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Adding Choice to the Contraceptive Mix: Lessons from Indonesia

MORE than half of all couples of reproductive age in the developing world now use some type of contraception. The percentage using birth control has increased from less than 10 percent in the 1960s to 45 percent in the 1980s and 51 percent today. Some of the most notable successes have occurred in Thailand, Indonesia, and Bangladesh. Yet, seen against these signs of family planning progress is compelling evidence of continued population growth at higher than replacement rates, which many believe to be at the root of the mass poverty and environmental degradation that burden developing nations.

Reaching the high levels of contraceptive use needed to achieve a replacement level of fertility requires that

couples not only initiate contraceptive use but also continue to practice sustained use of contraception throughout their reproductive lives. Ensuring sustained use of contraception is one of the greatest challenges in the population field. Even in the Asian nations where contraceptive acceptance is increasing, high rates of contraceptive discontinuation continue to plague program planners.

Reproductive goals and health concerns are dynamic; they change with age, health status, and events such as marriage, dissolution of marriage, and births of children. Contraceptive choice is likewise a dynamic process, changing according to the circumstances, personal goals, and cultural norms of

contraceptive users. Choice is also influenced by the characteristics of the available contraceptive methods (e.g., their effectiveness, health implications, ease of use, and reversibility) and by the quality of the family planning services provided.

Family planning programs must strive to achieve an optimal mix of contraceptive options that meet couples' needs across the reproductive life span and that also link initial contraceptive choices to continuation of use. Two recent studies address the factors that have the most influence on contraceptive continuation rates and the ways in which an understanding of these factors can be used to plan and achieve an optimal contraceptive mix for a population.

Choice as a Factor in Sustained Contraceptive Use

MANY studies have examined the reasons for contraceptive discontinuation in developing nations. Results from these studies show that discontinuation rates vary inversely with age and with the number of previous births. Discontinuation is also lower for women who have achieved their desired family size than for those who have not, for previous users than for new users, for those who experience no side effects than for those who do, and for those who experience favorable client-provider interaction than for those who do not.

It is this last factor that may provide the key to more widespread contraceptive continuation in developing countries. Siti Pariani, lecturer, Medical Faculty, University of Airlangga, Surabaya, Indonesia, and David M. Heer and Maurice D. Van Arsdol, Jr., co-director and director respectively of the Population Research Laboratory, Department of Sociology, University of Southern California, have recently studied the effects of client-provider interaction on contraception continuation. According to the authors of the study "Does Choice Make a Difference to Contraceptive Use? Evidence from East Java," the quality of the interaction between provider and client can be an important element in the sustained use of contraceptives. The study shows that the relationship between contraceptive choice and subsequent continuation of contraceptive use may be grounded in the opportunity for women to choose their preferred method of contraception and in the willingness of providers to respect clients' method choice.

The researchers interviewed women of childbearing age living in

East Java, Indonesia, who were visiting a government family planning clinic for the first time to initiate contraceptive use. Before receiving a contraceptive method, participants were questioned about their preferred method of contraception. Immediately after being introduced to a method, women were asked again about the method suggested by the fieldworker and the method that they intended to use. Follow-up interviews were conducted one year later to determine if contraceptive practice had continued.

Giving clients their method of choice was found to be an important determinant of sustained use of contraceptives. Of the 1,945 women surveyed, 1,679 reported they had been granted their method choice. Of these, 9 percent were found at follow-up to have discontinued use. In contrast, 72 percent of the 266 women who were denied their contraceptive choice had discontinued use.

According to the researchers, women are often in a dependent relationship with family planning clinic workers, who are not obligated to grant their clients' contraceptive choices. Clinical observations suggest, however, that many women have chosen a contraceptive method before they ever visit a family planning clinic. If clients' preferences are unclear, or unimportant to family planning workers, then the relationship between health workers and their clients can work against the sustained use of a contraceptive method. According to the authors, "clients frequently avoid open disagreement with health workers, but, nevertheless, will not practice a method that is not their own first choice."

The researchers go on to suggest that by adhering to a "mutual participation" model of professional-client relationships, family planning workers can respect their

clients' method choices and at the same time enhance decision making by providing needed information.

Choice as a Factor in the Contraceptive Mix

AN understanding of the contraceptive choices that couples make is the key to family planning program planning. Given that couples are more likely to use—and continue to use—contraception if they are granted access to the methods they prefer, it makes sense to integrate information on contraceptive choice into the planning process.

Minja Kim Choe, a research associate at the East-West Population Institute, has developed a method to define the optimal method "mix" for use by national population programs and to determine the distribution of methods that best conforms to the reproductive goals, health concerns, and personal preferences of a particular population. The method can be used to determine the patterns of contraceptive use in a population and to identify gaps that can be addressed through targeted educational and social marketing efforts.

Stages in the reproductive life cycle

According to Choe, a woman's reproductive life, beginning with menarche and ending with menopause, can be divided into four main segments: (1) before first marriage, (2) after first marriage but before first birth, (3) after first birth but before last birth, and (4) after last birth. Appropriate contraceptive choices are assumed to be different at the different stages of the reproductive life cycle defined by these events.

The first period is characterized

by sporadic sexual intercourse and the possibility of multiple sex partners. In general, no pregnancies are desired. The preferred contraceptive method for use at this stage is the condom; it requires neither a doctor's prescription nor fitting, is simple to use, and provides protection against sexually transmitted diseases.

The second stage—between first marriage and first birth—is characterized by frequent sexual intercourse with one partner and, presumably, no exposure to sexually transmitted diseases. For women who want to postpone the birth of a first child, the most suitable methods are oral contraceptives and injectables.

The third period—the childbearing stage—has several components. During the period of breastfeeding, contraceptive choice must take into consideration the method's effect on both breast milk and the lactation process. Barrier methods (condoms, diaphragms, sponges, cervical caps, and spermicides) are options during this period, despite their low levels of effectiveness. Intrauterine devices (IUDs) provide a more effective alternative; however, insertion must be done with care to minimize the increased risk of expulsion and perforation during the postpartum period.

Child spacing needs after breastfeeding are similar to those during the interval between first marriage and first birth, with the difference that there is more certainty about the need for contraception for at least one year. During this period, oral contraceptives, injectables, and IUDs are preferred for their high level of effectiveness and user control over continuation. Barrier methods are also appropriate.

During the fourth stage, after a woman has completed childbearing and is no longer breastfeeding, the couple may not be sure about permanently terminating their ability to

have children. The recommended methods during this period are IUDs and implants because of their effectiveness and long-acting characteristics. Alternative methods are oral contraceptives and injectables.

Once the couple has made a commitment to terminate childbearing, the preferred contraceptive method is either male or female sterilization. Male sterilization, because of its safety, is preferred. If sterilization is not acceptable for cultural or religious reasons, alternative methods are IUDs and implants. Oral contraceptives and injectables are less appropriate because of their unknown medical effects for long-term use and the inconvenience of user dependency.

Estimating an optimal contraceptive mix: The Indonesia example

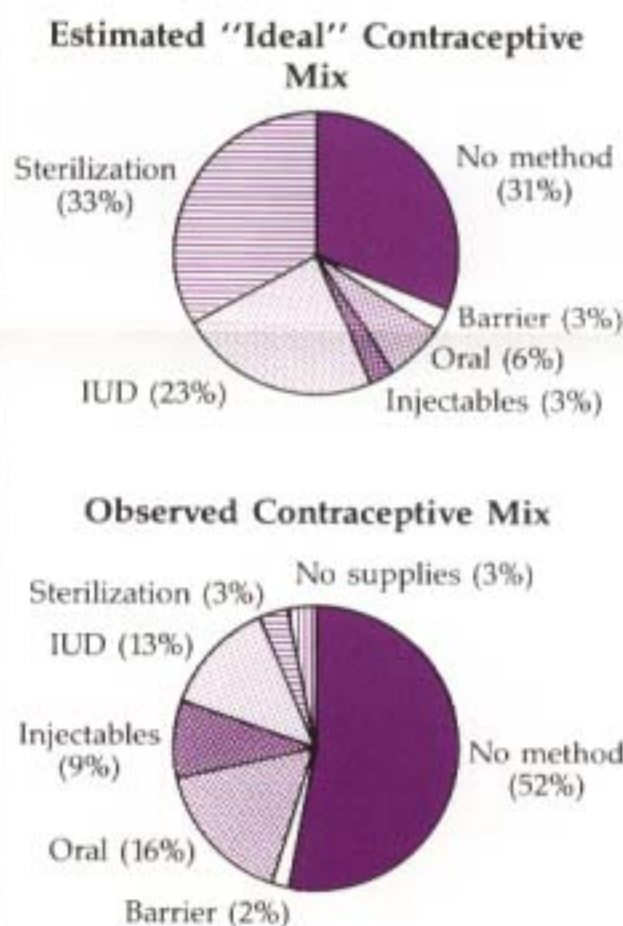
Choe's method applies these assumptions about changing contraceptive needs to data from the 1987 National Indonesia Contraceptive Prevalence Survey. The approach considers factors such as past fertility, future fertility intentions, current risk of conception, breastfeeding status, and personal health issues for each reproductive age group. With this information, Choe was able to estimate the age-specific need for contraception for each stage of the reproductive life cycle. To arrive at the ideal contraceptive mix, she applied observed contraceptive preferences for women using contraception within each life-cycle stage (a probability factor) to the age-specific contraceptive need.

The results of these calculations provide an important standard for use in (1) determining current contraceptive use, (2) setting targets for future use, (3) identifying gaps between current and optimal contraceptive distribution, by age group, and (4) planning strategies

to address these gaps, targeted to specific groups.

Using Choe's example, a comparison of the estimated contraceptive mix with the observed contraceptive prevalence among Indonesian women (Figure), shows that overall observed prevalence is low; oral contraceptive use is high; use of injections is slightly high; IUD use is low, especially among younger women; and use of sterilizations is low, especially among older women. Based on these findings, the strategy for achieving the targeted distribution should center on expanding the contraceptive mix to promote methods that better "fit" women's life-cycle needs.

Figure
Estimated "ideal" and observed percentage distribution of contraceptive methods:
Indonesia, 1987



Source: Choe (1991).

Policy Implications

ACHIEVING programmatic goals to approach replacement-level fertility will require careful planning and continued improvements in family planning program quality. Ensuring that couples are provided with the contraceptive choices that they desire is an important component that may have far-reaching effects on sustained early contraceptive use.

The results of the East Java study imply that contraceptive continuation can be enhanced either when family planning workers pay more attention to the stated preferences of their clients or when

governments institute policies that allow persons freedom of contraceptive choice. The relationship between providers and their clients is therefore an essential factor in program quality. Reciprocal rather than hierarchical relationships in the family planning setting give each participant—client and provider—a role in the sustained use of contraception. Contraceptive users can select their preferred method, which they are then likely to continue to use; providers can ensure that couples use the method correctly and can support their efforts to use it consistently.

As family planning programs achieve success in increasing the level of contraceptive prevalence,

continued contraceptive use becomes an increasingly important criterion of program success. Achieving method choice is an important determinant of continued contraceptive use; therefore, setting family planning targets to emphasize meeting method choices instead of emphasizing the methods used will work to increase continued use and maintain prevalence.

The Pariani, Heer, and Van Arsdol and Choe studies together suggest new procedures for family planning programs' target setting that give greater emphasis to user preferences than has been possible in the past.

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