the skin on the inside of a woman's arm. 6 capsules release the progestin levonorgestrel at a slow, steady rate. For 5 years they prevent nearly all pregnancies. Biodegradable implants also are placed under the skin, but they eventually dissolve and disappear. Injectable microspheres and microcapsules, suspended in a solution, are given
with a hypodermic needle. The tiny particles of different sizes, consisting of hormone in a polymer carrier, dissolve and release hormone at various rates, providing a nearly constant dose that prevents pregnancy for 1 to 6 months. Monthly injectables add an estrogen to a progestin to minimize menstrual changes. The vaginal ring is placed by the woman in her vagina, where it gradually releases hormone. When new long-acting methods become available, marketing and program development are essential. Production must be arranged; providers trained; logistics systems in place; and supplies available. The media, the health care professions, and other opinion leaders must be thoroughly briefed in advance. Couples must learn about the new methods. If these are properly introduced and made continuously available, there will soon be a much broader choice of contraceptives for women. Effective, reversible, long-acting hormonal contraception will be available for nearly every couple, whatever their plans and needs.

• Long-acting Progestins: Promise and prospects

This article reviews the development, characteristics, and use of various types of long-acting progestins, examining their effectiveness, side effects, effects on reproduction, carcinogenicity, continuation, and acceptability. Progestins, synthetic hormones that act like the natural female hormone progesterone, can be administered in at least 5 different ways to provide pregnancy protection over extended periods: injectable contraceptives, hormone-releasing IUDs, subdermal implants, vaginal rings, and once-a-month oral pills. 3 progestins, medroxyprogesterone acetate in depot form (DMPA), norethindrone enanthate (NET EN), and levonorgestrel, have proven highly effective as long-acting contraceptives. Advantages of long-acting progestins are convenience and reversibility, while menstrual disturbances are a main disadvantage. The major unresolved question involves their possible carcinogenic effects. 2 injectables, NET EN and DMPA, have been used in about 100 countries. About 2.3 million women currently use DMPA, mainly in 3-month doses of 150 mg, especially in Jamaica, Thailand, Sri Lanka, and New Zealand. About 275,000 women use NET EN. DMPA and NET EN are highly effective, have few side effects apart from menstrual disturbances, and have noncontraceptive benefits such as increasing the supply of breast milk in lactating women and reducing the risk of pelvic infection. Continuation rates of injectables are about 50-75% at 1 year. DMPA has not been approved for use in the US because of concern over studies in which beagle dogs developed breast tumors and monkeys developed endometrial cancer while receiving high doses of these progestins. The relevance of these studies has been questioned, studies in humans using injectables show no increased risk of cancer, and several expert medical panels have endorsed the use of DMPA. Ongoing large, multicenter case-control studies should provide clearer answers; preliminary indications are that DMPA involves no additional risk for cervical or breast cancer. The main advantages of progestin-releasing IUDs are reduced menstrual bleeding and pain, but the devices cost more, must be replaced every year, cause spotting, and may be associated with more ectopic pregnancies than other IUDs. Implants, silastic or other polymer-based rods or capsules inserted under the skin, are very effective and can be used for up to 7 years. Vaginal rings are still under development. Other research is focusing on
biodegradable implants, new injectables, once-a-month pill containing both estrogen and progestin, and hormonal methods for men.

- **Injectable Progestogens:** Officials debate but use increases
A report on the status of the injectable contraceptive agents, Depo-Provera (depot medroxyprogesterone acetate) and Norigest is presented. Depo-Provera is distributed in 64 countries, though it is not available in the U.S., the United Kingdom, and Japan. The drug is usually administered in single 150 mg injections every 3 months, and doses of 300-400 mg every 6 months have been studied. The contraceptive effect of Depo-Provera is primarily through its ability to inhibit ovulation. Norigest exerts its effect by altering the cervical mucus. The suppression of ovulation is most likely caused by action on the hypothalamus-pituitary axis, resulting in inhibition of the luteinizing hormone surge. Depo-Provera causes an atrophic endometrium, while Norigest has varying endometrial effects. The reported pregnancy rates for Depo-Provera are usually less than 1%, while those for Norigest are slightly higher. Most method failures occur either shortly after the 1st injection or at the end of an injection interval. Menstrual disorders have been the primary reason for discontinuation. The injectables can cause shorter or longer cycles, increased or decreased menstrual flow, and spotting. Depo-Provera users experience increased amenorrhea with continued use, while normal cycles increasingly reappear in Norigest users. Cyclic estrogen therapy has been effective in treating excessive or irregular bleeding and amenorrhea. Long-acting estrogen injections have been administered in combination with Depo-Provera or Norigest, though the studies are limited in number. Weight gain of up to 9 pounds has been reported for users of Depo-Provera. Some researchers have found that Depo-Provera raises blood glucose levels, while others have reported it does not. No adverse effects have been reported for injectables on blood clotting, adrenal or liver function, blood pressure, lactation, and metabolic or endocrine functions. The continuation rate for Depo-Provera is reportedly higher than that for oral contraceptives. Generally, 60% of the acceptors will use the method for at least 1 year. Effective counseling on the menstrual alterations resulting from injectables can increase continuation of the method. The return of fertility in Depo-Provera users usually requires 13 months from the time of the last injection, while the aferile period in Norigest users is about 6 months from the time of the last injection. Instances of fetal masculinization as a result of Depo-Provera use have not occurred. The possibility that Depo-Provera can cause cervical carcinoma in situ has not been substantiated by the evidence; doubt about this possible association has prevented its approval as a contraceptive method in the U.S. Although Depo-Provera and Norigest have caused breast nodules in laboratory animals, there is no evidence to suggest that this effect would occur in human. Despite the advantages of injectables, family planning officials have been reluctant to permit its unrestricted use, primarily because it cannot be withdrawn quickly enough if problems arise and because the actual effect on fertility is not yet known. Nonetheless, the use of Depo-Provera has increased in recent years. The IPPF and the U.N. Fund for Population Activities currently supply the drug.

Series L: Issues in World Health
With access to family planning services, supportive care, and the information needed to make good choices, women with human immunodeficiency virus (HIV), including women with acquired immune deficiency syndrome (AIDS), in many cases can lead healthy sexual and reproductive lives. Like all other women, women with HIV have the right to make their own decisions about their reproductive and sexual health. Health care programs and providers can help women with HIV and their partners make and carry out informed reproductive health decisions. Women with HIV who decide to prevent or delay pregnancy can safely use almost any family planning method. Preventing unintended pregnancies among women with HIV is an important and cost-effective way to avoid the birth of HIV-infected infants. For those who are considering having children, providers can help them weigh the risks and consider the responsibilities. For clients with HIV who want children now, providers can help them minimize the risk of transmitting the virus to their partners or to the infant.

Better Breastfeeding, Healthier Lives

Only breastmilk offers infants and young children complete nutrition, early protection against illness, and safe, healthy food--all at once. Nearly all babies are breastfed to some extent, but far less than half are breastfed in the most beneficial way. Better breastfeeding offers triple value: important improvements in child survival and health, better health for mothers, and temporary contraception. What can governments, programs, and health care providers do to support and enable women to breastfeed better?
Birth Spacing: Three to five saves lives.

Couples who space their births 3 to 5 years apart increase their children’s chances of survival, and mothers are more likely to survive, too, according to new research. Many women want to space births longer than they currently do. Programs can do more to help them achieve the birth intervals they want. Over the years research has consistently demonstrated that, when mothers space births at least 2 years apart, their children are more likely to survive and to be healthy. Many programs have recommended 2-year intervals, and the message is widely known: In surveys most women say that a birth interval of 2 years is best. Now new studies show that longer intervals are even better for infant survival and health and for maternal survival and health as well. Children born 3 to 5 years after a previous birth are about 2.5 times more likely to survive than children born before 2 years.

Youth And HIV/AIDS: Can we avoid catastrophe?

Today's young people are the AIDS generation. They have never known a world without HIV. Millions already have died. Yet the HIV/AIDS epidemic among youth remains largely invisible to adults and to young people themselves. Stopping HIV/AIDS requires comprehensive strategies that focus on youth. Of the over 60 million people who have been infected with HIV in the past 20 years, about half became infected between the ages of 15 and 24. Today, nearly 12 million young people are living with HIV/AIDS. Young women are several times more likely than young men to be infected with HIV. In nearly 20 African countries 5% or more of women ages 15 to 24 are infected. Such statistics underscore the urgent need to address HIV/AIDS among youth.

Ending Violence Against Women

This issue of Population Reports focuses on ending violence against women. It tackles primarily two types of violence: 1) abuse of women within marriage and other intimate relationships; and 2) coerced sex, whether it takes place in childhood, adolescence, or adulthood. The first part contains the editor's summary and an article entitled The World Takes Notice. Intimate partner abuse is discussed thoroughly and is supported by tables presenting various statistics on relevant issues such as help seeking by physically abused women. A framework for understanding partner violence is also presented. The article on sexual coercion deals with forced sexual initiation and sexual abuse in childhood. The impact of violence on the reproductive health of women and its threat to health and development are also discussed. The last part focuses on specific strategies in detecting, preventing, and
stopping the abuse. An agenda for change is then presented.

• **Care for Postabortion Complications: Saving women's lives**

  Each year, an estimated 585,000 women in developing countries die from complications of pregnancy, childbirth, and unsafe abortion. Virtually all of these maternal deaths are preventable. Although many countries have designed programs to prevent hemorrhage, obstructed labor, infection, and pregnancy-induced hypertension, unsafe abortion remains a neglected area. Up to 20 million unsafe abortions are performed each year, and 10-50% are associated with a need for emergency medical care for complications. At present, such care tends to be provided in a crisis atmosphere, with little attention to prevention through counseling and contraceptive provision. Outlined in this report is a postabortion strategy that ensures that women receive complete, appropriate, and prompt emergency treatment as well as family planning counseling to prevent the need for repeat abortions. Manual vacuum aspiration under local anesthesia is safer and less expensive than sharp curettage with general anesthesia—the treatment commonly used in many countries. Decentralization of emergency care, as well as establishment of a formal referral system, would ensure that each woman receives prompt, appropriate care. Health care professionals and nongovernmental organizations must disseminate information to policy-makers documenting that postabortion care saves women’s lives.

• **Special Guide: What health care providers can do about domestic violence**

  Health care providers can help solve the problem of violence against women if they learn how to ask clients about violence, become better aware of signs that can identify victims of domestic violence or sexual abuse, and help women protect themselves by developing a personal safety plan. Everyone can do something to help promote nonviolent relationships. Women’s advocates in the US have used the “power and control” framework for many years to describe how some men use violence to dominate their partners and maintain control with the relationship. The wheel at right is adapted from that framework to show how the behavior of health care providers often contributes to women's victimization.

• **Controlling Sexually Transmitted Diseases**

  Sexually transmitted diseases (STDs) can cause lifelong pain, infertility, life-threatening ectopic pregnancy, blindness in newborns, and death. In addition, HIV infections are
transmitted more easily in the presence of STDs. This report discusses the extent, diagnosis, treatment, management, and prevention of STDs. A graph shows new cases of trichomoniasis, genital chlamydia, genital papillomavirus, gonorrhea, genital herpes, syphilis, chancroid, and HIV infections worldwide in 1990. For each disease and pathogen, the first symptoms in women and men, the incubation period, the natural history, and transmissibility are tabulated. The link between STDs and AIDS is highlighted, and ways to reduce the toll of STDs are presented, including making effective services accessible, getting affected people to treatment, and encouraging people to avoid STDs. Effective management of STDs is linked to obtaining information; performing a physical examination; and diagnosing, treating, and counseling patients. Examples of successful STD programs from 1970 to 1992 in Zambia, Sweden, the US, Kenya, the Dominican Republic, and Thailand are given. The syndromic approach to diagnosis and treatment is presented, along with its important benefits (avoiding misdiagnosis, ease to use, provision of treatment in one patient visit) and disadvantages (failure to provide care for asymptomatic patients, especially women, and wasting drugs). A detachable page with diagnostic and treatment tips is provided to accompany the wall chart guide to the syndromic approach to STDs published with this report. Ways to improve care for women are centered around providing services, and enabling women to protect themselves. A general discussion of getting services to the people focuses on the structure of STD services, the provision of appropriate treatment on the part of public and private providers, and the steady supply of the appropriate drugs purchased at low prices. The advantages and drawbacks of combining family planning services with STDs services are presented along with a discussion on contraceptives and STDs. The topic of getting people to services is considered with an emphasis on communication, screening, and partner notification. A list is given of resource materials on STDs as is a description of the STD Diagnostics Initiative founded in 1990 to develop quick, inexpensive tests. Programs are described which provide outreach to high-risk populations. The report concludes with a discussion of promoting prevention through the use of condoms and the practice of monogamy.

AIDS Education: A beginning

This issue of POPULATION REPORTS is dedicated to acquired immunodeficiency syndrome (AIDS) and its prevention. Contents include 1) The Extent of the Problem, 2) How is the Virus Spread? 3) Mass Media Programs for the General Public, 4) Programs for People at High Risk, 5) Counseling, 6) Evaluation, 7) Family Planning and AIDS prevention, 8) Lessons from Family Planning Programs, and 9) a Bibliography. Some of the highlights are entitled 1) AIDS toll growing, 2) What is safer sex? 3) Programs is Switzerland, Uganda, Zaire, and Mexico profiled, 4) Mass media can make a difference, 5) Lessons learned from mass media programs, 6) Programs for people at high risk change behavior, stir controversy, 7) Condoms offer good, not perfect protection, 8) Family planning programs fight AIDS, and 9) Family planning experience can help combat AIDS.
Mothers' Lives Matter: Maternal health in the community

The 2 greatest health risks for women in their reproductive years are pregnancy and childbirth. This is especially true in developing countries, where more than half a million women die each year in pregnancy or childbirth. A concerted effort by families, communities, and health care professionals, especially maternal health care providers, can make childbearing safer. Maternal health care providers, as well as referral centers, have a responsibility to promote improvements in women's health. Referral centers can offer emergency treatment when labor or delivery complications occur at home, provide a safer place to deliver for those women likely to develop complications, and offer treatment for problems that develop during pregnancy. The role of the community in the provision of maternal health care is important. Prenatal screening, trained health care workers who could attend deliveries at home, available transportation to referral centers, family planning and education and adequate food supplies are some of the ways communities can take an active role in maternal health care. Because many women prefer traditional birth attendants (TBAs) or relatives even when trained providers are available, maternal health programs need to cooperate and integrate TBAs into the maternal health care system. Training for TBAs, as well as training for health care providers and doctors and nurse, is important for the establishment of a responsive health care system. Controversy exists about where the emphasis should lie in maternal health care. While preventive care and safer delivery is important, referral centers and transportation needs also require resource consideration. Although community-level maternal health care is not yet widespread, appropriate training, communication, and cooperation can help to achieve this goal and give priority care to maternal health.

Immunizing the World's Children

This issue of “Population Reports” is focused on immunization against childhood diseases. Such efforts save the lives of 1 million children in developing countries each year; however, over 3.5 million additional children are killed or disabled by diseases that immunization could have prevented. At present, fewer than half of 1-year-olds have been immunized against the major preventable diseases. Efforts are now underway to expand immunization services to all infants and pregnant women by 1990. The World Health Organization (WHO) Expanded Program on Immunization (EPI) targets 6 diseases: measles, pertussis, neonatal tetanus, polio, tuberculosis, and diphtheria. Immunization against these diseases is safe and effective. Experience in both developed and developing countries confirms that morbidity and mortality from these diseases decline sharply when immunization is widely available. An infant can be fully immunized for as little as US-$5-15, but may programs reach under half of the population at risk. 4 main strategies have been used to deliver immunizations services: 1) fixed facilities offering immunizations at any time or on weekly or monthly basis; 2) outreach services periodically offering immunizations at locations away from fixed facilities;
3) mobile teams traveling to areas that have no other access to immunization services; and 4) intensive activities, such as mass campaigns and national immunization days, in which large numbers of people are vaccinated in a short time. The planning of immunization delivery must take into account the vaccination schedule, the state of existing health care systems, the communication/transportation infrastructure, and the local pattern of vaccine-preventable diseases. Immunization programs should work closely with family planning programs, since both are essential to child survival and health. A major logistical problem is keeping vaccines cold to protect their potency. Recent program evaluations point to common problems, including limited surveillance of disease cases and immunization coverage, inadequate supervision, and insufficient communication efforts.

- Infertility and Sexually Transmitted Disease: A public health challenge

This review assesses the extent and causes of infertility throughout the world, particularly that caused by sexually transmitted diseases (STDs); discusses infertility therapy and prevention; and outlines the potential role of family planning programs in remedying the problem. For both sexes, infection, often caused by STDs, is the most common preventable cause of infertility. Treatment of either primary infertility (inability to have any children at all) or secondary infertility (inability to have additional children) is difficult, costly, and uncertain. Public health programs that focus on prevention are more practical and cost effective than programs attempting to treat infertility. Such programs could stress improved diagnosis and control of STDs, public education about them, expanded family planning programs emphasizing barrier methods and the pill, and improved delivery and maternal health care through training programs for traditional midwives. Infertility appears to be most widespread in tropical Africa, where over 30% of couples in some communities are childless; in some Asian countries, and in the Caribbean region. In most developing countries 2-3% of married women remain childless. The major causes of female infertility are infection and damage to the fallopian tubes, hormonal and ovulation disorders, and endometriosis. Infertility caused by after effects of genital infections is most common in developing countries and most difficult to treat. Childbirth and abortion can also be major sources of infection. STDs that cause female infertility, especially gonorrhea, chlamydial infection, and perhaps mycoplasmas, also affect males.

- Community-based Health and Family Planning

This publication examines existing community-based distribution (CBD) programs for family planning and other health care measures and discusses some principles of organization and management. CBD programs have 4 essential features: community residents who are not health professionals deliver supplies and services, services are delivered to communities or households rather than to clinics, CBD workers operate without day-to-day supervision, and
many record keeping, diagnostic, and screening procedures are omitted because they are not practical for community workers. CBD overcomes geographic, cost, bureaucratic, and cultural barriers to health care. The more than 70 existing CBD programs differ in services offered, fees charged, means of delivery, presence of research components, and in whether they are single purpose, integrated, government-sponsored, or private. In designing or expanding CBD programs, the health problems of the community, availability of effective remedies, and ease and safety of services and supplies must be considered. 6 aspects of CBD programs which are likely to be most difficult are discussed: recruiting effective workers, training workers in new skills, providing continued training and supervision, coordinating backup with the existing medical system, keeping supplies flowing, and establishing an evaluation system. Experience in integrated family planning and CBD health programs is inconclusive, but a few lessons are clear: CBD projects should avoid a service overload, new activities should be phased in step-by-step, community participation is desirable, combining family planning with other services is not necessary to make family planning acceptable although it may help meet other primary health care needs, and research on design and implementation of CBD programs is needed. Experience and problems with CBD programs for health measures in addition to family planning are described, including oral rehydration therapy for diarrhea, malaria treatment, intestinal parasite treatment, nutrition education and supplements, and immunization. A table listing characteristics of selected community-based integrated family planning and health projects is included.

• Oral Rehydration Therapy (ORT) for Childhood Diarrhea

Since about 1 of every 10 children born in developing countries dies of diarrheal complications before age 5, this report establishes rationale, composition, and production of oral rehydration therapy (ORT) for treatment of childhood diarrhea. In this context, ORT is defined as a solution of water, sugar, and mineral salts to be drunk to replace the water and salts lost via stool and urinary output during diarrheal diseases. The effect of ORT is to counteract dehydration, the most direct cause of diarrheal deaths. ORT has the advantage of low cost and easy access to ingredients, making it ideal for use in developing areas. The oral rehydration formula recommended by WHO is as follows (and is available in preweighed packets from UNICEF): sodium chloride, 3.5 gm.; sodium bicarbonate, 2.5 gm.; potassium chloride, 1.5 gm.; glucose, 20 gm.; and water, 1 liter. Another ORT formula can be concocted from sugar and salts available in most households, thus solving problems of cost and distribution. The scientific rationale for oral rehydration is firmly established and is based on the rapid loss of body fluids and the electrolytes of sodium, potassium, chloride, and potassium during diarrhea and the concomitant impairment of intestinal absorption of these salts during diarrheal disease. In addition to outlining various ORT solutions, the following topics concerning the efficacy and use of ORT are discussed: measuring and mixing of ORT solutions, early use in the home, feeding during diarrhea, use of purgatives, antibiotics, and other drugs, program organization for control of diarrheal diseases, the possibility of an integrated program of family planning and ORT, and possible external assistance available to
developing areas.

- **Tobacco: Hazards to health and human reproduction**

Twenty years of adverse publicity have begun to affect cigarette smoking habits in the United States. Between 1964-75 the percentage of males smoking declined from 52 to 39, females 34 to 52. British surveys show half of 60,000 physicians quit smoking between 1951-65. In the developing countries, however, tobacco is associated with western affluence and modernity. Consumption increases 5% annually. Tobacco is one of the foremost public health hazards. It is associated with a higher incidence of lung cancer, heart disease, emphysema, and other related lung diseases. Nicotine, which is likely the habit forming agent in cigarettes, with carbon monoxide reduces the amount of oxygen available to the heart while stimulating cardiac activity which increases the heart's need for oxygen. Known and suspected cancer promoting agents reside in cigarette tar. Smoking during pregnancy retards fetal growth and increases risks of spontaneous abortion, pregnancy complications, preterm delivery, and late fetal and newborn death. The risk of fetal death for a pregnant smoker over 30 or poor or anemic is 100% greater than for a nonsmoker. By 1974, 20 of 25 developing countries had taken some regulatory action against smoking, compared to 13 of 49 developing countries. Finland, Norway, and Sweden lead the developed countries in health oriented, antismoking policy. The tobacco industry represents 6 billion dollars to the United States government. The strength of years of research demonstrating harmful effects should outweigh commercial considerations and persuade government to reduce export subsidies, raise taxes on tar and nicotine products, educate the public, limit or prohibit advertising, prohibit smoking in public areas and work places, and setting differential insurance rates for nonsmokers.

**Series M: Special Topics**
New Findings on Contraceptives

This report on new findings in contraception research can help program managers, providers, teachers, and communicators to: update colleagues and students on recent research findings; draw attention to the new, longer "grace period" for DMPA reinjection recently recommended by WHO, and advocate clear and prominent changes in program policy and training; answer concerns about ready access to emergency contraceptive pills; adopt and use checklists that qualify more women to use IUDs; recommend LAM to women with HIV who are breastfeeding; offer a wide range of contraceptive methods to women with HIV; check whether program guidelines reflect important research findings that have long been neglected in many places.

New Contraceptive Choices

Family planning users and providers have been calling for more choices. They want contraceptive methods that provide highly effective protection and at the same time cause fewer side effects, cost less, and are easier to use. In response, researchers are improving existing contraceptives and developing new ways to deliver hormones. Offering a wide range of safe, effective, and convenient family planning methods encourages more people to use contraception. Having more choices helps ensure that users are satisfied with their family planning method. Most new methods reaching the market today result from investments made years ago. Virtually all methods undergo a long process of research and rigorous testing for safety and effectiveness and must obtain regulatory approvals before becoming available.
Men's Surveys: New findings

Family planning users and providers have been calling for more choices. They want contraceptive methods that provide highly effective protection and at the same time cause fewer side effects, cost less, and are easier to use. In response, researchers are improving existing contraceptives and developing new ways to deliver hormones. Offering a wide range of safe, effective, and convenient family planning methods encourages more people to use contraception. Having more choices helps ensure that users are satisfied with their family planning method. Most new methods reaching the market today result from investments made years ago. Virtually all methods undergo a long process of research and rigorous testing for safety and effectiveness and must obtain regulatory approvals before becoming available.

New Survey Findings: The reproductive revolution continues

Fertility fell in almost all developing countries surveyed since 1990, as use of modern contraception rose. These trends continue a long-term change in attitudes and behavior. Findings from more than 100 surveys conducted since 1990 suggest that, as family planning programs have become widespread, more and more people want smaller families, and more succeed in having the size of family that they want. Since 1990, 120 surveys of women (many also including men) have taken place in 71 countries as part of the Demographic and Health Surveys (DHS) and the Reproductive Health Surveys (RHS) programs. These surveys report on contraceptive use, child survival, and other key reproductive health topics.

Meeting the Urban Challenge

Every week urban areas gain another one million people. Within four years half of the world's population will live in urban areas. How governments and communities meet the concurrent challenges of rapid urbanization, poverty, development, and protection of the natural environment will largely determine the world's future.

Population and the Environment: The global challenge

This issue of Population Reports focuses on the impact of rapid population growth on the environment. Many developing economies currently consume resources much faster than
they can regenerate. Natural resources are under increasing pressure, threatening public health and development. Water shortages, soil exhaustion, loss of forests, air and water pollution, and degradation of coastlines afflict many areas. However, many steps toward sustainability can still be taken today. These include using energy more efficiently; managing cities better, phasing out subsidies that encourage waste; managing water resources and protecting freshwater resources; harvesting forest products; managing coastal zones and ocean fisheries; protecting biodiversity hot spots; and adopting an international convention on climate change.

**Solutions for a Water-Short World**

The freshwater shortage is emerging as one of the most critical global natural resource issues. At present, 31 countries face chronic freshwater shortages and this figure is expected to rise to 48 countries (encompassing 35% of the world's projected population) by the year 2025. Population growth, rising demands for water for irrigated agriculture and industrial development, massive urbanization, and rising living standards are contributing to the shortage. Pollution has produced a decrease in the finite supply of freshwater at the same time that annual global water withdrawals are increasing at an average rate of 2.5-3.0% each year. The combination of polluted water, improper waste disposal, and poor water management has been associated with serious public health problems, including malaria, cholera, typhoid, and schistosomiasis. Prevention of a crisis requires strategies aimed at managing both the supply and the demand for freshwater. Expansion of family planning programs in developing countries represents an essential measure for ensuring that population growth slows to sustainable levels in relation to the freshwater supply. Just as the Green Revolution transformed agriculture in the 1960s, a Blue Revolution is required now to conserve and manage freshwater supplies. Uncoordinated water management policies by separate jurisdictions must be replaced at the national level with a watershed or river basin management perspective. At the international level, countries that share river basins can devise policies to manage water resources more equitably. Development agencies need to place more emphasis on assuring the supply and management of freshwater resources and on providing sanitation as part of development and public health programs.

**Winning the Food Race**

This report provides an overview of the important developments in the population field, particularly in the production of food that will meet the demand of the growing population. It is noted that while the global economy produces enough food to feed the world's 6 billion people, many people lack access to enough food for a healthy life. This is most apparent in poor countries where population is growing rapidly and hunger and malnutrition are often the critical problems. Estimates show that more than 840 million people, mostly women and children, particularly girls, suffer chronic malnourishment; each year, 18 million people die
from starvation, malnutrition and related causes. Along with discouraging trends in agricultural production and population growth, international trade policies raise questions about whether food production and distribution can improve fast enough to overtake population growth and reach the goal of food security. However, a coordinated approach to increase agricultural production, improve food distribution, manage resources, and provide family planning, as well as education and health care would yield to the achievement of food security.

• The Reproductive Revolution: New survey findings

Data from the Demographic and Health Surveys and the Family Planning Surveys are used to review fertility trends in developing countries since the 1960s. Consideration is given to fertility patterns and preference; contraceptive use, knowledge, and availability; estimates of unmet needs for family planning services; trends in marriage age; infant and child mortality; and antenatal and child health care. Future fertility patterns are also projected. An appendix provides information on the status of the surveys in each participating country as of December 1992.

• The Environment and Population Growth: Decade for action

The 10th Special Topics series emphasizes how population growth is linked with environmental stress. Each of the 90 million new people added to the Earth each year requires food, energy, and water. By the year 2000, >50% of developing countries will not be able to provide food for their populations. Almost 50% of the world’s population will not have enough fuelwood to meet their needs. Only a few large stands of tropical forests will survive by the year 2010. Carbon dioxide emissions from energy use in developing countries will have increased 3 times its present rate by the year 2020. Ocean levels could increase at least 1 m due to global warming which would flood coasts and uproot millions of people. Humans will have depleted immediately accessible oil supplies by the year 2030. The total hectares of tropical forests destroyed annually equals an area the size of Uruguay. Soil degradation is apparent in exhausted farmlands and eroded hillsides. Pollution has permeated the water and air supplies to the point where they cause disease rather than support life. Therefore pollution and overuse are threatening resources once considered renewable: air, water, forests, and soil. Farsighted economic and social policies, protection of high risk areas, support for family planning programs, resource conservation, and pollution control are now imperative to preserve ecosystems and to improve the quality of life. Many women want to limit their family size and more and more females are joining women in their reproductive years indicating these programs could be successful. If developing countries could provide family planning to 50% more couples during the 1990s world population growth would peak at 12 billion. Sidebars in this issue center on sustainable development, 5 major
population impacts, what will happen if current trends continue, "overshoot," environmental pollution, global carrying capacity, and policy implications.

- **Fertility and Family Planning Surveys: An update**

  This issue presents, in comparable form, the major findings of all World Fertility and Contraceptive Prevalence Surveys available from developing countries--89 in all from 49 countries, covering women age 15--44 married or in union. These surveys, which constitute the largest body of knowledge on fertility and family planning available, reveal striking differences in family planning practices. The percentage of couples who use fertility control methods ranges from under 10% in most African countries south of the Sahara to 40% in the Latin American and Caribbean countries surveyed. The great majority of women have knowledge of at least 1 family planning method, usually a modern one. In over 80% of countries surveyed, at least half of contraceptive users relied on oral contraceptives, the IUD, or voluntary female sterilization. Worldwide, family planning is more often used to prevent births when desired family size is complete than to space births. Survey results further indicate that making family planning supplies and services more available increases their use, and women who can obtain services close by are more likely to use family planning. Fertility remains high in some countries of Africa where breastfeeding, postpartum abstinence, and disease-induced infertility are decreasing. On the other hand, fertility is falling in much of the world, particularly in Latin American and the Caribbean. Women who marry at age 22 years or above average at least 0.5 fewer children than those who marry at 18 or 19 years of age. The survey findings also provide evidence of the importance of birth spacing to infant and child survival. Finally, it is noted that these fertility and family planning surveys have led to significant program and policy changes. By providing data to evaluate and direct programs, these surveys are helping to improve services that reduce fertility and promote family health.

- **Youth in the 1980s: Social and health concerns**

  Today more than 1 billion of the world's nearly 5 billion people are between the ages of 10-19 years. In developing countries, there are 860 million people in this age group. National and international agencies are focusing new attention on the problems of youth and on programs to help young people make the transition to responsible adulthood. The major challenges that face young people today are in the areas of education (high drop out rates, especially among girls), employment (unemployment rates 2-10 times as high for those under age 20 than among older workers), marriage (increases in age at marriage raise the risk of an unwanted pregnancy before marriage), and reproductive health (early sexual activity can expose young people to sexually transmitted diseases, unwanted pregnancy, life-threatening complications from pregnancy and delivery, more infant mortality and morbidity, and social and economic handicaps for young parents and their children). In addition, young people are
increasingly exposed to alcohol, tobacco, and drug use. New approaches to these issues have been developed by parents, schools, churches, health organizations, social agencies, and family planning associations. Educational programs have been designed to help parents communicate with their children; to introduce family life and responsible parenthood into the school curriculum; and to reach out-of-school youth at home and at work. Health and social service centers provide information and guidance through individual and group counseling sessions, peer group meetings, and telephone hot lines. Moreover, the mass media are beginning to carry messages urging self-discipline and providing information about avoiding pregnancy. Such efforts must be continued if young people are to achieve all they can in the areas of education, employment, health, and family life.

Migration, Population Growth, and Development

This report provides an overview of migration, population growth, and development. The population of the developing world increased dramatically from 1.7 billion in 1950 to 3.3 billion in 1980. This increase was expressed in rapid urbanization and large-scale international labor migration. Approximately 1 billion people now live in developing country cities and there are 15-20 million international migrant workers. Concern that rapid urban growth may slow economic development has led many governments to develop policy measures to discourage migration or divert migration from the largest cities. These efforts, which have had mixed results, require longterm political commitment, considerable funds, administrative efficiency, and sometimes coercion. There is evidence that policies to manage and channel rural-to-urban migration may be more effective than policies aimed at preventing it. However, as long as birthrates remain high in some areas and large wage differentials exist between jobs in different places, most of these policies will have little impact on longterm trends. Family planning programs can play an important role in population distribution by addressing the problem of high natural growth (the source of 60% of urban growth), reducing the volume of potential migrants, and reducing the rural/urban fertility difference that contributes to migration. It is expected that the impact of family planning on population distribution will become recognized as a benefit of family planning as the relationship between population growth policies and population distribution policies becomes increasingly apparent.

Population Education in Schools

Formal population education aims to teach school children about basic population issues and to encourage them eventually to have smaller families. It is vital to include population in the school curriculum because population and family life issues are an important aspect of many personal, community, and national decisions. National population education programs began in about a dozen countries, mostly Asian, during the 1970's. The most extensive school program is in the Philippines and includes all 12 grades. Other countries are carrying out smaller-scale activities within the school system. In the absence of government
population policies, as in Sierra Leone and Sri Lanka, in-school programs emphasize "population literacy", e.g., learning about population issues from different viewpoints to enable students to make rational personal decisions. Teachers play a crucial role in the success of a population education program. Training teachers in population issues is a massive task and requires continued guidance. Some training strategies include: 1) face-to-face training by experts/supervisors in short courses or workshops; 2) peer training, in which trained teachers instruct other teachers in schools; 3) Self-Learning Educational Modules which introduce teachers to population education through self-explanatory booklets; and 4) correspondence courses using standard population education training materials. However, these strategies have not always proved practical and effective. Teaching materials that have proved most successful are those which the teachers themselves helped to prepare. The most efficient way to incorporate population topics into teaching materials is during a comprehensive curriculum revision; another is to include questions about population on standardized national or regional examinations. Although funding from international organizations has helped stimulate programs, implementation in most countries has been slow. What is needed is a long-term national effort to institutionalize a national program.

- **Contraceptive prevalence surveys: a new source of family planning data**

CPSs (contraceptive prevalence surveys) are regional or national probability sample surveys designed to evaluate family planning programs by collecting information on contraceptive knowledge and use, choice of methods, and use in relation to desire for additional children. 16 developing countries have already conducted CPSs and at least 3 more are planning to do so. This is a detailed summary of information obtained from those surveys with the information presented in graphic and tabular form. Some crossnational comparisons are made and certain trends are noted. The surveys have shown high levels of contraceptive usage in South Korea, Thailand, Sao Paulo State of Brazil, Costa Rica, Jamaica, and Panama. OCs (oral contraceptives) seem to be preferred by young women while sterilization is the method of choice for older women. In most of the countries surveyed, contraceptive practice was greater among urban, better educated, and employed women and among those nearer to the distribution center. 80-90% of those surveyed were found not to want another child--either at all or not at present. In the countries where 1/2 of these at-risk women were not practicing contraception, opportunity (availability) was a major factor. The surveys did, in general, indicate a declining fertility level in most of these countries. A sample survey questionnaire from Thailand is included. There is a brief discussion of the survey methodology.

- **The World Fertility Survey: Current status and findings**

In 1979, 5 years following the initiation of the 1st World Fertility Survey (WFS) -- the largest
social science research project ever undertaken -- data from the WFS are answering questions that policy makers and demographers have debated for the last 10 years. By means of the WFS over 400,000 women of reproductive age in over 40 developing countries and 20 developed countries are providing information on their marriages, fertility, and contraceptive practice. At the end of April 1979, 41 developing countries were participating in the WFS program, and another 3 countries were scheduled to join during 1979. The WFS has developed a large set of materials to aid and guide countries in conducting their surveys. These include the household schedule for the screening interview, the individual questionnaire, various modules which can be incorporated into the individual or household questionnaires, and manuals for national project directors and their staffs. The primary function of the WFS headquarters professional staff is to assist developing countries in carrying out and analyzing their fertility surveys. Assistance is provided at all stages of the process. 1 of the primary objectives of this overview is to highlight findings from the first 15 published reports on the subjects of past and current fertility levels, preferences concerning fertility, age at marriage and marital stability, and knowledge, availability, and use of contraceptive methods. These data are drawn from 9 countries in the Asia and Pacific region (Bangladesh, Fiji, Indonesia, South Korea, Malaysia, Nepal, Pakistan, Sri Lanka, and Thailand), and from 6 Latin American countries (Colombia, Costa Rica, the Dominican Republic, Mexico, Panama, and Peru). 4 conclusions stand out from among the findings: 1) fertility is declining at a dramatic rate in many of these countries; 2) age at marriage is increasing in some Asian countries but changing very little in Latin America; 3) about 1/2 of all married women of reproductive age want no more children, but about 1/2 of this group fail to use effective contraceptive methods; and 4) over 80% of all married women in every country except Nepal have heard of contraception, but the percentage who have ever used contraception varies widely, from 10% in Pakistan to 82% in Costa Rica.

Guide to Equipment Selection for M/F Sterilization Procedures

This is a guide to aid in selecting and maintaining the proper equipment used in the following sterilization procedures: 1) minilaparotomy, 2) laparoscopy, 3) conventional laparotomy, 4) colpotomy, 5) culdoscopy, and 6) vasectomy. Prototype, experimental, or infrequently used instruments are not discussed. Colpotomy, minilaparotomy, and conventional vasectomy are low-technology procedures requiring relatively simple, locally produced instruments, e.g., retractors, forceps, and scalpels. High-technology equipment consists of specialized items, e.g., laparoscopes and culdoscopes. These are produced in a limited number of technically advanced countries. Equipment donor agencies are discussed. The following factors must be considered in selecting equipment: 1) suitability for the intended procedures, 2) quality of the instrument, 3) ease of repair, and 4) initial cost. Each type of equipment is pictured, diagrammed, described, and charted against others of its kind. Maintenance and repair guidelines are provided.
Organizing Work Better

Family planning and other health care organizations in developing countries increasingly must do more with the same resources, and sometimes with fewer. Reorganizing work processes offers one common-sense way to help staff members at all levels cope with growing demands. Whether you are a clinic manager, front-line provider, program supervisor, or district-level manager, you can improve how work is organized and performed. Often, simple changes enable organizations to serve clients better, offer more satisfying work to the staff, operate more effectively, cut waste, and even reduce or recover costs.

Improving Client-Provider Interaction

In family planning programs good face-to-face interaction between the client and providers is key to meeting clients' needs and program goals. Programs can best improve client-provider interaction (CPI) when they move beyond just training providers and strengthen CPI continuously in multiple ways. Good face-to-face communication between clients and providers forms a cornerstone of good-quality services, and family planning programs have worked hard to improve it. Most providers are trained professionals and caring community members who want to communicate well with clients. Why then do clients sometimes receive inadequate information or suffer poor treatment? Relying on training alone and focusing
exclusively on providers, while neglecting the client’s role in consultations, have held back efforts to strengthen CPI. What more can programs do?

INFO Reports

The INFO Reports series was published by K4Health’s predecessor INFO Project. The series featured brief looks at special topics, newsworthy events, and important new research and program developments in family planning and related reproductive health. 19 titles were published between August 2004-June 2008, some of them in French and Spanish, in addition to English. Issues ranged in length from 8-25 pages.

(Please note: These publications are mainly for reference purposes and stand as a historical record. Researchers and others who want more up-to-date information about contraceptive methods and other reproductive health topics should visit Knowledge for Health eToolkits at [www.k4health.org/toolkits](http://www.k4health.org/toolkits), and Family planning: A Global Handbook for Providers at: [https://www.fphandbook.org/](https://www.fphandbook.org/).

Resources:

- **Tools for Behavior Change Communication**

  Many health and development programs use behavior change communication (BCC) to improve people’s health and wellbeing, including family planning and reproductive health, maternal and child health, and prevention of infectious diseases. BCC is a process that motivates people to adopt and sustain healthy behaviors and lifestyles. Sustaining healthy behavior usually requires a continuing investment in BCC as part of an overall health program. The tools in this issue of INFO Reports are meant to help with planning and developing a BCC component in family planning programs. The same tools can be used, however, for any health or development-related BCC program.

- **Entertainment-Education for Better Health**

  This issue of INFO Reports discusses three aspects of entertainment-education to improve family planning/reproductive health and prevent HIV infection: 1) How E-E works and its potential effects on knowledge, attitudes, and behavior; 2) The best uses of the various E-E formats; and 3) The important steps for managing E-E projects, within the framework of the general process for developing communication programming. Managers of family planning/reproductive health programs and policy makers can use this report to become
more knowledgeable advocates for E-E and better prepared to oversee E-E projects. Also, this report can help E-E managers with choosing formats and producing E-E products. For radio or TV dramas, a checklist includes the tasks that are the responsibility of the E-E manager.

• **Vasectomy: Tools for providers**

Family planning providers can use the checklists and tables in this report to: 1) Counsel clients about vasectomy and ensure that they make an informed choice; 2) Identify men with conditions that require a delay or special consideration before they can have a vasectomy; 3) Explain the vasectomy procedure; 4) Try to make sure that the client's decision for vasectomy is well-considered and his own; and 5) Explain to a man what he should do before and after the vasectomy.

• **Integrating Family Planning and HIV/AIDS Services for Young People: Tools for programming**

Meeting the unmet health care needs of young people poses a continuing challenge for health systems worldwide, yet it is critical to containing the AIDS epidemic and reducing unintended pregnancies. An integrated approach to the delivery of reproductive health care expands youth access to health care by making multiple services available at the same facility, during the same hours, and often from the same provider. Integrated services for young people address the two major risks associated with unprotected sex—that is, unintended pregnancy and sexually transmitted infections (STIs), including HIV/AIDS. In addition, some integrated programs address other issues, such as sexual abuse or maternal and child health care. This report highlights tools that managers can use to integrate reproductive health, family planning, and HIV/AIDS services for young people. The tools described here, and the examples that illustrate their use, are drawn from USAID and other donor-funded programs. The tools are designed to help programs: make integrated services youth-friendly—that is, increase their ability to attract and retain young clients, train providers on how to offer integrated services to young people, develop job aids that help providers offer a wider range of services, and raise awareness of and gain community support for integrated services for young people.

• **Measuring Success of a Continuing-Client Strategy**

This tool offers program managers a quick reference to measure how well a continuing-client
strategy is succeeding. It includes 24 key indicators organized into three areas: program readiness, quality of care, and reproductive health outcomes. By measuring these indicators, managers can track changes in program performance and fine-tune operations as needed to achieve the objectives of a continuing-client strategy.

Focus On... Breastfeeding Decisions for Women with HIV: A digest of key resources

This issue of Focus On... is intended to help health care practitioners better understand the current state of knowledge on breastfeeding and HIV transmission. It examines the most recent studies and expert guidance on the topic and provides the key points from recent research trials, literature reviews, and program evaluation studies. For women with HIV, infant feeding decisions are shaped by their access to infant feeding counseling and antiretroviral treatment, on the social stigma surrounding people with HIV, exclusive breastfeeding, and exclusive replacement feeding, on access to clean and safe water and food supplements, and on partner and family support. A woman infected with HIV can pass HIV on to her infant during pregnancy, at the time of labor and delivery, and through breastfeeding. Without treatment, between 15% and 30% of infants born to mothers with HIV become infected with HIV during pregnancy, labor, and delivery. An additional 10% to 20% become infected during breastfeeding depending on how long the infant is breastfed.

Closing the Effectiveness Gap

For most people, the most important reason given for choosing a particular contraceptive method is how well it protects against pregnancy. Many contraceptive users, however, do not achieve the protection from pregnancy that they want. To achieve the best possible contraceptive protection against unintended pregnancy, family planning clients must make an informed decision to choose, from among available methods suitable to their individual circumstances, the one that combines the greatest inherent effectiveness with their own ability to use it correctly and consistently. This report reviews each method's effectiveness and suggests ways that family planning programs can improve contraceptive counseling to facilitate the effective use of contraception.

Women and HIV: Questions answered

This tool offers family planning and HIV care providers a quick reference to answer common questions about HIV that women and their partners have. Specifically, it provides information
on some basic facts of HIV acquisition, on family planning use for women with HIV, on the health of pregnant women with HIV and their infants, and on mother-to-child transmission of HIV. Information is presented in a simple question and answer format.

• **Implants: Tools for Providers**

Women consider effectiveness the most important factor when they choose a contraceptive method, but also consider side effects and safety. Counseling helps a woman decide if a method suits her needs, preferences, and current situation. This reports provides checklists and tables to help the family planning provider to: 1) counsel clients about implants; 2) identify women who may not be able to use implants for medical reasons; 3) review the steps for appropriate infection prevention during insertion and removal of implants; 4) counsel women about changes in monthly bleeding; 5) review the insertion and removal steps for new implants; and 6) answer questions about implants.

• **Focus On... Improving Hormonal Method Continuation: A digest of key resources**

This edition of Focus on... briefly reviews studies on hormonal method continuation, focusing on oral contraceptives (OCs) and injectable contraceptives and the issues most relevant to service delivery. It emphasizes program strategies that either have proved successful in improving hormonal method continuation or appear promising based on initial evidence. While most of the studies reported are recent, a few key studies date back more than a decade, reflecting that hormonal method continuation is an established research topic. Also, while the studies generally focus on short-acting hormonal methods -- OCs and injectable contraceptives -- some studies also include other methods. The focus on short-acting hormonal methods reflects the fact that they are the most popular birth-spacing methods in the developing world and that their discontinuation rates are much higher than those for longer-acting hormonal methods such as contraceptive implants.

• **Breastfeeding Questions Answered: A guide for providers**

This guide offers health care providers a quick reference and easy-to-understand answers to some of the most common breastfeeding questions that pregnant women and mothers, their families, and community members have. The answers in the guide are based on the latest evidence and international recommendations. Topics covered are: Practicing Breastfeeding, Breastmilk Value, Maintaining Breast Health, Family Planning, and Illness or Infection.
Focus On... Integrating Family Planning and HIV/AIDS Services: A digest of key resources

This first issue of Focus on... presents information about the benefits and challenges of linking HIV/AIDS services and family planning and related reproductive health care. To highlight the major issues of integration (also called linkages), Focus on... summarizes key points from selected resources--most from the past 3 years--that reflect field successes, lessons learned, and further avenues for research. There are strong arguments for family planning and HIV/AIDS integration on both sides. Potentially, family planning services offer a path to extend HIV prevention efforts and to see that family planning decisions consider STI prevention. At the same time, people living with HIV have continuing needs for help with family planning--both in making decisions about their fertility and to obtain services and supplies. While proponents of family planning and HIV/AIDS integration cite benefits, the reality of implementation has involved a number of challenges: limited evidence to document benefits, stigma, bias of providers, families, and communities potentially interfering with fertility choices of HIV-positive men and women, lack of integrated funding streams to facilitate joint services, concerns about health care capacity, among others. This digest of integration resources, while covering only some of the issues, is designed to provide the reader with practical information for planning and implementing improved public health programs.

• Key Facts About the Menstrual Cycle

This tool offers health care providers, educators, and communicators a quick reference to answer common questions about menstruation and the menstrual cycle that girls, women, male family members, and other community members have. It also answers questions about how some contraceptive methods affect the menstrual cycle. Information is presented in a simple way and accompanied by illustrations that can be used with clients.

• Injectable Contraceptives: Tools for providers

More than twice as many women are using injectable contraceptives today as a decade ago, and the numbers keep growing. Women choose injectables because they are highly effective, long-acting, reversible, and private. At the same time many women do not choose injectables or stop using them because of side effects--particularly irregular bleeding, no monthly bleeding, and weight gain--or because they have trouble returning for injections. Family planning programs are meeting increasing demand while helping providers to maintain good
quality of care. Attention to quality, and to counseling especially, can be the difference between successful and unsuccessful efforts to expand access to injectables. Using the tools in this report, providers can 1) Counsel about injectables or answer clients’ questions; 2) Identify women who may not be able to use DMPA or NET-EN for medical reasons; 3) Be reasonably sure that a woman is not pregnant before giving the first injection; 4) Review the steps required to give an injection safely; and 5) Help women be informed and satisfied continuing users of injectables.

- **Microbicidess: New Potential for protection**

Microbicides are substances that are designed, when applied vaginally, to reduce transmission of HIV or other sexually transmitted infections (STIs). This report concerns the protective potential of microbicidess, some of which are under development to also function as spermicides to provide contraceptive protection.

- **World Health Organization Updates Guidance on How to Use Contraceptives**

The World Health Organization (WHO) issued new guidance in 2004 on how to use certain contraceptives safely and effectively, including the following: A woman who misses combined oral contraceptive pills should take a hormonal pill as soon as possible and then continue taking one pill each day. This basic guidance applies no matter how many hormonal pills a woman misses. Only if a woman misses three or more hormonal pills in a row will she need to take additional steps (see p.3). The new guidance simplifies the missed-pill rules issued by WHO in 2002. Men should wait three months after a vasectomy procedure before relying on it. Previous guidelines advised men to wait either three months after the procedure or until they had had at least 20 ejaculations, whichever occurred first. Recent studies have shown, however, that the 20-ejaculation criterion is not a reliable gauge of vasectomy effectiveness.

- **WHO Updates Medical Eligibility Criteria for Contraceptives**

The World Health Organization (WHO) has issued new family planning guidance, including the following: Most women with HIV infection generally can use IUDs. Women generally can take hormonal contraceptives while on antiretroviral (ARV) therapy for HIV infection, although there are interactions between contraceptive hormones and certain ARV drugs. Women with clinical depression usually can take hormonal contraceptives. More than 35 experts met at
WHO headquarters in Geneva, Switzerland, in October 2003 and developed this and other new guidance. The new guidance updates the 2000 Medical Eligibility Criteria (MEC) for Contraceptive Use.

- Obstetric Fistula: Ending the silence, easing the suffering

Obstetric fistula--a devastating medical condition consisting of an abnormal opening between the vagina and the bladder or rectum--results from unrelieved obstructed labor: Unless the fetus is delivered surgically, prolonged obstructed labor often ends only when the fetus dies, decomposes, and is finally passed from the mother. In many cases the mother’s injured pelvic tissue breaks down, leaving a hole, or fistula, between adjacent organs. Fistulas also can have nonobstetric causes, such as laceration or sexual trauma. Fistulas can have terrible social consequences: The physical consequences of a fistula--including the continuous leaking of urine, feces, or both--usually make a normal life difficult, if not impossible. Fistula patients are often shunned, abandoned, or divorced.

Global Health Tech Briefs

*Global Health Technical Briefs* summarized the most important information on a timely reproductive health topic in two pages, and pinpointed the implications for public health programs. Each brief included background/definition of the topic, important recent findings or lessons learned in program application, implications for programs, and where to get more information.

Some 53 Global Health Technical Briefs were published between July 2004 ? August 2009. Many of them are available in French and Spanish in addition to English. They are divided into the following four categories:

- Family Planning
- Health Care Programming
- Maternal and Child Health
- Malaria

*(Please note: These publications are mainly for reference purposes and stand as a historical record. Researchers and others who want more up-to-date information about contraceptive methods and other reproductive health topics should visit Knowledge for Health eToolkits at [www.k4health.org/toolkits](http://www.k4health.org/toolkits) and Family Planning: A Global Handbook for Providers at [https://www.fphandbook.org/](https://www.fphandbook.org/).)*
Family Planning

Resources:

- **The LACTATIONAL AMENORRHEA METHOD (LAM): A Postpartum Contraceptive Choice for Women Who Breastfeed**

  The purpose of this brief is to guide health care service providers in offering quality LAM services within their maternal and child health, reproductive health and family planning programs.

- **Decentralization of Postabortion Care in Senegal and Tanzania**

  In developing countries, PAC programs are frequently available only in urban or regional health facilities, placing rural women at greater risk for mortality and morbidity from complications because they lack access to services. To improve access, USAID has worked with two focus countries, Senegal and Tanzania, to decentralize PAC activities. Required criteria for focus countries were commitment from the Ministry of Health (MOH) and matching funds from the USAID Mission to assist with scale-up and the sustainability of activities.

- **Hormonal Contraception and HIV: More Research Needed; No Changes in Family Planning Practices Currently Warranted**

  This brief focuses on the following points:
  - No conclusive evidence exists that hormonal contraceptive use increases the risk of HIV acquisition, transmission, or disease progression.
  - Current knowledge does not indicate a need to change existing recommendations that women at risk of HIV infection or those who are HIV-infected may safely use hormonal contraception.
Hormonal contraceptive users at elevated risk of HIV infection should also use condoms consistently and correctly.

- Male Circumcision: A New Approach to HIV Prevention
  
  This brief focuses on male circumcision (MC) and provides a history background on this topic. In addition, it discusses the endorsement of MC for HIV prevention by WHO and UNAIDS, programmatic considerations, and lessons learned.

- Contraceptive Implants: Safe, Effective, Long-acting, Reversible
  
  This brief provides an overview of contraceptive implants. It discusses implant types, method characteristics, health benefits, conditions that may make use of implants unsafe, sexually transmitted infections and HIV/AIDS, programmatic considerations, and lessons learned.

- Immediate Postpartum Insertion of an IUD is Safe and Effective
  
  This brief makes the case for immediate postpartum insertion of an IUD by providing the background on the topic, discussing the available evidence, and touching on the programmatic implications.

- No Evidence that Contraceptive Pills and Patches Lead to Weight Gain
  
  This brief finds that the belief that contraceptive pills and patches cause women to gain significant weight is not supported by the evidence and that counseling could reduce misperceptions about weight gain and decrease the number of women who discontinue the use of these effective contraceptives.

- Contraception for Women Taking Antiretroviral
Medications (ARVs): An Update

This brief focuses on the following points:

- Women with HIV/AIDS, including those who are taking ARVs, can start and use almost all family planning methods safely and effectively.
- Women on ARVs need access to contraception for compelling reasons.
- To successfully reach ARV recipients, contraceptive services need to be integrated with HIV care from the start.

Curriculum-Based Reproductive Health and HIV Education Programs for Youth

This brief finds that curriculum-based reproductive health and HIV education programs reach large numbers of young people and can help them reduce sexual risk taking and that evidence-based standards can guide programs to adapt, develop, and implement effective curricula.

Developing a Continuing-Client Strategy

This brief discusses the following topics: life-stage perspective identifies continuing needs, continuing-client strategy refocuses program goals, good-quality services encourage clients to continue, and ways in which family planning providers can encourage continuation.

When Contraceptives Change Monthly Bleeding: How Family Planning Providers Can Help Clients

This brief focuses on the following statements:

- Monthly bleeding changes with hormonal contraceptive methods and IUDs are a normal and rarely harmful side effect, but they are a common reason that women discontinue use.
- Family planning providers can help women anticipate and deal with bleeding changes through counseling and encouragement.
- When women know about bleeding changes in advance, they can choose a suitable method, be more satisfied with their choice, and continue to prevent unintended
• **Five Simple Ways to Improve Oral Contraceptive Provision and Use**

This brief focuses on the following points:

- Unnecessary service delivery barriers often prevent women from initiating and continuing oral contraceptive use.
- Providers can employ five simple strategies to reduce medical barriers to oral contraceptive provision resulting in faster and safer delivery, and improved counseling and use of OCs.

• **Checklists Reduce Medical Barriers to Contraceptive Use**

This brief focuses on the following points:

- Medical barriers often prevent clients from using their desired method of family planning.
- The pregnancy, COC, DMPA, and IUD checklists can effectively increase access to family planning while helping ensure client safety.
- Introduction of checklists into service delivery settings should include careful training on how to use the checklists as well as the medical eligibility criteria on which they are based.

• **Family Planning for Married Adolescent Girls**

This brief focuses on the following points:

- Married adolescent girls are highly vulnerable, yet health care providers and then community often ignore their needs.
- Avoiding early childbearing is crucial to preventing maternal and infant mortality. Addressing the high unmet need for family planning in this group is a key strategy.
- Programs need to lower the many hurdles these girls face in using a family planning method and to ensure good access and quality.

• **How Family Planning Programs Can Meet Rising Demand**
for Injectable Contraceptives

This brief states:

- As demand for injectable contraceptives continues to rise rapidly, programs are challenged to expand access and improve the quality of care.
- To expand access, programs need to keep injectables in stock, train more providers, and find ways to offer injectables in rural and isolated areas.
- Good-quality services ensure that providers counsel clients well, give injections safely, and properly dispose to used needles and syringes.

Postabortion Family Planning Benefits Clients and Providers

This brief focuses on the following points:

- Provision of family planning methods is a central feature of postabortion care.
- When family planning methods are available onsite for all clients treated for incomplete abortion or miscarriage, clients, providers, and programs benefit.

Family Planning for Postpartum Women: Seizing a Missed Opportunity

This brief discusses the following points:

- Postpartum women have a high unmet need for family planning (FP).
- Health services often pay little attention to postpartum care, including FP.
- Women who are breastfeeding have special needs when selecting a FP method; however, in the right circumstances, all methods of modern contraception may be used.
- The goals of a postpartum FP program are to: reduce unmet need; improve contraceptive choice; promote optimum health for both mother and baby through breastfeeding; encourage birth spacing of three to five years; and integrate FP with other maternal health and newborn services.
- Contraception is the primary method of reducing mother-to-child transmission of HIV.

Birth Spacing: 2004 Evidence Supports 3+ Years
This brief discusses the following points:

- New 2004 evidence from DHS and other analyses confirms earlier findings that spacing births three to five years apart is associated with the lowest risk for neonatal, infant, child, and under-five mortality.
- New analyses also indicate that postabortion (spontaneous or induced) - next pregnancy intervals shorter than six months are associated with adverse maternal and perinatal outcomes in the next pregnancy.
- While birth spacing was a common theme of family planning programs in the past, recent reviews have identified substantial programmatic gaps. In many countries, birth spacing is not included in mortality reduction strategies. Programmatic actions are needed in policy, advocacy, communications, community outreach, services, and research.
- In 2003, if women in developing countries (excluding China) had spaced births approximately 36 months apart, it is estimated that 3 million deaths to children under the age of five could have been averted, accounting for 35% of all deaths to children in this age group.

• **Youth and Contraception: Needs and Challenges**

Young people today face greater risk of unintended pregnancies than ever before. More education about contraception is needed, as well as greater access to services and products. Integrating such services into existing youth programs is often the most cost-effective approach.

• **Abstinence and Delayed Sexual Initiation for Youth**

Complete sexual abstinence is the most effective means of protection against both pregnancy and HIV infection. Messages encouraging abstinence appear to work best when aimed at younger youth who are not yet sexually active, especially girls.

• **Vasectomy: Safe, Convenient, Effective-and Underutilized**

This brief focuses on the following points:

- Vasectomy is a very safe, convenient, highly effective, and simple surgical form of contraception for men that is provided under local anesthesia in an outpatient setting and is intended to be permanent.
- Although vasectomy is safer, simpler, less expensive, and equally effective as female sterilization, it remains the least known and least used modern contraceptive method.
Men in every region and cultural, religious, or socioeconomic setting show interest in or use of vasectomy, despite commonly held assumptions about negative male attitudes or societal prohibitions; however, men often lack full access to information and services. Thoughtful, male-centered programming has resulted in greater use of vasectomy. Effective FP/RH programs should have an active, accessible, vasectomy component that delivers quality services, with wide contraceptive options for the man and his partner, and informed choice.

Female Sterilization: The Most Popular Method of Modern Contraception

This brief focuses on the following points:

- Female sterilization is the most widely used modern method in the world, including developing regions and many developed countries such as the United States.
- Female sterilization is a safe, highly effective, relatively simple, surgical means of contraception that can usually be provided in an outpatient setting and is intended to be permanent.
- Effective FP/RH programs should have an active, accessible, voluntary female sterilization component that delivers quality services to women who make a free and informed choice for this method from within a range of contraceptive options.

Standard Days Method: A Simple, Effective Natural Method

The Standard Days Method (SDM) is an effective new natural method of family planning developed through scientific analysis of the fertile time in the woman’s menstrual cycle. With its simplicity, low supply cost, and attractiveness for couples not previously using contraception, more and more programs are including it among the options they offer.

IUDs: A Resurging Method

Programs and providers are now making IUDs more available. Reasons for this resurgence include:

- Recognition of the IUDs many advantages,
New research findings on safety - resulting in liberalized guidance from WHO,
A new program strategy, focusing on developing a core of skilled providers motivated to
offer IUDs.

Health Care Programming

Resources:

• Peer Education: A Viable Approach for Reaching Youth

This brief focuses on the following points:

  o Peer education can be an effective way to improve youth reproductive and sexual health outcomes (unintended pregnancy, sexually transmitted infections, and HIV).
  o Greater exposure and improved outcomes are associated with the quality of peer education programs.
  o Programs should ensure high quality by emphasizing adequate training, retention efforts, monitoring and evaluation, curriculum/structure, and meaningful youth involvement.

• Risk Communication: Principles, Tools, and Techniques

This brief focuses on the following points:

  o Risk communication is central to informed decision-making.
  o Guidelines exist to help programs and providers present risk information clearly and effectively.
  o People under stress typically want to know that you care before they care about what you know.
  o People under stress typically have difficulty hearing, understanding, and remembering information.

• Tuberculosis and the Media: The Importance of Communicating Messages with Partners
This brief focuses on the following points:

- Planning is the key to a successful tuberculosis (TB) communication program or activity.
- Choose a format for contact with the media that best fits your audience and message. Identify the SOCO (single overriding communication objective?) that you want your audience to remember.
- Identify and train a spokesperson to represent your program to the media.

Avian Influenza: Critical Program Issues

This brief focuses on the following messages:

- While the spread of avian influenza (H5N1) virus from person-to-person is currently rare and unsustained, H5N1 continues to pose a significant threat to public health and economies worldwide.
- All evidence to date indicates that close contact with dead or sick birds is the principal source of human infection with H5N1.
- Key protective practices endorsed by international agencies include washing (proper hygiene), separating chickens/birds, reporting dead or sick chickens/birds, and cooking poultry properly.
- Strategic AI communication can effectively increase awareness of AI risks, means of transmission, and promote sustained behavior change when carefully delivered.

Mobilizing Local Resources to Support Health Programs

Increasingly, donors and national governments are asking local governments, nongovernmental organizations (NGOs), private-sector companies, and communities to take more responsibility for supporting health care programs at the local level. While it is natural to think in terms of funding, there are other equally important material and in kind resources that can be locally mobilized. These can include human resources, space, pharmaceuticals, advocacy, and transportation.
Local resources can significantly contribute to national governments? and external donors? efforts to maintain and extend health programs. By identifying and using a full range of local resources, health programs can help build partnerships among public, private, and government sectors; involve individuals and groups in the community; and strengthen and expand health services.

• Public Sector Family Planning: How Can We Pay For It?

Government and donor funds fail to meet growing demands for reproductive health care in the public sector. Strategies to support such services include:

○ Convince governments to invest more in family planning.
○ Use market segmentation to direct subsidies to the poor and to direct clients who can afford to pay to the private sector.
○ Encourage public-private partnerships to increase use of the private sector.
○ Increase the efficiency of service provision in the public sector.
○ Plan for the phase-out of donor-provided contraceptives.

Convince governments to invest more in family planning

• Coping with Crises: How To Meet Reproductive Health Needs in Crisis Situations

This brief discusses the following points:

○ Urgent reproductive health care needs during crisis situations include safe motherhood, protection from and response to sexual and gender-based violence, prevention and treatment of STIs including HIV/AIDS, access to family planning methods, and adolescent reproductive health.
○ Local health care service providers can best serve the needs of refugees dispersed within communities.
○ Materials such as the Inter-Agency Field Manual and Minimum Initial Service Package provide guidelines for local providers.

• Addressing the Crisis in Human Resources for Health
This brief focuses on the following key points:

- A shortage of human resources for health (HRH) threatens the health care delivery system in many countries, particularly in Africa.
- Promising practices to strengthen HRH include workforce planning, task shifting, strengthening HR information and management systems, promoting retention and gender equity, and establishing partnerships.

- **Creating a Work Climate That Motivates Staff and Improves Performance**

  This brief discusses the following points:

  - A positive work climate leads to and sustains employee motivation, high performance, and better results in health care.
  - Good leadership and management practices contribute to a positive work climate.

- **Systematic Screening: A Strategy for Determining and Meeting Client Reproductive Health Needs**

  This brief focuses on the following points:

  - Systematic screening is a simple process by which health care providers can increase the number of client needs addressed during a single visit.
  - Research shows that systematic screening can increase the number of services received per client visit to a health care facility by as much as 25 percent.
  - Adopting systematic screening can be a cost-effective strategy for programs to offer more services and thus to improve women’s and children’s health. Systematic screening is a USAID best practice.

- **Accelerating the Abandonment of Female Genital Cutting: Community Change to Support Human Rights**
This brief discusses the following key points:

○ View FGC in terms of gender, human rights, and child protection.
○ Address FGC holistically, within a community development strategy, using culturally sensitive and non-judgmental approaches.
○ Engage a wide range of participants and stakeholders.
○ Improve the infrastructure and support for women's health care.

• Building Successful Alliances for Global Health

This brief focuses on the following points:

○ Alliances need to evolve at a pace that builds trust and cohesion.
○ Successful alliances balance effective decision-making with broad participation.
○ Alliances are most effective when they have a fully funded Secretariat.

• Family Planning Success Stories in Sub-Saharan Africa

Evidence from Malawi, Zambia, and Ghana demonstrate that rapid uptake and sustained use of modern family planning methods can occur in even the most poor, resource-strapped, and largely rural countries.

• Leading Changes in Practices To Improve Health

This brief focuses on the following points:

○ Experience shows that long-lasting change can result when health care managers incorporate success factors in their planning and implementation of new practices.
○ Health care managers will run into fewer obstacles in initiating changes if they follow a five-phase process to identify, test, and scale up new practices.

• Private Providers: A Vast Untapped Resource to Improve Women's Health

This brief discusses the following key points:
Networks of private providers can be highly effective in reaching women with Family Planning/Reproductive Health (FP/RH) services. Advantages: service delivery points are already in place, often financially sustainable, and have excess capacity. Private midwives provide 46% of all contraceptive use in Indonesia. A "linking organization" is key to link providers, identify incentives, develop a plan to meet service objectives and broker training, supplies, quality, and outreach to customers.

**Priorities for Family Planning and HIV/AIDS Integration**

This brief focuses on the following key points:

- Reaching the United Nations General Assembly goal of reducing HIV infections among infants by 50% by 2010 requires preventing unintended pregnancies among HIV-positive women.
- There are important synergies between Voluntary Counseling and Testing (VCT) and Family Planning (FP) services.
- HIV-positive women, especially those on antiretrovirals (ARVs), can have increased need for access to voluntary FP services.
- A wide range of contraceptive options are safe and should be available for HIV-positive women including those on ARVs.

**Client-Provider Interaction: Key to Successful Family Planning**

This brief focuses on the following points:

- Tailor interaction to the individual. Clients fall into four categories with different needs:
  - New clients who know what method they want,
  - New clients who need help choosing a method,
  - Satisfied method users returning for supplies or routine follow-up,
  - Clients returning with problems or concerns.
- It takes two. Both the client and the provider need to communicate effectively.
- Providers should listen actively, assess and meet clients' needs for information and support, respect their decisions, and facilitate method use.
- Clients should participate actively in a dynamic interaction, providing essential information, asking questions, expressing preferences and concerns.
- Programs should support and reward good CPI as a clear expectation.
Organizing Work Better

Increasingly, family planning and other health care organizations in developing countries must do more with the same or reduced resources. To cope, organizations can make simple changes in the way work is organized—changes that can help them serve clients better, offer more satisfying work to the staff, operate more effectively, and become more efficient.

Contraceptive Security: What You Can Do

Many countries face the challenge of meeting people’s needs for contraceptives, including condoms, on a sustainable basis. Programmatic experience in several countries has pointed to some “ready lessons” that can be applied to improve contraceptive security.

Maternal and Child Health

Resources:

Postpartum Care

This brief focuses on the following points:

- In developing countries, over 60% of maternal deaths occur in the postpartum period, and about 70% of women receive no postpartum care.
- Effective care during the first week postpartum—especially during the first 24 hours—is essential to maximize survival of mothers and newborns.
- Women, their families and communities should be able to recognize maternal danger signs and have a plan for seeking appropriate care.
- Programs should manage the care of mother and newborn together, as the health and well-being of both are interdependent.
Mother-to-Child Transmission of HIV

This brief focuses on the following key points:

- HIV-positive women can transmit HIV to their infants during pregnancy, childbirth, or while breastfeeding.
- Providing HIV prevention, care and treatment within existing maternal and child health services dramatically improves their uptake, improving maternal health and reducing mother-to-child transmission of HIV.

Preventing Postpartum Hemorrhage

This brief discusses the following points:

- Postpartum hemorrhage (PPH) is the leading cause of maternal mortality in low-resource settings.
- In countries with high maternal mortality and limited resources, introducing safe, low-cost, evidence-based practices that prevent PPH can save women’s lives.

Helping Women with HIV Decide About Breastfeeding: What Family Planning Programs Can Do

This brief focuses on the following points:

- The AIDS crisis has focused concern on HIV transmission through breastfeeding, while drawing attention away from the risks to infant health of not breastfeeding. The mistaken belief that all mothers infected with HIV will pass HIV to their infants through breastfeeding has overshadowed the health and life-saving benefits of breastfeeding.
- Depending on her circumstances, a woman can rely on several safer breastfeeding and nonbreastfeeding options. WHO and UNICEF recommend, where safe alternatives to breastmilk are not available, that women with HIV breastfeed their infants exclusively for the first months of life before switching completely to replacement foods when possible.
- Program managers can ensure that family planning providers are taught the facts about HIV and breastfeeding and taught how to help women with HIV weigh the various risks in deciding whether to breastfeed.
First Aid for Women and Newborns. Where Home Birth is Necessary or Common

This brief discusses the following key points:

- The Home Based Life Saving Skills approach helps communities provide safe, acceptable, and feasible emergency care during home births.
- Key to the approach is strengthening links between home, community, and referral facilities through community mobilization.
- Training of home birth teams uses an assessment of methods, including picture cards and role plays, to maximize learning for participants with varying ability to read.

Active Management of the Third Stage of Labor: A Simple Practice to Prevent Postpartum Hemorrhage

This brief discusses the following points:

- Postpartum hemorrhage (PPH) is the leading direct cause of maternal death in developing countries.
- Most cases of PPH occur within 24 hours after delivery.
- About 70 percent of cases of PPH are due to uterine atony, which can be prevented with Active Management of the Third Stage of Labor (AMTSL).
- Any woman can face life-threatening blood loss at the time of delivery; women with anemia are particularly vulnerable since they may not tolerate even moderate blood loss.
- AMTSL reduces the incidence of PPH, quantity of blood loss, need for blood transfusion, and need for medical intervention to stop bleeding.

Focused Antenatal Care: A Better, Cheaper, Faster, Evidence-based Approach

This brief focuses on the following points:

- Traditionally, antenatal care (ANC) programs have mirrored those in developed countries. Too often, programs are poorly implemented and do little to promote the health of
Mothers and newborns.

- Until recently, many of the components of antenatal care had not been rigorously evaluated. Now the World Health Organization (WHO) has developed a focused ANC package that includes only counseling, examinations, and tests that serve immediate purposes and have proven health benefit.

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**Malaria**

**Resources:**

- **Malaria: Prompt Treatment Save Lives**

  This brief discusses the following points:

  - Prompt disease recognition followed without delay by high-quality treatment of malaria shortens the duration of illness, reduces complications, and saves lives.
  - Programs should help home-based caregivers make key decisions and take action to ensure proper treatment.
  - Artemisinin-based combination therapy should be considered as the first-line treatment for malaria.

- **Prevent and Treat Malaria During Pregnancy**

  This brief discusses the following key points:

  - Fetal loss, premature delivery, and death can be avoided through prompt disease recognition followed without delay by high-quality treatment of malaria.
  - Pregnant women should sleep under an insecticide-treated bednet.
  - Intermittent preventive treatment has a beneficial impact on maternal and infant health.

- **Bednets Reduce Malaria**

  This brief focuses on the following points:

  - More than one million lives could be saved annually if insecticide-treated bednets (ITNs) were routinely used by the populations at greatest risk of malaria.
  - Several models for delivery of ITNs have been developed, and the choice among them
depends on how capable the commercial sector is to provide bednets.

- A new technology for dipping nets may soon turn people’s conventional bednets into long-lasting bednets.

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