Promoting Dual Protection in Family Planning Clinics In Ibadan, Nigeria

CONTEXT: *Integration of efforts to prevent HIV and sexually transmitted infections (STIs) and of condom promotion into family planning services is urgently needed because of the escalating HIV epidemic in Sub-Saharan Africa.*

METHODS: *Counseling on dual protection—concurrent protection from unintended pregnancy and HIV and other STIs—and provision of the female condom were introduced in six family planning clinics in Ibadan, Nigeria. Structured observations of interactions between clients and service providers, clinic service statistics, provider interviews, and other qualitative and quantitative methods were used to assess family planning providers' promotion of dual protection.*

RESULTS: *Following intensive training, providers delivered dual-protection counseling to a majority of clients and demonstrated the female condom to 80% of the new clients observed. Discussion of the sexual behavior of clients and their partners, of the relative ability of various contraceptives to protect against HIV infection and of how to negotiate condom use increased significantly, as did STI assessment. Providers' internalization of the importance of HIV/AIDS prevention was crucial to promoting and sustaining the dual-protection initiative. Condom purchases increased from a baseline of 2% of all family planning visits in 1999 to 9% in January–June 2001. This increase came mainly from acceptance of the female condom, used either alone or in conjunction with another contraceptive.*

CONCLUSIONS: *Integrating dual-protection counseling and female condom provision into family planning services appears feasible, as is service providers' acceptance of dual-protection objectives. While providers and clients are key to transforming family planning to dual-protection services, the attitudes and behaviors of clients' male partners must be considered in gauging the success of the dual-protection intervention.*

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With the rapid spread of HIV throughout Sub-Saharan Africa, new approaches to HIV prevention are urgently needed, especially among young women. Family planning services have traditionally focused on promoting methods that are highly effective at preventing pregnancy but provide no protection against HIV. Further, thousands of women receiving family planning services every day are not informed of what they can do to protect themselves from HIV infection.

Since the mid-1990s, various strategies have been implemented, primarily in Africa and in Latin America and the Caribbean, to integrate family planning with HIV and sexually transmitted infection (STI) services.[1] These efforts have consisted primarily of teaching family planning providers about HIV and STIs and of providing STI treatment; however, they have not been shown to be effective in increasing condom use.[2] They have also generally failed to promote the condom's role in dual protection—a strategy for providing concurrent protection from unwanted pregnancy and disease prevention, mainly through the use of condoms (either alone or in conjunction with another method).[3]

Structured observations of family planning services in Botswana, Ghana, Kenya, Zambia and Zimbabwe showed that only one-quarter of family planning clients had received information on HIV and other STIs and that fewer than one-third had heard about the dual-protection benefits of condoms.[4] The compartmentalization of family planning services from HIV and STI prevention in health care delivery systems has generated the need for a paradigm shift in family planning services—one that places family planning and HIV and STI prevention under a single umbrella.[5]

Integrating dual protection into family planning services will require changes in service-delivery practices and policies, including making newer HIV and STI prevention options (such as the female condom and, when they become available, microbicides) available, documenting dual-protection practice within management information systems and changing how family planning service providers perceive their role and carry out client counseling. As gatekeepers in the family planning service delivery system, providers are in a position to determine how dual protection is incorporated into family planning services.[6] However, they have not been well trained in many key aspects of HIV prevention, such as in conducting sexual risk assessments, promoting condoms and teaching clients how to negotiate condom use with their sexual partners. Further, simply educating family planning providers about HIV and its prevention is not enough to bring about significant changes in counseling practices.[7]

In this article, we focus on the first phase of an ongoing project of the Association for Reproductive and Family

Health (ARFH), a nongovernmental reproductive health organization located in Ibadan, Nigeria. It is intended to incorporate HIV and STI prevention into family planning service delivery in six clinic settings through the promotion of dual-protection counseling (known as *Onise Meji,* or two purposes, in the local language, Yoruba), by bringing about changes in service providers' attitudes and core values and in their counseling of clients. We also examine the obstacles encountered in bringing about changes in service-delivery practices.

Our analysis concentrates on efforts among new clients, because dual-protection counseling was designed to be integrated into overall family planning counseling, which is provided in its entirety only to new clients. The counseling offered to continuing clients is usually more limited, and therefore is likely to provide fewer details about dual protection and to have less of an effect. The overall impact of the program on the level and consistency of condom use will not be addressed in this article.

The consequences of the spread of HIV are of urgent concern for family planning services in Nigeria. In populations at antenatal clinic sentinel sites, HIV prevalence rose from 1.2% in 1992 to 5.8% in 2000.[8] Thus, according to World Bank criteria, HIV infection has begun to move beyond high-risk populations to the general population.[9] Perceptions of invulnerability to HIV, coupled with low rates of condom use for family planning* and the pattern of extramarital sexual relationships among married men,[10] create an environment of significant HIV risk for Nigerian women seeking family planning services. With more than one million inhabitants, Ibadan provides an ideal setting for integrating dual-protection services in family planning clinics that serve a primarily homogenous (Yoruba) population.

METHODS

Research Setting

In 1998, we selected six family planning clinics (three government clinics and three clinics sponsored by nongovernmental organizations) with a total of 15,000 client visits yearly to participate in the project. In four of the six clinics, the IUD and the injectable accounted for more than 90% of all contraceptive methods dispensed; a large majority of visits were made by continuing clients. Only one of the six facilities had an STI clinic on the premises. Although the male condom was available, most clinics' records of condom distribution were inadequate. Most did not record purchasers' personal identifiers, believing that the anonymous provision of condoms was a positive service attribute. Providers were well trained in family planning, but few had received training about HIV and other STIs or in counseling. Infection-control procedures were inadequate, with latex gloves being reused and instruments inadequately disinfected.

*Current condom use levels are 2% among married women and 9% among married men, and 7% among unmarried women and 15% among unmarried men.

†Copies of the flip chart in English can be obtained from ARFH.

The Dual-Protection Intervention

Dual protection, or concurrent protection from unintended pregnancy and HIV and other STIs, can be achieved in three ways: use of a male or female condom alone; use of two methods (a condom along with some nonbarrier contraceptive); or use of an effective contraceptive in the context of long-term mutual monogamy. (Although the latter was recommended, it was not recorded as a dual-protection practice.)

• *Training of family planning providers.* Project investigators and ARFH's training team adapted a training program that had been developed earlier in South Africa and New York.[11] A "Training of Trainers" workshop was first conducted with managers of the participating clinics and with senior ARFH staff to modify existing materials for the Nigerian context and to determine training strategies for helping family planning providers put the workshop content into practice. This workshop produced a manual and curriculum for provider training, which took place between March and May 1999, and promoted senior clinic management's commitment to and ownership of the intervention. Most trainees were registered nurse-midwives who had training and experience in family planning service delivery.

A participatory training approach was used to discuss behavioral strategies for increasing the practice of dual protection, for mitigating judgmental responses to the sexual practices of clients or their partners, and for promoting positive attitudes about dual protection and condom use. Sexual desensitization exercises were conducted to help providers become more comfortable in talking about sexual issues. Role plays that addressed how to communicate about sex and how a woman could convince her husband to use condoms were featured throughout the workshop.

Additionally, providers were given male and female condoms and were asked to use them (if possible) and to report their personal experiences. The training also strengthened providers' skills in assessing sexual risk behavior, in counseling about HIV and STIs, and in teaching about condom use. A clinical field practicum that used a standardized dual-protection counseling protocol provided feedback on providers' progress.

• *Introduction of a dual-protection counseling protocol.* The dual-protection protocol was based on the Female-Initiated Protection Paradigm (FIPP).[12] Dual-protection counseling based on this framework integrates HIV and STI education and client risk assessment, reproductive health assessment, STI prevention and treatment (or referral), and condom skills-building, partner negotiation and other behavior-change strategies into traditional family planning counseling.

A central feature of the counseling consists of increasing clients' recognition of their HIV/STI risks and of the role of condoms in dual protection. Providers were trained in how to tailor the counseling to clients' individual needs and situations. They were then given a locally developed dual-protection flip chart,† which helped to standardize the counseling across the six clinics. In addition to seeing posters at the clinics, clients received pamphlets (in both

Yoruba and English) on dual protection and on male and female condom use. The dual-protection intervention became the standard of care in these clinics, and all family planning providers were expected to implement it.

• *Provision of the female condom.* Clients were offered the female condom as part of routine clinical services. (The female condoms were donated by UNAIDS.) Initially, in mid-December 1999, up to three female condoms were given out free (on a trial basis). Later, distribution policies and supply practices were altered: Female condoms were sold for $0.10 each, and the funds were used to purchase supplies for improving infection-control practices at the clinics.

• *Management information system.* Prior to the study, each clinic used a different management information system, and requests for male condoms often were not recorded. Management information system tools were developed to document providers' dual-protection counseling and clients' dual-protection decision-making, as well as to improve recording of clients' acceptance of male and female condoms, including their concurrent use of these methods with other contraceptives (dual method use).

• *Supervision.* Continuing supervision was provided by ARFH, including on-site assessment of clinic conditions and client counseling and monthly meetings with providers for program feedback.

Data Collection

We used a number of quantitative and qualitative data collection strategies in this research. For example, we carried out structured observations of interactions between family planning providers and all new and continuing clients over a 3–4 week period. These observations occurred at two different times in the five largest clinics, which had more than 98% of all clients, and were followed by exit interviews with clients. The objective was to rapidly accrue a large number of observations of family planning clients' experiences. Observers assessed the counseling offered by family planning providers, including whether they discussed HIV/AIDS and sex, initiated an HIV and STI risk assessment, used the dual-protection flip chart, discussed the female condom and demonstrated use of male and female condoms.

The observations were based on a methodology used by the Population Council for a series of situation analysis studies of family planning clinics in Africa.[13] The baseline observations involved 15 service providers (plus nurse trainees) and 325 clients; these were conducted in March and April 1999, prior to the training of providers and the introduction of the female condom. The second set of observations involved 15 service providers (plus nurse trainees) and 289 clients. Referred to as the Time 2 observations, these took place in June and July 2000.

Ten of the providers observed at baseline were also observed at Time 2. No client refused to be observed during her counseling visit. The research team, which consisted of two men and five women, was trained in conducting structured observations of provider-client interactions and in using a detailed checklist. We used chi-square tests to assess changes in client counseling between the two sets of observations.

TABLE 1. Percentage distribution of new and continuing family planning clients interviewed at baseline or at Time 2, by selected characteristics

Characteristic	Baseline (N=175)	Time 2 (N=289)
Marital status		
Monogamous	70.9	76.8
Polygamous	24.0	19.7
Unmarried	5.1	3.5
Age		
15–24	5.7	7.6
25–34	50.3	52.9
35–44	33.7	32.6
≥45	10.3	6.9
Education*		
None	11.4	10.4
Primary only	37.2	28.7
Secondary	30.8	38.4
Postsecondary	20.6	22.5
Heard about AIDS		
Yes	93.7	88.6
No	6.3	11.4
Had multiple sexual partners in past year*		
Yes	7.4	4.8
No	92.6	95.2
Suspected partner had other partners in past year		
Yes	41.1	32.2
No	58.9	67.8
Was ever told she had an STI*		
Yes	17.3	4.5
No	82.7	95.5
Total	100.0	100.0

*Difference between samples is statistically significant at p<.05 by chi-square test.

Client exit interviews were conducted with more than half of the clients observed at baseline (n=175) and with all clients observed at Time 2 (n=289). Except for a few continuing clients, the clients interviewed at Time 2 were not the same as those interviewed at baseline.

Service providers conducted interviews with 47 purposively selected dual-protection acceptors at their follow-up clinic visits in 2000. In addition, 24 focus groups were conducted, four with family planning service providers, four with clients and 16 with groups of men of different ages and socioeconomic status who were representative of the community.

Monthly service statistics and documentation on clients' use of dual protection were collected from each clinic. Finally, in-depth interviews with 10 providers were conducted in August 2001 to assess their personal experiences and reactions to the dual-protection program.

RESULTS

Characteristics of Family Planning Clients

Baseline data (Table 1) indicated that the great majority of clients were married (95%), were in monogamous sexual partnerships (71%) and were aged 25–44 (84%). About half had had at least some secondary education. Nearly all

TABLE 2. Number and percentage distribution of family planning visits, by client type and method, 1999–2001

Client and method	1999		2000		2001*	
	No.	%	No.	%	No.	%
Client type						
New	2,655	17.7	3,792	25.2	1,906	26.4
Continuing	12,347	82.3	11,231	74.8	5,304	73.6
Method						
IUD	9,490	63.3	8,134	54.2	3,949	54.8
Injectables	4,211	28.1	5,199	34.6	2,597	36.0
Pill	966	6.4	726	4.8	310	4.3
Condoms†	335	2.2	964	6.4	354	4.9
Total	15,002	100.0	15,023	100.0	7,210	100.0

*January–June. †Includes male and female condoms (single method only); female condoms were available in the clinics as of mid-December 1999.

(94%) said that they had heard about AIDS. Forty-one percent reported knowing or suspecting that their partner had had other partners in the past year, whereas 7% said that they themselves had had multiple sexual partners. Seventeen percent reported ever having been told by a medical provider that they had an STI.

Few statistically significant demographic differences were found between the two exit-interview samples. However, compared with clients interviewed at Time 2, clients in the baseline sample were less educated, were more likely to report that they had had an STI and engaged in greater sexual risk behavior.

Contraceptive Distribution and Condom Acceptance

Table 2 presents the distribution of family planning visits by the type of client (new vs. continuing) and by the contraceptive method provided during the baseline period in 1999 (before the intervention fully began), in 2000 and during the first six months of 2001. The large majority of visits were by continuing clients, although this proportion decreased from 82% in 1999 to 74% in 2001.

Additionally, visits in which condoms were the only family planning method distributed increased from 2% to 6% in 2000, but decreased to 5% in the first six months of 2001. Changes in the acceptance of other methods seemed to be related to long-term trends rather than to this increase, as use of injectables increased and reliance on the pill and the IUD decreased. It appears that the overall client load did not increase as a result of the intervention, although many other client and management factors may have limited the clinics' client load.

These data, however, greatly underrepresent the impact of the program. When we examined the proportion of all clients who accepted male and female condoms in 2000 and the first six months of 2001, we found that 14% of all family planning visits in 2000 included condom distribution (Table 3). This proportion differs from that shown in Table 2, in that more than half of condom visits in 2000 (54%) involved a client taking condoms along with another contraceptive—i.e., using dual methods. About four-fifths of condom acceptors took the female condom. New family planning clients were more likely to accept a condom (25%) than were continuing clients (10%).

In the initial phases of the project, as we noted earlier, up to three female condoms were provided free for all clients who accepted them, and clients who wanted more were charged $0.10 each. However, after mid-October 2000, all female condoms were sold for $0.10 each, a meaningful cost in the Nigerian context and about five times the cost of the male condom. Thus, in the first six months of 2001, the proportion of all clients accepting a condom decreased to 9%, as free female condoms were no longer available. Most condom acceptance continued to be by new clients who purchased female condoms. Recorded male condom distribution decreased during this period as well. Information on levels of continuing condom use among dual-protection acceptors is not available.

Changes in Provider Practices

A number of changes took place in service providers' counseling of clients as they incorporated dual-protection issues into their family planning counseling practices. Our focus here is on the experience of new clients, because they are expected to have received comprehensive family planning and dual-protection counseling. (Continuing clients often come to the clinic only to receive additional supplies and may receive minimal counseling, although they were expected to be told about dual-protection issues if they had not been counseled previously.)

Observational data on the counseling of new clients indicate that HIV and STI risk assessment and dual-protection counseling increased significantly from baseline to Time 2. Although a large majority of new clients were given a demonstration of the female condom (80%) and were told about dual protection (75%), only between one-fifth and one-half received each of the detailed aspects of the FIPP-based counseling (Table 4).

However, the differences from the baseline measures were dramatic. Discussions of the client's and her partner's sex-

TABLE 3. Number and percentage of visits in which male and female condoms were provided, by selected measures

Measure	2000		2001*	
	N	% of visits	N	% of visits
Type of condom				
All	2,116	14.1†	651	9.0†
Female	1,672	11.1†	576	8.0†
Male	444	3.0†	75	1.0†
Type of use				
Single method	964	45.6‡	354	54.4‡
Double method	1,152	54.4‡	297	45.6‡
Type of client				
New	948	25.0§	453	23.8§
Continuing	1,168	10.4**	198	3.7**

*January–June. †Of all family planning visits. ‡Of all condom visits. §Of all new-client visits. **Of all continuing-client visits. *Note:* From January through October 12, 2000, up to three female condoms were given free to any client who requested them. Beginning October 13, 2001, every client paid 10 naira (US $0.10) per condom.

TABLE 4. Percentage of new client visits in which providers addressed specific components of dual-protection counseling

Indicator	Baseline (N=88)	Time 2 (N=76)
HIV/STI risk assessment and risk reduction		
Discussed client's sexual behavior	19.4	34.2*
Discussed partner's sexual behavior	16.4	35.5*
Discussed HIV/AIDS	12.1	42.1*
Discussed client's STI concerns	9.1	21.1*
Indicated to client that she might have an STI	3.6	22.4*
Discussed how to bring up HIV/STI prevention with partner	3.0	23.7*
Dual protection family planning counseling		
Tailored counseling and education to client's personal situation	28.0	67.1*
Compared HIV/STI protective effects of different family planning methods	7.0	42.1*
Showed client how to use the male condom	10.5	34.2*
Showed client how to use the female condom	†	80.3
Discussed how dual protection could be achieved by either one or two family planning methods	4.7	75.0*
Discussed if client's initially preferred method provided protection against HIV/STIs	2.3	49.2*
Discussed with client how she might convince her partner to use a condom	0.0	18.4*
Used dual-protection flip chart	†	47.4
Distributed brochures	3.8	27.6*

*Difference is statistically significant at p<.05 by chi-square test. †Female condom and dual-protection flip chart were unavailable at baseline.

ual behavior increased from 19% and 16% of visits to 34% and 36%, respectively. Coverage of how to bring up HIV and STI prevention with the client's partner increased from 3% to 24% of the visits observed, while the number of visits in which staff talked with clients about how they might convince their partner to use a condom increased from 0% at baseline to 18% at Time 2.

Counseling tailored to the client's personal situation increased from 28% to 67%. In addition, discussions about the ability of different family planning methods to protect against HIV and STIs increased from 7% of visits prior to the dual-protection intervention to 42% of visits at Time 2. In nearly half (49%) of the Time 2 visits that were observed, providers discussed whether the method that clients had selected (among those who had had an initial method preference) protected against HIV and other STIs. In contrast, such a discussion took place in only 2% of baseline visits. The providers' awareness of the importance of STI assessment was also indicated by the number of clients who were told that they might have an STI, which increased from 4% at baseline to 22% at Time 2.

Although providers demonstrated the female condom at most new client visits at Time 2 (80%), counseling regarding the male condom occurred less frequently. Nevertheless, actual demonstrations of how to use a male condom increased from 11% of visits at baseline to 34% at Time 2. Moreover, an indication of the effectiveness of the counseling is that 42% of new clients were observed to have taken at least one female condom at Time 2 (not shown), although they still were being given out at no charge at that time. Following implementation of dual-protection services, providers used the flip chart in 47% of the new client visits and distributed dual-protection brochures in 28% of visits.

Exit interviews with clients reinforced the findings of the observations (not shown). The proportion of new clients who indicated that they were aware of the concept of dual protection increased from 8% to 50%, and the proportion who responded to an open-ended question that they were aware that condoms can protect them from HIV and other STIs increased from 27% to 51%. Thirty-seven percent of new clients at Time 2 said that they had taken a dual-protection or condom brochure from the provider, compared with just 2% who said at baseline that they had received any educational materials.

In general, new clients received more extensive dual-protection counseling than did continuing clients, although the latter were generally informed of the female condom. For example, only 56% of continuing clients were told of the need for dual protection, compared with 74% of new clients; moreover, 62% of continuing clients were informed about the female condom, compared with 90% of new clients. Only half as many continuing clients as new clients were told about male condoms.

DISCUSSION

The project described here moved the field beyond earlier HIV and STI integration efforts and their analysis in at least four ways. First, it was focused on a systems approach that recognized the interdependence of the family planning service delivery system, providers and clients. Second, we examined the acceptability of dual protection in a society with relatively low levels of family planning use and within a context of routine family planning services in a limited-resource setting. Third, the intervention incorporated the female condom into the contraceptive method mix. Finally, it described the personal involvement of service providers in developing dual-protection services.

Implementation of Dual-Protection Counseling

Evidence from a number of sources suggests that service providers' counseling practices improve as a result of dual-protection training and ongoing monitoring and supervision.[14] In this study, providers informed clients of the concept of dual protection and the extent to which their preferred family planning method provided protection against HIV and other STIs. They also paid more attention to STIs, conducted sexual risk assessments, discussed HIV risk-reduction strategies, demonstrated male and female condom use, and helped clients develop condom-negotiation strategies.

New clients received more extensive dual-protection counseling than did continuing clients. When interviewed, providers said that most continuing clients had already been exposed to dual-protection counseling—which may have been true after the first year of the intervention. Providers also reported that they had limited time for counseling, as continuing clients usually expected that their family planning visit would be brief. Consequently, when faced with large numbers of waiting clients, some providers gave lower

priority to discussing dual protection with continuing clients. Ultimately, the model of dual-protection counseling for continuing clients may need to be different from that for new clients.

Changes in Providers' Values

Meetings and interviews with service providers indicated that providers were committed to promoting dual protection and viewed this new responsibility as their role. They were energized by their awareness that the AIDS epidemic is in its nascent stage and that they were pioneers in promoting dual protection as a viable response. Providers expressed personal concern with preserving the lives of Nigerians. The interviews also revealed that participating in the dual-protection project gave providers newfound confidence and skills in talking about sex, not only with clients but in their personal lives as well. For most, the project made them more aware of their personal vulnerability to HIV and was a catalyst for them to talk about sex and protection with their husbands and other family members. One provider reported that she kept condoms in strategic places in her household and continually replenished the supply.

One unanticipated effect of the project was providers' increased awareness of the need for infection prevention measures for both themselves and their clients. The constant reminders of HIV risk created a sense of vulnerability at work, made providers more aware of the need for infection prevention measures and provoked a sense of self-preservation that contributed to their ability to reorient family planning to dual-protection services. When interviewed, most providers noted that they now understood the importance of universal precautions and of the use of latex gloves and sterilization solutions for their equipment. The income generated from female condom sales has been used to purchase latex gloves and disinfectant.

Identification of Implementation Problems

A number of problems developed as we attempted to implement dual-protection services. Providers appeared not to promote the male condom aggressively. Clients' low and unchanged rates of male condom use suggest a possible continuation of both provider and client bias against the male condom. Other studies have reported that family planning providers are often biased against both male and female condoms and promote them inadequately.[15] However, providers of dual protection reported in individual interviews and monthly meetings that they had not given up promoting the male condom. They believed that because the female condom was new and a female-initiated method, it was more acceptable, especially for women who were unable to convince their husbands to use the male condom. The use of the female condom along with another family planning method—typical of more than 50% of condom acceptors—also likely increased its acceptance. Some acceptors of the female condom, however, reported that they disliked its slipperiness and that their husbands objected to using it.

Providers' perceptions that the female condom is more acceptable than the male condom to their largely married clientele and the association of male condom use with nonmarital partners may have contributed to the limited promotion and acceptance of the male condom. Focus groups with men elaborated the problems that women who brought home male condoms would face, including assumptions that the wife had been unfaithful, that the decision to use a male condom should be made by the man and that the condom might threaten the marital relationship. Other factors identified with a decline in male condom use in 2001 included a lack of supply from the state Ministry of Health and the unrecorded sale of male condoms.

Problems continued throughout the study period with accurately documenting clients' dual-protection status, especially dual method use. Providers found this difficult to accommodate within their clinic reporting routines. Most family planning management information systems afford no room for reporting dual method use. The integration of the dual-protection service registry with the standard clinic reporting forms, implemented on a trial basis in one of the clinics, should help make documentation more complete and make evaluation of the intervention easier.

The relatively high level of dual method use to achieve dual protection (mainly a female condom used along with an IUD or hormonal contraceptive) was unanticipated. It indicates that despite the obvious disadvantages of using two methods, many clients wish to maximize both their protection from pregnancy and their protection from HIV and other STIs. Similar findings have been reported recently from family planning clinics in South Africa where the female condom was introduced.[16]

Substantial numbers of clients, however, were not exposed to dual-protection messages. A primary expectation of the project was that all clients would receive dual-protection counseling, with the flip chart serving as an integral part of routine family planning services. One problem was that some of the trained staff were transferred and were replaced with staff who received inadequate on-the-job training in dual-protection counseling. At Time 2, for example, a substantial number of providers were family planning nurse trainees on short-term assignment. Another problem was that some providers simply forgot to use the flip chart with every client. Underutilization of the flip chart was subsequently addressed through in-service training.

Although we had expected greater use of the dual-protection flip chart, it nevertheless was regarded as a major innovation and a key to making the integration of dual-protection concepts into traditional family planning counseling more concrete. In the monthly meetings and interviews, providers described how using the flip chart structured their counseling: It provided a memory aid and prevented them from skipping core information, and it helped clarify concepts for clients and presented important prevention concepts using culturally appropriate illustrations.

Given that all stakeholders in the project—investigators, providers and clients—concluded that family planning clients' male partners are the major impediment to dual protection

adoption, we recently implemented intervention activities that target male partners of clinic clients. As Yoruba culture generally considers the male to be dominant in regard to family matters, the ultimate effectiveness of dual protection will rest with enlisting the support of male partners.

Limitations

The lack of comparison family planning clinics not exposed to the intervention limits our ability to conclude definitively that the changes in providers' counseling were related to the intervention. However, since dual protection was introduced only by ARFH and the female condom is available only in the study clinics, providers had limited potential to be exposed to dual-protection concepts outside of the study. Further, we cannot be certain that providers' awareness of being observed by the research staff did not influence their behavior. However, most reports of similar observation methodologies suggest that after an initial reaction, people who are being observed return to their typical behavior patterns. Finally, each service provider was observed with multiple clients, and most provided counseling at both baseline and Time 2. Therefore, assessments of provider practices in the observations are correlated, which would lead to inflated standard errors and p-values. This issue is of minor importance in our current analysis, however, as its focus is on the changes in the overall experience of clients rather than on changes at specific clinics.

Sustainability

ARFH staff had been concerned about sustaining dual-protection services in the clinics after project funding ends. Although an unlimited supply of female condoms has not been assured at the time of this report, other elements important to sustainability are in place. Most important, the commitment of the providers to the goals of dual-protection programming will help ensure that the counseling intervention will continue. Clinic managers' participation in project planning and management has helped to ensure that top-level staff members have bought into the program. Support of dual-protection services, in terms of the flip charts, brochures and posters, are in place. Dual-protection concepts are now being incorporated into other ARFH projects and consultant services, including work with private medical practitioners and in youth projects with the Oyo State Ministries of Health and Education.

The problems reported here are probably indicative of the usual provider difficulties in dealing with changes in fundamental family planning service provision and of the difficulties of providing clinic services in a low-resource environment. Despite these problems, substantial changes have been made, and we expect that they will continue to be implemented.

CONCLUSIONS

Dual-protection services increased condom uptake in the participating Ibadan family planning clinics, mainly as a result of female condom introduction and through dual method use. Family planning providers have made cognitive and attitudinal changes that are crucial to promoting and sustaining the dual-protection initiative, assisted by both an intensive two-week initial training and continuing supervision. The involvement of clinic managers and service providers in the design of the dual-protection intervention facilitated their commitment to change. In addition, a system for integrating dual-protection counseling into traditional family planning education, in the form of a detailed flip chart using locally drawn illustrations, proved an important aid in the dual-protection counseling of clients.

Although providers' attitudes about condoms are an important factor in dual-protection promotion, the attitudes and behaviors of clients and their partners must also be considered in gauging the success of the intervention. Men's objections to both male and female condom use have been important in this setting.[17] With a substantial proportion of clients reporting that they suspect their partner has had other partners, the HIV and STI risk of family planning clients is a reality. Our experience points to the potential value of the female condom, used either alone or in conjunction with other contraceptives, as a facilitator of dual-protection practices.

The need to expand the scope of the intervention beyond clinic-based dual-protection services for women is essential. Data from Phase 2 of the intervention, which will include clinic-based and community-based activities targeting men, the follow-up of dual-protection acceptors and a management assessment of clinic practices, will further our understanding of ways to foster dual-protection practices within family planning services in Nigeria.

REFERENCES

1. Kisubi W, Farmer F and Sturgis R, *An African Response to the Challenge of Integrating STD/HIV-AIDS Services into Family Planning Programs,* Nairobi, Kenya: Pathfinder International, 1997; Baakile B et al., *A Situation Analysis of the Maternal and Child Health/Family Planning (MCH/FP) Program in Botswana,* Gabarone, Botswana: Ministry of Health MCH/FP Unit, Family Health Division, and New York: Population Council, 1996; Miller K et al., *Clinic-Based Family Planning and Reproductive Health Services in Africa: Findings from Situation Analysis Studies,* New York: Population Council, 1998; Becker J and Leitman E, Introducing sexuality within family planning: the experience of three HIV/STD prevention projects from Latin America and the Caribbean, *Quality/Calidad/Qualité,* No. 8, 1997; Best K, Many clients need dual protection, *Network,* 2001, 20(4):4–7; Askew I et al., Demand for and cost-effectiveness of integrating RTI/HIV services with clinic-based family planning services in Zimbabwe, New York: Population Council, 1999; and Askew I and Maggwa N, Integration of STI prevention and management with family planning and antenatal care in Sub-Saharan Africa—what more do we need to know? *International Family Planning Perspectives,* 2002, 28(2):77–86.

2. O'Reilly KR, Dehne KL and Snow R, Should management of sexually transmitted infections be integrated into family planning services: evidence and challenges. *Reproductive Health Matters,* 1999, 7(14):49–59.

3. Shelton JD, Prevention first: a three-pronged strategy to integrate family planning program efforts against HIV and sexually transmitted infections, *International Family Planning Perspectives,* 1999, 25(3):147–152; Cates W, Jr., and Stone KM, Family planning, sexually transmitted diseases and contraceptive choice: a literature update—Part 1, *Family Planning Perspectives,* 1992, 24(2):75–84; and Cates W, Jr., Contraception, unintended pregnancies, and sexually transmitted diseases: why isn't a simple solution possible? *American Journal of Epidemiology,* 1996, 143(4):311–318.

4. Miller K, Jones H and Horn MC, Indicators of readiness and quality: basic findings, in: Miller K et al., eds., *Clinic-Based Family Planning and Reproductive Health Services in Africa: Findings from Situation Analysis Studies,* New York: Population Council, 1998.

5. Stein Z, Family planning, sexually transmitted diseases, and the prevention of AIDS—divided we fail? *American Journal of Public Health,* 1996, 86(6):783–784.

6. Mantell JE et al., The acceptability of the female condom: perspectives of family planning providers in New York City, South Africa, and Nigeria, *Journal of Urban Health,* 78(4):658–668.

7. Askew I, Fassihian G and Maggwa N, Integrating STI and HIV/AIDS services at MCH/family planning clinics, in: Miller K et al., eds., 1998, op. cit. (see reference 4).

8. National AIDS Control Programme, *Annual Report 2001,* Abuja, Nigeria: Ministry of Health, 2001.

9. World Bank Institute, *Confronting AIDS: Public Priorities in a Global Epidemic,* Washington, DC: World Bank Institute, 1997.

10. National Population Commission, *Nigeria Demographic and Health Survey 1999,* Calverton, MD, USA: ORC/Macro, 2000; Orubuloye IO, Caldwell JC and Caldwell P, Perceived male sexual needs and male sexual behaviour in Southwest Nigeria, in: Caldwell JC et al., eds., *Towards the Containment of the AIDS Epidemic: Social and Behavioural Research,* Canberra, Australia: Health Transition Centre, Australian National University, 2000; Orubuloye IO et al., The role of high-risk occupations in the spread of AIDS: truck drivers and itinerant market women in Nigeria, in: Orubuloye IO et al., eds., *Sexual Networking and AIDS in Sub-Saharan Africa: Behavioural Research and the Social Context,* Health Transition Series, Canberra, Australia: Health Transition Centre, Australian National University, 1994, No. 4; Caldwell JC et al., The social context of AIDS in Sub-Saharan Africa, in: Orubuloye IO et al., eds., *Sexual Networking and AIDS in Sub-Saharan Africa: Behavioural Research and the Social Context,* Health Transition Series, Canberra, Australia: Health Transition Centre, Australian National University, 1994, No. 4; and Messersmith LJ et al., Who's at risk? Men's STD experience and condom use in Southwest Nigeria, *Studies in Family Planning,* 2000, 31(3):203–216.

11. Mantell JE et al., Introducing the female condom through the public health sector: experiences from South Africa, *AIDS Care,* 2000, 12(5): 589–601.

12. Mantell JE and Weiss E, Dual protection against unwanted pregnancy and HIV/STDs, *Sexual Health Exchange,* 1999, No. 3, p. 8; and Mantell JE, Weiss E and Scheepers E, The female-initiated protection paradigm: promoting dual protection within family planning services, unpublished manuscript, 1997.

13. Miller R et al., *The Situation Analysis Approach to Assessing Family Planning and Reproductive Health Services,* New York: Population Council, 1997.

14. Becker J and Leitman E, 1997, op. cit. (see reference 1); and Abdel-Tawab N et al., Integrating issues of sexuality into Egyptian family planning counseling, New York: Population Council, 2000.

15. Abdool Karim Q, Abdool Karim SS and Preston-Whyte E, Accessibility of condoms to teenagers at family planning clinics in Durban. Part II: A provider's perspective, *South African Medical Journal,* 1992, 82(5):360–362; Feldblum P et al., Female condom introduction and sexually transmitted infection prevalence: results of a community intervention trial in Kenya, *AIDS,* 2001, 15(8):1037–1044; Mqoqi N et al., *The National Introduction of the Female Condom and Emergency Contraceptive Pills Program, Pilot Phase–Final Report,* Johannesburg, South Africa: Reproductive Health Research Unit, Chris Hani-Baragwanath Hospital, 2000; and Mantell JE et al., 2000, op. cit. (see reference 11).

16. Nutley T, National public sector introduction of the female condom in South Africa, paper presented at the USAID Technical Update on the Female Condom, Dec. 18, 2001, Washington, DC.

17. Mantell J et al., The impact of male gender roles on HIV risk in southwest Nigeria, paper presented at the annual meeting of the American Public Health Association, Atlanta, GA, USA, Oct. 21–25, 2001.

RESUMEN

Contexto: *Debido a la creciente epidemia del VIH en el Africa Subsahariana, es necesario integrar con urgencia todos los esfuerzos que se realizan para prevenir el VIH y las infecciones transmitidas sexualmente (ITS) y la promoción del uso del condón, a los servicios de planificación familiar.*

Métodos: *Se introdujeron servicios de consejería en materia de doble protección–la protección simultánea contra el embarazo no planeado y el VIH y otras ITS–junto con la oferta del condón femenino en seis clínicas de planificación familiar en Ibadán, Nigeria. Para evaluar la promoción de la doble protección ofrecida por los proveedores, se observaron en forma estructurada la interacción entre las clientas y los proveedores, se llevaron a cabo entrevistas a los proveedores y recabaron estadísticas de servicios clínicos, además de otros métodos cualitativos y cuantitativos.*

Resultados: *Después de recibir capacitación intensa, los proveedores ofrecieron consejería sobre la doble protección a la mayoría de las clientas y demostraron el uso del condón femenino al 80% de las clientas nuevas observadas. Aumentaron significativamente las discusiones con clientas sobre su comportamiento sexual con su pareja, sobre la relativa capacidad de los diversos anticonceptivos para prevenir la infección del VIH, y sobre la manera de influenciar al pareja que use el condón. Igualmente, aumentaron los esfuerzos de evaluar el riesgo de las ITS. La interiorización por parte de los proveedores acerca de la importancia de la prevención del VIH/SIDA fue crucial para la promoción y mantenimiento de la iniciativa de la doble protección. Aumentó la compra de condones, desde el 2% de todas las visitas a las clínicas de planificación familiar en 1999 al 9% entre enero y junio de 2001. Este aumento se debió principalmente al aumento del uso del condón femenino, utilizado en forma independiente o junto a otros anticonceptivos.*

Conclusiones: *La integración de la consejería en materia de doble protección y el suministro del condón femenino en los servicios de planificación familiar parece ser una iniciativa viable; es igualmente posible la aceptación por parte de los proveedores de los objetivos de la doble protección. Si bien los proveedores y las clientas son un factor clave para transformar la planificación familiar para ofrecer servicios de doble protección, también la actitud y el comportamiento de los hombres deben ser considerados seriamente para lograr éxito con esta iniciativa de doble protección.*

RÉSUMÉ

Contexte: *L'escalade de l'épidémie du VIH en Afrique subsaharienne crée un besoin urgent d'intégration des efforts de prévention du VIH et autres infections sexuellement transmissibles (IST) et de la promotion du préservatif dans le cadre des services de planning familial.*

Méthodes: *Les conseils sur la double protection–la protection simultanée contre des VIH/IST et la grossesse non planifée–et l'offre du préservatif féminin ont été introduits dans six cliniques de planning familial d'Ibadan, au Nigéria. L'observation structurée des échanges entre clientes et prestataires, les statistiques de prestations dans les cliniques et les interviews de prestataires ont servi, entre autres méthodes qualitatives et quantitatives, à évaluer la promotion de la double protection par les presta-*

taires du planning familial.
Résultats: *Après formation intensive, les prestataires offraient des conseils de double protection à la majorité de leurs clientes et démontraient l'usage du préservatif féminin à 80% des nouvelles clientes observées. La discussion du comportement sexuel des clientes et de leurs partenaires, de la capacité relative de protection contre le VIH offerte par différents contraceptifs et de la manière de négocier l'usage du préservatif, a augmenté significativement, de même que l'évaluation des IST. L'intériorisation par les prestataires de l'importance de la prévention du VIH/sida s'est avérée essentielle à la promotion et à la durabilité de l'initiative sur la double protection. Les achats de préservatifs ont augmenté, d'un point de référence de 2% de l'ensemble des consultations de planning familial en 1999 à 9% entre janvier et juin 2001. Cet accroissement est dû principalement à l'acceptation du préservatif féminin, utilisé seul ou en combinaison avec un autre contraceptif.*
Conclusions: *L'intégration des conseils de double protection et de l'offre du préservatif féminin dans les services de planning familial semble praticable, de même que l'acceptation par les prestataires des objectifs de la double protection. Si les prestataires et clientes représentent les intervenants clés de la transformation du planning familial vers les services de double protection, il faudra tenir compte des perceptions et comportements des partenaires masculins des clientes dans l'évaluation du succès de l'initiative.*

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