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FAMILY PLANNING OUTREACH IN THE PHILIPPINES

Final Report on the Community Outreach Surveys

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EXECUTIVE SUMMARY

The 1978 and 1980 Community Outreach Surveys (COS) were undertaken for the purpose of evaluating the Outreach Project of the Philippine Commission on Population. Interviews were conducted with representative samples of Full-Time Outreach Workers (FTOWs), Barangay Service Point Officers (BSPOs), and wives living in the areas served by the sample BSPOs. In addition, selected information was transcribed from records kept at the barangay service points (BSPs) and a complete enumeration of the households in each of the BSP areas was conducted, including the collection of data on contraceptive practice for all married couples of reproductive age (MCRA). Most of the data reported here are from the 1980 COS, when the survey covered 359 FTOWs, 355 BSPOs and their BSP areas, and 4,320 married women in the ages 15-49.

Major Findings

The findings summarized here are the ones deemed most relevant to program managers. For a more comprehensive overview of the findings as a whole, see the final subsection of each major section of the full report. The findings presented here are listed in the same sequence as in the full report.

Profiles of FTOWs and BSPOs

Both FTOWs and BSPOs were predominantly women (70 percent and 85 percent, respectively). The FTOWs were relatively homogenous with regard to age, two-thirds of them falling in the 25-34 range; the mean age was 30. The BSPOs' ages varied more and tended to be higher, the mean being 36 years. Nearly all the BSPOs were married, whereas about one-third of the FTOWs were still single. In terms of a variety of socio-economic indicators, BSPOs tended to be better off than the MCRA in their areas, and the FTOWs tended to be better off than the BSPOs.

About two-thirds of the married FTOWs and BSPOs said they were currently using contraceptive methods, as against less than half of the MCRA. However, their expected family size, when standardized for variations in age, did not differ appreciably from that of the MCRA, and the average number of children they said they thought best for a typical family in the sample BSP area was close to the average of 3.7 stated by the MCRA, despite the fact that POPCOM's official goal is to reduce the average number of children per family to only two by the year 2000.

Training of FTOWs and BSPOs

Whereas virtually all of the FTOWs and about half of the BSPOs had been formally trained by 1980, a majority felt they needed additional training in each of the major training topics. FTOWs were asked to select from among seven basic topics the ones in which they felt most in need of refresher training. The topic by far most commonly selected was "techniques for motivation and communication."

Responses of both FTOWs and BSPOs to questions about contraceptive methods indicated a low degree of knowledge about relative use effectiveness, the best time for initiating contraceptive practice following childbirth, appropriate methods for breastfeeding women, and the timing of the fertile period in relation to menstruation.

The FTOW's Territory

Most of the FTOWs reported that they had received support from municipal officials. Only one-seventh of them reported the presence of organized opposition to family planning within their territories. Almost all the opposition that was cited was attributed to Roman Catholic Church-affiliated groups. Most FTOWs reported the presence in their territories of workers of the Ministry of Health (MOH), the Ministry of Social Services and Development (MSSD), the Bureau of Agricultural Extension (BAEx), the Ministry of Local Government and Community Development (MLGCD), and the national nutrition program. Though nearly all the MOH personnel were seen as actively involved in family planning promotion, the proportion of other types of workers seen as active in family planning work ranged from less than half to 86 percent, depending on the agency.

Two-thirds of the FTOWs reported that they had referred clients to a clinic within the month preceding the interview; the mean number of referrals per FTOW during that month was 3.2. Similarly, 63 percent said that one or more clients had been referred to them for follow-up during the month before the survey, but only about half said they had followed up all or even most of the clients referred to them for follow-up. Most FTOW territories were served by at least one clinic or hospital, but only one-fourth had been visited by an itinerant team during the year preceding the COS.

By 1980, an average of 15 BSPs had been established per FTOW, and an average of five more were expected to be established in the future. Nearly half of the FTOWs said that they would not be able to cover all their BSPs (including those not yet established) and devote as much time to each as they thought they should.

BSP establishment had started with relatively remote, rural BSPs and been followed by establishment of more urban BSPs. Nevertheless, at the time of the 1980 COS, about half of the BSPs still to be established were located in remote or "critical" areas.

BSPOs and BSP Areas

BSPOs were more likely than not to have been selected in consultation with barangay officials or other residents of the barangay rather than by the FTOW alone. Three-fourths of the BSPOs active in 1980 were the same ones initially selected; the remainder had replaced the original BSPO. Most of the BSPOs who had resigned had done so either because they found the work too time-consuming or because they had moved out of the BSP area.

The BSPs greatly reduced the amount of time required for residents of the area to travel for supplies and services. The median travel time to the BSP was only five minutes as opposed to twenty minutes to the nearest poblacion (where full clinics are usually located) and about fifteen minutes to the nearest barangay health station (in those areas served by such satellite clinics).

The mean number of MCRA living in each BSP area was 84 to 87, depending on the definition of MCRA. However, the size of the BSP, both in terms of population and geography varied widely. The number of couples in the sample BSPs ranged from 19 to 351 and would have varied even more had it not been for the fact that the largest and smallest BSPs were systematically excluded from the sampling frame. The time required to enumerate the BSPs ranged from less than eight man-hours (in 2.6 percent of the BSPs) to 80 man-hours or more (in 2.3 percent). The time required to reach the farthest residence in the BSP area ranged from less than five minutes (26 percent) to more than 90 minutes (5 percent).

Seven percent of the sample BSPs in 1980 had no condoms on hand, and 17 percent had no pills. However, the great majority of BSPs were amply stocked with supplies of both types in relation to the numbers usually given out in a month. Most of the BSPs had at least a three-month supply of condoms and a six-month supply of pills. Nevertheless, 26 percent of the BSPOs said they needed more condoms or pills or both.

Nearly two-thirds of the BSPs in 1980 had no printed IEC materials at all, even for the reference of the BSPO. Only very small proportions (less than ten percent) indicated that they had multiple copies of specified types of printed IEC materials. Comic books, which are the most popular of the printed materials, were in especially short supply; only 2.3 percent of the BSPOs reported that they had multiple copies, and 1.4 percent said they had given out comic books during the month preceding the survey. Language presented an added problem in some areas, especially in those areas (about one-third of the BSPs) where a dialect other than Tagalog or Cebuano was preferred.

Barangay officials were reported to have been actively involved in family planning promotion in about two-thirds of the BSP areas during the year preceding the survey, and clinic-based workers had been active within the preceding three months in at least three-fourths. However, the proportions of BSP areas with other types of field workers active during the preceding three-month period ranged from 29 to 43 percent.

BSP Records

According to the FTOWs, the baseline surveys of couples in the BSP areas had been completed in 88 percent of the BSPs established by 1980. However, in the enumeration of the BSP area by the COS teams, it was found that only about half of the couples residing in the sample BSP areas had in fact been listed in the BSP records. In nearly all the BSPs, at least some couples who should have been counted in the BSP records were omitted. In some cases, couples were omitted because they had married or moved into the BSP area since the time the baseline survey had been completed, but in many cases, it appears that they were simply missed at the time of the survey. Although the BSPs were supposed to be resurveyed annually, most were not. Sixty-two percent of the BSPs had not been surveyed during the twelve months preceding the COS.

The degree of error in counting MCRA was compounded by the fact that the definition of MCRA varied from one BSP to the next and that the records often listed cases who should not have been included, such as couples who had moved away, wives who were too old to be fecund, and single individuals. Thus, of the average of 72 couples listed per BSP, only 42 on the average were found to be currently married, fecund (or surgically sterilized), and resident in the BSP area.

One reason for the incomplete survey work may have been that many FTOWs received little or no help from the BSPO. About half reported no help at all from the BSPO in surveying the sample BSP; only one-third reported that the BSPO did half the work or more.

The BSP records were also deficient in reporting contraceptive practice. They tended to over-report use of condoms by a wide margin and use of pills by a relatively small margin; they tended to undercount use of sterilization, rhythm, and non-program methods, especially withdrawal and abstinence. The reason for the overcounting of use of condoms and pills (the two methods provided by the BSP) appears to have been due to failure to update records. Pill and condom recipients tended to remain on the records as users of these methods long after the supplies received would have run out, since service dates were often not recorded and systematic efforts were rarely made to follow up couples who did not return for resupply. Even in case where dates were recorded and a "deadline" date for the next contact was indicated (presumably to guide the FTOW and BSPO in scheduling home visits), the "deadline" was usually already long past.

Field Operations

FTOWs indicated that they worked an average of about 40 hours a week, excluding leave time. Their time was allocated primarily to motivational activities, primarily through personal contacts with couples, and with establishing and maintaining BSPs. They said they spent relatively little time on municipal planning, helping with non-

family planning activities, coordinating with fieldworkers of other agencies, or premarital counseling. Nevertheless, one-third said they considered the primary objective of their work to be promoting general development rather than promoting family planning practice.

Most of the sample BSPs had been visited by the FTOW during the month preceding the survey, some of them more than once. The median duration of the last visit was 2.4 hours. Allowing for travel time, it is estimated that about one-third of the FTOWs' time each month was occupied in visiting BSPs. Since most of the activities the FTOWs said occupied most of their time would be done during these visits, it is not clear how most of the remaining two-thirds of the FTOWs' working time was spent.

One-fifth of the FTOWs who had worked during the week before the COS interview said they had done no home visits during that week. The mean number of home visits reported for that week was 13.5, and the median was 8.1. However, the mean number indicated by written records kept by about one-third of the FTOWs was 12.1. Assuming that the written records are more accurate, the estimated annual number of home visits was about 630 -- a ratio of one for every three MCRA. Since many MCRA are visited more than once in a year, the proportion of MCRA who were visited at least once was probably much less than one-third.

During the week preceding the COS interview, 28 percent of the FTOWs had given out one or more leaflets and 10 percent had given out one or more comic books, including both distribution directly to MCRA and (probably more commonly) distribution to intermediaries, such as BSPOs, local officials, and field workers of other agencies. To a large extent the small proportion of FTOWs who distributed materials is attributable to a lack of supply. Only half of the FTOWs said they had extra copies of leaflets and one-fifth said they had extra copies of comic books for distribution at the time of the survey. Their responses when asked how many they would like to distribute each week indicated that they felt they needed about three times as many leaflets and nineteen times as many comic books as they had distributed during the week preceding the COS interview.

A major element of POPCOM's IEC activities is the production and broadcasting of radio programs. Such programs are expected to augment the face-to-face efforts of the FTOWs. When asked whether they knew of a radio program on family planning that could be heard by MCRA in their territories, 43 percent of the FTOWs said yes, and the great majority said they recommended that MCRA listen to it. However, they do not appear to have informed their BSPOs about such programs; of the BSPOs whose FTOWs said they knew of a radio program, only 44 percent said they also knew of a program. Even in the 70 cases where both the BSPO and the FTOW said there was a program, the great majority of the paired responses indicated different programs. Thus there appears to have been little systematic linkage between radio broadcasts and the motivational efforts of FTOWs and BSPOs.

Only about half of the FTOWs said they were willing to provide initial pill supplies to a couple, even if they had no discernible contraindications and lived too far from a clinic where they could go to get a prescription.

Though BSPOs were less likely than FTOWs to have participated in the BSP survey, their involvement in home visiting and other motivational activities in the BSP area appears to have been, on the average, about equal to that of the FTOW. BSPOs were especially likely to have been active if they had been trained. About half of the BSPOs reported that they had done no home visits during month before the COS interview. The mean number of home visits per BSPO per month was 3.5.

Of the 355 interviewed BSPOs, eleven reported that special family planning clubs had been established in their BSP areas, and they were unanimous in saying that they felt that such clubs were worth the effort involved in establishing and maintaining them. Nearly half of the BSPOs reported that clubs established in their barangays primarily for other purposes included family planning instruction and promotion among their activities.

Support and Satisfaction of FTOWs and BSPOs

About half of the FTOWs said they were satisfied with the supervision and guidance they received from their District Population Officers (DPOs). However, one-fourth said they felt the DPO should spend more time in the field or assist more in IEC work. One-third reported that the DPO had not visited their territories during the month preceding the COS interview. Most of them reported that they visited the DPO's office at least once a month.

Only five percent of the FTOWs expressed satisfaction with their salary level, in spite of a pay increase that occurred during the course of the COS field work. The median preferred monthly salary was 600 pesos, 22 percent higher than the revised salary level of 490 pesos. Similarly, only 11 percent were satisfied with travel reimbursement levels; preferred levels ranged around 250 pesos, as opposed to a mode of 170 pesos at the time of the 1980 COS. Payment of travel reimbursements and salaries was often delayed: 59 percent of the FTOWs reported delays of more than two weeks in the payment of travel reimbursements and 21 percent reported similar delays in the payment of salaries.

Most FTOWs said they found their work moderately difficult or very difficult, and comparison between 1978 and 1980 data indicated an increasing perception of the work as difficult. When asked about work satisfaction, 18 percent of the FTOWs interviewed in 1980 said they were "not so satisfied" or "dissatisfied." FTOWs who were less than "very satisfied" were asked for suggestions for making their work more satisfying; by far the most common suggestion was to increase salaries or allowances. Other recurrent suggestions were to provide for prompt payment of salaries and allowances, improved travel provisions, improved provision of supplies (especially IEC materials), and better management in general.

Most of the BSPOs said they felt they were visited frequently enough by the FTOW. Though they were not paid salaries, about one-fifth of the BSPOs said they had received some sort of incentive, mostly inexpensive non-monetary gifts, since becoming BSPOs. About one-sixth of the BSPOs reported membership in a BSPO association, which provided guidance for their work.

As with the FTOWs, a substantial minority (17 percent) of BSPOs said they were less than moderately satisfied with their work; again, the main concern seemed to be with remuneration; two-thirds of the BSPOs who were less than "very satisfied" recommended some form of payment or reimbursement for BSPOs. A distant second suggestion (12 percent) was to provide more training.

Wives' Exposure to Program Communications

Among mass media, the one through which by far the largest proportion of wives had been exposed to family planning messages during the year preceding the COS was radio. Fifty-nine percent of the wives said they had heard about family planning on the radio during that year. The next most common medium, newspapers, was cited by only 30 percent. Regardless of the specific type of medium, exposure to family planning messages through mass media was strongly correlated with educational attainment.

The proportions who said that, during the year preceding the COS, they had seen particular types of printed IEC materials produced by the family planning program ranged from nine to 27 percent, but the proportions who said they had actually been given such materials were much lower, ranging from four to eight percent. Nearly all the wives who had not seen such materials expressed interest in seeing them.

On the interpersonal level, wives were most likely to say they had discussed family planning during the past year with friends, relatives or neighbors (72 percent) or with husbands (66 percent). They were much less likely to say they had discussed family planning with school teachers (26 percent), local officials (22 percent) or religious leaders (11 percent). Nearly one-third said they had talked with medical or paramedical persons, but only 18 percent with BSPOs, 10 percent with FTOWs, and from three to five percent with various types of field workers representing partner agencies. Fifteen percent said they had discussed family planning with Outreach workers (FTOWs and BSPOs) but not with medical or paramedical workers. Wives were twice as likely to report discussions with formally trained BSPOs as with BSPOs who had not yet received formal training. FTOWs and BSPOs both tended to concentrate their attention on wives who lived near the BSP and were therefore more accessible.

Only three percent of the wives were aware of clubs in the barangay that had been established to promote family planning, and less than one percent said they were members of such clubs. Even in barangays where

the BSPO said such a club had been established, only 15 percent of the wives indicated awareness of the club's existence.

Wives' Family Planning Attitudes and Knowledge

About two-thirds (68 percent) of the wives said they did not want more children than they already had. Fifty-five percent said they thought their husbands wanted no more children. Thus husbands were seen as wanting more children than their wives. Comparison of the 1978 and 1980 COS findings indicated a decreasing desire for additional childbearing among women with two or more children.

Nearly three-fourths (72 percent) of the wives said they approved of modern contraceptives "like pills, IUDs, or sterilization." In contrast, only 62 percent perceived that their husbands approved of such methods. Approval was positively associated with a variety of indicators of socio-economic status and communication about family planning. Catholic and Protestant respondents did not differ in attitude, but members of the Iglesia ni Cristo were more likely than Catholics to approve, and Muslims were less likely to approve.

Willingness to try contraceptive methods tended to vary in the same manner as approval of family planning. In addition, willingness to try specific methods was correlated with the perceived effectiveness of the method relative to others.

As might be expected, on the basis of the low knowledge of FTCWs and BSPOs about specific details concerning contraceptive practice, the knowledge of the wives was very low, although their awareness of the program methods was high. Even among users of rhythm, knowledge about the timing of the fertile period was low. The great majority of the wives said they were not aware of the difference between vasectomy and castration; less than five percent were able to describe the difference correctly.

Contraceptive Practice

The most important finding concerning contraceptive practice was that use of relatively ineffective methods was much more widespread than use of the highly effective clinical methods (pills, IUD, and sterilization). Despite the availability of pills in the BSP, only five percent of the MCRA were relying on this method in both 1978 and 1980. There was an apparent increase in use of clinical methods as a whole, from 11 to 14 percent, all of it attributable to increasing use of female sterilization.

According to the survey data, 45 percent of the MCRA in BSP areas in 1980 were using some method of contraception, more than half of them relying on rhythm, withdrawal, or a combination of the two. However, there is evidence that the use of the less effective methods was over-

reported in the COS; the actual prevalence rate may have been closer to 40 percent.

Substantial minorities of users admitted to some degree of incorrect use, ranging from 11 percent of pill users to 27 percent of rhythm users. These figures probably understate the actual degree of incorrect use. Analysis of retrospective data on contraceptive use and the incidence of pregnancy indicates that the use effectiveness of pills was much lower than that of the IUD, indicating a high degree of misuse of the pills, probably mostly in the form of forgetting to take them everyday. Users of rhythm, withdrawal, and condoms all had very high failure rates, also indicating widespread misuse. However, combinations of pairs of these methods were used much more successfully, their effectiveness rivalling that of pills.

In terms of continuation, the best methods appeared to be the IUD and combinations of less effective methods, which tended to be used continuously for 30 months or more at a time. The methods least likely to be used continuously were condoms (five months) and abstinence (six months).

In assessing the advantages of the current method, users tended to place greatest emphasis on the absence of side effects, with much less attention given to perceived effectiveness and still less to convenience. In reporting disadvantages, they also expressed primary concern with side effects, but the relative importance of perceived effectiveness and convenience was reversed.

When asked why they did not use any contraceptive method, most non-users said either that they had no need for it because of pregnancy, amenorrhea, sterility, or sexual inactivity or that they wanted to have another pregnancy. Only eight percent of the wives said they were not using contraception and not otherwise protected from unwanted pregnancy. Couples in this category are prime candidates for motivational efforts.

Nearly half (44 percent) of the users cited a doctor, nurse, or midwife as their chief source for their current method. Friends (22 percent) and husbands (15 percent) were next most commonly cited. Only eight percent cited the BSPO and three percent the FTOW. Thus, the BSP as a service point was not contributing much to contraceptive prevalence. In part this was probably due to the fact that less than half of the interviewed MCRA were aware of the services offered by the BSP.

Cross-classification of current supply source by referral agent (i.e., the person who informed the respondent about the supply source) indicates a very low incidence of referrals to clinics or barangay health stations by Outreach workers or referrals to BSPs by medical or paramedical personnel. Friends, relatives, and neighbors were more likely to have referred wives to clinics than to BSPs, but it is not clear whether this is because the BSPs are less well known or because they are less popular.

Differentials in contraceptive practice tended to follow much the same pattern as differentials in attitudes toward modern methods. In general the differentials tended to be greater for clinical methods than for the less effective methods, probably reflecting mostly a lower degree of reliability in the reporting of use of the latter.

Outreach Project Effects on Contraceptive Prevalence

A multivariate analysis of variations in contraceptive prevalence at the BSP level indicates that the Outreach Project has had an appreciable effect on contraceptive prevalence. After controlling for variations in socio-economic development of the BSP areas and for other (non-Outreach) program inputs, it was found that Outreach variables explained 17 percent of the residual variation in prevalence of clinical methods and 13 percent of the residual variation in overall prevalence of contraception as a whole.

Moreover, particular Outreach variables were identified as having statistically significant effects. The Outreach determinants of prevalence of both clinical methods and all methods as a whole tended to cluster around five dimensions:

1) the BSPO's and FTOW's experience with clinical methods;
2) an emphasis on personal contact in motivational activities;
3) referral of clients to clinics;
4) training of the BSPOs; and
5) support of the FTOW, as evidenced by number of printed IEC materials on hand.

Aspects of the Outreach Project that did not appear to have any independent effect on prevalence included distribution of IEC materials, background characteristics of FTOWs and BSPOs, and measures relating to FTOWs' and BSPOs' job satiafaction.

Several of the Outreach determinants are subject to some degree of program control, and it is estimated that improvements in these inputs could have the effect of adding several percentage points to the prevalence levels observed in 1980.

Implications

The findings from both the 1978 and 1980 COS indicate that the Outreach Project has been functioning well in many ways. Most FTOWs and BSPOs appear to have been well selected in terms of personal characteristics, including contraceptive practice; large numbers of BSPs had been established by 1980, covering about two-thirds of the MCRA outside Metro Manila; most BSPOs were well stocked with pills and condoms; many BSPOs, despite their status as unpaid volunteer workers, were actively involved in home visiting activities and referral of clients to clinics; most FTOWs were assisting clinics in efforts to follow up their clients; and

awareness about, attitudes toward, and practice of contraceptive methods tended to be high among couples living in BSP areas. In addition, the multivariate analysis of data from the 1980 COS indicates that Outreach efforts had had a substantial effect on contraceptive prevalence in the BSP areas.

However, the COS findings also point to important weaknesses, many of which might be dealt with through improved management and support services. Following is a list of suggestions for such improvements that appear to be implied by the COS findings.

1. FTOWs appear to need more training especially in contraceptive methods, motivational techniques, record-keeping and reporting, and administration of the checklist for screening potential pill acceptors.

2. Since BSPOs appear to benefit from formal training, efforts should be made to provide such training for all of them. Furthermore, since most of those who have been trained feel they need more training, it may be worthwhile to revise and or extend the training curriculum for BSPOs.

3. The tendency of FTOWs and BSPOs to say they think the ideal number of children for MCRA in their areas is about 3.5 or more and to expect to have similar numbers of children themselves suggests a need to reorient them to POPCOM's long-range goal to limiting families to two children by the year 2000. If this goal is to be reached, it seems essential that program personnel promote a family size of three children or less during the 1980s.

4. The prevalence of serious deficiencies in the BSP records indicates a need for major improvements in this regard. A uniform definition of MCRA should be adopted, FTOWs and BSPOs should be better trained and oriented to the importance and usefulness of accurate records, records should be checked for internal consistency and spotchecked for validity, BSP survey techniques should be modified to ensure complete enumeration of MCRA, and the BSP should be resurveyed annually.

5. FTOWs and BSPOs should be encouraged to increase the amount of time they spend on home visits.

6. Priority should be given to visiting those couples who live relatively far from the BSP and who are therefore least likely to be reached by mass media or other field workers.

7. More attention needs to be paid to motivating husbands in the light of the fact that they are more likely than their wives to prefer larger families and to oppose family planning practice.

8. The relatively high resistance of Muslims to family planning suggests that they require special IEC approaches.

9. IEC support to FTOWs and BSPOs could be greatly improved by increased production and wider distribution to FTOWs and BSPOs of leaflets and comic books. Efforts should be made to ensure that each BSPO receives printed IEC materials and keeps at least one copy of each type of material on hand for her own reference and for the reference of MCRA living in the BSP area.

10. If FTOWs were systematically informed of radio broadcast schedules and instructed to inform their BSPOs and MCRA about them, the motivational efforts of the FTOWs and BSPOs would probably be strengthened, and the number of listeners to family planning broadcasts would probably be substantially increased.

11. To reduce the workload of FTOWs, it may be necessary to induce BSPOs to play a more active role, perhaps through more widespread provision of incentives, through the establishment of more BSPO associations, and through placing more emphasis on willingness to engage actively in family planning work as a criterion in the selection of BSPOs.

12. To further reduce the FTOW's workload, the number of BSPOs assisting the FTOW could be increased by establishing BSPs in areas not already covered and by breaking up large BSPs into smaller ones, thereby making them easier for the BSPOs to cover with minimal assistance from the FTOW.

13. Increased use of existing clubs, associations, classes, and the like for promoting family planning might serve in the long run to reduce the workload of both the FTOW and the BSPO. In places where such clubs are not already functioning, serious consideration might be given to establishing a new club expressly for promoting family planning.

14. BSPs might be used by larger numbers of MCRA if their existence and services were better advertized.

15. Though most BSPs appeared to be well-stocked with pills and condoms, about one-fourth of the BSPOs said they needed more supplies of one or both methods, indicating a need for improved logistics.

16. Supervision of FTOWs might benefit from increasing the DPO's visits to the field and decreasing the number of visits the FTOW makes to the DPO's office.

17. Serious consideration needs to be given to the twin questions of increased compensation for FTOWs and greater provision of incentives for BSPOs, since dissatisfaction over the issue of compensation appears to be widespread and increasing with time.

18. If feasible, efforts might be made to find ways of reducing delays in the payment of travel expenses. Since some FTOWs appear to experience little difficulty in this regard, it may be that the reimbursement procedure is implemented more efficiently in some

places than in others and that wider application of the more efficient procedures would reduce the problem to more tolerable levels.

19. Some of the FTOWs' dissatisfaction with the level of travel reimbursements might be alleviated if they could be trained to schedule travel more efficiently so as to maximize the time spent in field work while minimizing travel costs.

20. Efforts should be made to promote more effective contraceptive practice. This might be accomplished by promoting both increased use of the most effective methods and improved use of less effective methods. Some IEC measures that might be taken in this regard are as follows:

    a. Instruct FTOWs and BSPOs in the relative use effectiveness of the various methods, stressing the importance of effectiveness as a consideration in selecting a method to use.

    b. Stress the importance of effectiveness from a health standpoint, noting that the mortality risks from accidental pregnancy with less effective methods far exceed the risks associated with use of the more effective methods.

    c. Strive to upgrade the quality of use of methods like pills and rhythm, whose failure is often caused by lack of understanding of the method rather than by deliberate misuse.

    d. Improve the quality of use of rhythm, withdrawal, and condoms by recommending that pairs of them be used in combination.

    e. Stop promoting the use of condoms among couples already using contraception, including users of non-program methods like withdrawal, which are at least as effective as condoms.

21. Steps might be taken to reduce the barriers to more widespread recruitment of pill acceptors by FTOWs. Such steps could include efforts to overcome local opposition of clinical personnel and health administrators and efforts to increase the FTOWs' confidence in their own ability to administer the checklist correctly.

22. FTOWs and BSPOs could probably refer larger numbers of couples to clinics if encouraged to do so by their supervisors. Such referrals would probably benefit the program more than direct recruitment of acceptors since they would generally lead to acceptance of more effective methods that would be used for longer periods of time. They might also serve to improve relations between clinic personnel and Outreach workers.

23. The relationship between clinic personnel and Outreach workers would probably be further improved if FTOWs were more conscientious and systematic in helping clinics with their follow-up work.

24. Clinical services could be made more widely available if itinerant teams were sent to more FTOW territories, especially to areas where IUD insertions on sterilizations could not otherwise be obtained.

25. The widespread lack of awareness of the difference between vasectomy and castration suggests that the IEC efforts associated with this method have not been very effective. If vasectomy were more effectively promoted it could be made much more readily available than female sterilization, since more doctors are trained in vasectomy and it can be performed in even the most remote barangay.

26. Many couples do not go to clinics for effective contraception because they have already rejected the methods available there. Clinical services might be made more attractive if the choice of methods available at clinics were increased. For instance, the copper-T, low-dose pills, and implants are all highly effective methods that might attract potential clients who have rejected the methods presently available.

INTRODUCTION

The Outreach Project

In January 1977, the Philippine Commission on Population (POPCOM) launched the National Population and Family Planning Outreach Project (hereafter referred to simply as the Outreach Project). The chief purpose of this project was to make family planning messages and services more readily accessible to married couples of reproductive age (MCRA) by training and deploying a corps of Full-Time Outreach Workers (FTOWs) to bring family planning information, motivational efforts, and services to the barangays (villages). This project represented a major departure from the past strategy of channeling family planning program efforts through stationary clinics, usually based in cities and town centers.

Findings from the 1973 National Demographic Survey had revealed a strong relationship between proximity to clinics and contraceptive practice (Laing, 1979c), and program service statistics had shown that acceptors throughout the 1970-76 period, since the establishment of POPCOM as an executive body, had been disproportionately well-educated (Laing, 1979c). Most motivational work had been done by clinic-based, part-time motivators who tended to limit their activities to areas near their clinics, and rivalry among the motivators of neighboring clinics had led to divisiveness and a general decline of morale (see, for instance, Pal-Montano and Phillips, 1974).

The Outreach Project was intended to alleviate such problems by deploying FTOWs in proportion to population, each with a defined territory but with no particular clinic affiliation, and each carefully selected, trained, and provided with sufficient travel money to reach couples in the most remote portions of their territories. They were to be trained and authorized to dispense pills and to establish "barangay supply points" (BSPs), manned by local volunteer worker called BSP Officers (BSPOs), where barangay residents could obtain condoms or pills (after initial screening by the FTOW) free of charge.

A total of about 2,600 FTOWs were trained and deployed in 1977, almost all of them during the first three months of that year. Since that time, vacancies created by resignations, promotions, or other causes have generally been filled without much delay, keeping the number of active FTOWs stable at about 2,600. Their territories cover all parts of the Philippines except Metro Manila, where the Outreach Project is implemented only in selected areas on a pilot basis, and particularly volatile areas, especially in some parts of Mindanao. Each FTOW is assigned to a territory inhabited by about 2,000 MCRA. The FTOW territories are clustered into districts, supervised by District Population Officers (DPOs). There are generally about five to six FTOWs per DPO on the average.

The initial training of FTOWs lasts three weeks. Trainees are selected through competitive examination and are required to have completed at least two years of college. The training syllabus covers several major topics, including group dynamics and human relations; community organization; motivational techniques; contraceptive methods, administration of a checklist for pill contraindications; and record-keeping and reporting.

FTOWs are expected to perform a wide variety of tasks, including the following:

1) establishment of good relations with local leaders at the municipal and barangay levels;

2) identification of potential volunteer workers to distribute pills and condoms and to assist in information, education, and communication (IEC) and motivational work among their neighbors;

3) establishment of barangay service points covering an average of 60 to 100 MCRA a piece;

4) visits to MCRA at home to promote family planning among non-users, to promote the use of more effective methods for couples already using relatively ineffective methods, and to check on the current status of those who have not been seen for some time or have missed appointments;

5) coordination with other development workers in the field, encouraging them to help promote family planning and in turn assisting in other development activities;

6) coordination with clinic personnel, assisting them in following up their clients who have missed appointments and referring to them any couples who desire or need clinical services;

7) maintenance of accurate and up-to-date records on current family planning status of all couples living in the BSP areas, including those not directly served by the BSP; and

8) preparation of monthly reports on current status of BSP residents as well as data from clinic records on numbers of clinic acceptors and current users of clinical services.

Because of the magnitude and consequent cost of the Outreach Project as well as the fact that it involved a large number of untested elements, it was deemed important from the outset to mount a multi-faceted evaluation scheme, involving (1) internal monthly reports made by program personnel on performance and problems; (2) field visits by regional and central personnel; (3) operations research, to be done primarily at the regional level; and (4) large-scale survey research to provide overall measures of program impact, strengths, and weaknesses. The 1978 and 1980 Community Outreach Surveys (COS) were conducted to meet this last need.

The Community Outreach Surveys

The 1978 COS conducted in April-September 1978, was in fact five different surveys carried out simultaneously. Eighty DPOs were systematically selected from a list of all DPOs in the field as of January 1978; the selection was representative of all DPOs except the handful who had fewer than three FTOWs currently working under them. For each sample DPO, three FTOWs were selected, with preference given to those who had been

employed longest. For each sample FTOW, one BSPO was drawn at random from all the clearly defined BSPs of that FTOW except the few that, according to the FTOW, covered less than 30 or more than 200 MCRA. The former exclusion was specified so as to avoid problems of sampling sufficient numbers of MCRA for interview and the latter to avoid excessive enumeration costs. The great majority of BSPs fell within this range since the FTOWs had been instructed to establish BSPs covering about 60-100 MCRA wherever feasible. (The BSP area's boundaries were not necessarily coterminous with official barangay boundaries; large barangays were expected to be subdivided into more than one BSP area and small barangays to be combined whenever appropriate.)

In each sample BSP area, key items of information from the BSP records on MCRA and their contraceptive practice were recorded and a household enumeration was made by the survey team. From that enumeration a list of "married women", aged 15-49 (including all those living in a stable conjugal union even if not formally married), was prepared, and 16 of them were selected from each sample BSP for the survey of wives. A random half of the sample wives' husbands were selected for interview as well.

The 1980 COS, conducted in April-September 1980, was designed in similar fashion, but with the following major exceptions: (1) the interviews of DPOs and husbands were omitted; (2) the number of sample districts was increased from 80 to 120, thus increasing the samples of FTOWs and BSPOs by 50 percent; (3) the sampling of districts was stratified by region, ten districts being selected from each of the twelve regions (excluding Metro Manila), regardless of regional population; and (4) the number of wives interviewed in each sample BSP was reduced from 16 to 12.

Despite provision for substitution, there was some sample loss, which is reflected in the actual numbers of respondents shown in Table 1. Two

TABLE 1

SAMPLE SIZES IN THE 1978 AND 1980 COS

Respondent Category	1978	1980
DPO	79	-
FTOW	239	359
BSPO	230	355
Wives: aged 15-49	3,760	4,320
aged 15-44	3,371	3,907
Husbands	1,596	-

figures are given for wives: the total number sampled, whose ages ranged from 15 to 49: and the subset in the ages 15-44, which are more commonly used for defining MCRA. These two groups will be referred for the sake of brevity as "MW15-49" and "MW15-44," respectively. Most of the univariate statistics on wives reported here refer to MW15-44; most of the cross-tabulations, on the other hand, utilize data from MW15-49 so as to maximize numbers of cases.

In the 1978 COS the samples of DPOs, FTOWs, and BSPOs were self-weighting. In 1980, because of the stratification by region with different sampling fractions, they were not; unweighted figures tend to be somewhat biased in the direction of the smaller, less-developed regions. In both 1978 and 1980, the sample of wives was also biased by the fact that equal numbers of wives were sampled from all BSPs regardless of the number of MCRA in the BSP area. As a result, unweighted data tended to reflect conditions in smaller BSPs, which tend to be more rural. In 1978, weights were not calculated; all data analyzed were therefore unweighted. In the 1980 COS, three sets of weights were computed to deal with the problem of sampling bias: one set of weights for variables referring to the entire FTOW territory (i.e., the reciprocals of the regional sampling fractions for FTOWs); a second set for variables referring to the sample BSP (which adjusted for both the FTOW sampling fractions and the proportion of BSPs in each FTOW territory excluded from the sampling frame because of size or inaccessibility); and a third set for wives, which incorporated the FTOW and BSPO sampling parameters plus the reciprocal of the wife's probability of selection within each sample BSP). All weights were scaled in such a way that the weighted total numbers of cases were equal to the unweighted totals shown in Table 1. The weights were applied in all univariate analyses based on 1980 COS data, but unweighted data were used for most bivariate and all multivariate analyses. Generally, the differences between weighted and unweighted levels were minor.

The data reported here are drawn primarily from the 1980 COS, since it was conducted after the Outreach Project had been under way for a longer period of time, since the resulting findings are more up-to-date, since it incorporated improvements based on methodological assessment of the 1978 COS, and since the weights render the 1980 findings on wives more accurate. Findings from the 1978 COS are generally presented only to augment 1980 data where no equivalent 1980 data are available, to reinforce 1980 findings, or to indicate possible trends over time.

The data from the 1978 COS on DPOs and husbands are not presented here. The data from the DPO survey did not yield findings which add usefully to the data from the FTOW and BSPO surveys. The aggregate data from the survey of husbands did not differ greatly from corresponding data from the survey of wives, though there were substantial discrepancies at the individual level. For comparison of husbands' and wives' responses see Alcantara and Laing (1980) and Alcantara (1980). For more detailed data on other aspects of the 1978 COS, see Laing (1979a, 1979b, and 1980).

PROFILES OF FTOWS, BSPOS, AND WIVES

Numbers of FTOWs, BSPOs, and MCRA

In 1980, the POPCOM regional offices reported a total of 474 districts, of which 463 were included in the COS sampling frame. The remaining 11 were excluded because they had only two active FTOWs apiece. In the 463 districts that were included, the total number of active FTOWs was reported to be 2,568. Including the 22 FTOWs working in the excluded districts, the total number employed was 2,590. The estimated number of BSPOs supervised by the 2,568 FTOWs in the sampling frame was 38,520, but about 6,840 (18 percent) of them were excluded from the BSPO sampling frame because they either were too large or too small or did not have well-defined territorial boundaries (a prerequisite for enumerating BSPs and evaluating the completeness of BSP records). In addition, it is estimated that another 330 BSPs were omitted from the BSP sampling frame because of the initial exclusion of eleven districts. Thus, the total number of BSPOs was about 38,850.

It is estimated that the total number of MCRA in the BSPs included in the sampling frame was about 2,780,000. The number of MCRA in the remaining BSPs was estimated to be about 590,000, bringing the total number covered by the Outreach Project to about 3,370,000. This number is about two-thirds of estimated 5,050,000 MW15-44 in the Philippines outside Metro Manila in 1980.

The present chapter provides background information on the FTOWs, BSPOs, and MW15-44, including findings regarding their knowledge about, attitudes toward, and practice of contraception ("KAP"). The data are presented simultaneously for all three samples, since many of the variables were measured by means of the same questions and since simultaneous consideration permits comparisons, which are useful for assessing the appropriateness of FTOWs and BSPOs to serve as change agents who are expected to influence the perceptions, attitudes, and behavior of the wives.

Demographic Characteristics

The wives were, by definition, all female, currently married, and of childbearing age. Table 2, giving data on the age, sex, and marital status of FTOWs and BSPOs, indicates that most of them shared these characteristics with the wives. In terms of age and marital status, the BSPOs were somewhat more like the wives than were the FTOWs. Only one-seventh of the BSPOs were male, in contrast to twice as many of the FTOWs. All but seven percent of the BSPOs were married, whereas one-third of the FTOWs were still unmarried. The FTOWs were younger and more homogeneous with respect to age than the BSPOs. Two-thirds of the FTOWs were in the ages 25-34, whereas most BSPOs were in the age groups 25-34 and 35-44 in approximately equal proportions. The mean age of the BSPOs (36) was six years higher than that of the FTOWs (30). The mean age of the MW15-44 was 31. The BSPOs may have had some advantage over the FTOWs because they tended to be older and more experienced.

TABLE 2

PERCENTAGE DISTRIBUTIONS OF FTOWS AND BSPOS BY SELECTED BACKGROUND CHARACTERISTICS, 1980 COS

Characteristic/Category	FTOWs (N=359)	BSPOs (N=355)
Sex		
Male	30.2%	14.7%
Female	69.8	85.3
Age		
Less than 25	13.6	8.1
25-34	66.0	39.9
35-44	17.4	42.2
45+	3.0	9.8
(Mean)	(30.0)	(36.4)
Marital Status		
Currently married	62.4	93.3
Previously married	3.6	1.4
Never married	33.9	5.3

Since the BSPOs tended to be older than the FTOWs, they also tended to have been married longer and to have had more children (Table 3). Among married FTOWs, the mean duration of marriage at the time of interview was 7.5 years; among married BSPOs, the corresponding mean was nearly 16 years. The married FTOWs had an average of 2.3 children and the BSPOs twice as many. In contrast, the mean duration of marriage of the MW15-44 was 10.7 years and their mean number of living children was 3.6.

When asked how many children they expected to have by the time they reached age 50, the means reported by FTOWs, BSPOs, and MW15-44, respectively, were 3.3, 5.3, and 4.9 (Table 4). Thus it might appear that FTOWs were much more conscientious than the MW15-44 about controlling family size and that the BSPOs were somewhat less so. However, it must be borne in mind that the expected number of children is constrained and influenced by the number of children a couple already has. For instance, the BSPOs could not average less than 4.5 expected children since that is the number they already had living. At the other extreme, most of the FTOWs still had no children (because so many were still unmarried) or only one or two, meaning that their family size preferences would not be greatly influenced by large numbers of children already born. To adjust for this sort of bias, the mean expected number of children of each of the three samples was standardized for number of living children, with the FTOW distribution by number of living children as the standard. The results of this process, limited to those with seven living children or less,

TABLE 3

PERCENTAGE DISTRIBUTIONS OF MARRIED FTOWS AND BSPOS BY MARITAL DURATION AND NUMBER OF LIVING CHILDREN, 1980 COS

Characteristic/Category	FTOWs (N=224)	BSPOs (N=331)
Duration of marriage (years)		
0-4	40.9%	5.9%
5-9	26.6	19.0
10-19	26.3	45.1
20+	6.3	30.0
(Mean)	(7.5)	(15.8)
Number of living children		
None	9.9	2.8
1-2	52.0	17.0
3-4	27.9	36.7
5-6	8.3	27.7
7+	1.9	15.8
(Mean)	(2.3)	(4.5)

TABLE 4

MEAN EXPECTED NUMBER OF CHILDREN BY NUMBER OF LIVING CHILDREN, FTOWS, BSPOS, AND MW15-44, 1980 COS

Living Children	FTOWs		BSPOs		MW15-44	
	$\bar{x}$	(N)	$\bar{x}$	(N)	$\bar{x}$	(N)
0	2.8	(142)	3.0	(28)	2.8	(16)
1	3.1	(60)	3.8	(18)	3.3	(604)
2	3.5	(58)	3.6	(39)	3.5	(617)
3	3.3	(38)	4.1	(49)	4.1	(694)
4	4.2	(29)	4.8	(45)	4.8	(538)
5	5.0	(7)	5.5	(44)	5.8	(494)
6	6.8	(10)	6.7	(43)	6.5	(377)
7	8.2	(5)	7.6	(18)	7.4	(278)
0-7 (Standardized)[a/]	3.4	(349)	3.7	(284)	3.5	(3,618)

a/With FTOW age distribution as standard

are shown in Table 4. It can be seen that most of the differences among the three samples disappear. Thus it appears that the family size expectations of FTOWs and BSPOs are really not much different from those of other wives of similar parity.

Socio-Economic Status (SES)

The FTOWs tended to be much better-off than the BSPOs, who, in turn, tended to be better-off than the wives. For instance, as has already been noted, all FTOWs were supposed to have had at least two years of college. In fact, the 1978 COS revealed that four percent of the FTOWs interviewed then had had less than two years of college (the question was not asked in 1980), but these were the exceptions that proved the rule; fully 74 percent were college graduates, including three percent who had done at least one year of post-graduate study. In contrast, according to the 1980 COS, only 26 percent of the BSPOs had completed even one year of college; 37 percent more had completed at least one year of high school; and 37 percent had not gone beyond elementary school. The corresponding proportions among the wives were 10 percent, 23 percent, and 67 percent.

In 1978, the same ranking of FTOWs, BSPOs, and wives was found with respect to other SES indicators (the questions were not asked of FTOWs or BSPOs in 1980). For instance, each respondent was asked whether her household had the following features:

a. walls made mostly of concrete or stone;
b. electric lights;
c. a gas, kerosene, or electric stove;
d. a dining table seating at least four persons;
e. at least one bed;
f. at least one chair; and
g. a functioning radio.

The percentages replying affirmatively to each of these attributes are displayed in Table 5. In every case the FTOWs' percentage was highest and the wives' percentage was lowest. The average number of affirmative responses to the seven questions was 5.0 for the FTOWs, 3.9 for the BSPOs, and 2.4 for the wives.

The occupational distributions of male and female BSPOs as well as of MW15-44 and their husbands are shown in Table 6. Female BSPOs were more likely than MW15-44 to report an occupation, and the reported occupation was more likely to be in sales or non-manual work. The emphasis on sales occupations is probably due to a tendency to select as BSPOs persons (usually women) who have small sari-sari (variety) store where neighbors are likely to do business and congregate. The emphasis on non-manual occupations is to be expected on the basis of the educational attainment and other SES indicators of the BSPOs. In contrast, male BSPOs were disproportionately likely to be farmers or fishermen and unlikely to do other types of manual work, probably because the former allows them to be more readily accessible to neighbors, even during working hours.

TABLE 5

PERCENTAGES OF FTOWS, BSPOS AND MW15-44 REPORTING PRESENCE OF SELECTED SES HOUSEHOLD INDICATORS, 1978 COS

Indicator	FTOWs	BSPOs	MW15-44
Sturdy walls	34%	24%	12%
Electric lights	54	30	19
Modern stove	33	13	10
Dining table	97	94	67
Bed	95	68	31
Chair	96	80	41
Radio	90	79	55

TABLE 6

DISTRIBUTION OF BSPOS (BY SEX), MW15-44, AND HUSBANDS, BY OCCUPATION, 1980 COS

Occupational Category	Female BSPOs (N=297)	MW15-44 (N=3907)	Male BSPOs (N=56)	Husbands of MW15-44 (N=3907)
None	59.9	70.6	5.4	1.3
Farming, fishing	5.1	8.5	64.3	49.2
Sales	15.5	8.4	5.4	6.4
Manual, non-farm	8.1	8.3	17.9	38.5
Non-manual	11.4	4.1	7.1	4.6

Over two-thirds of the MW15-44 were housewives with no other occupation; half of their husbands were farmers or fishermen and about three-fourths of the remainder were manual workers of other types.

The FTOWs, of course, all had the same occupation. However, in 1978, they were asked about their previous occupation. Nineteen percent reported none; 67 percent reported non-manual occupations; eight percent reported sales work; and six percent reported manual occupations, including farming and fishing.

FTOWs were encouraged to select as BSPOs those who were already active in community affairs. Accordingly, 72 percent reported involvement in community organizations, such as youth groups, barangay brigades, agricul-

tural cooperatives, religious groups, and mothers' clubs. Of the male BSPOs, 61 percent said that they were barangay officials. In contrast, only 15 percent of the female BSPOs were barangay officials, but 22 percent reported that their husbands were. Overall, 36 percent of the BSPOs reported that either they or their spouses were barangay officials. About one-fourth (26 percent) reported that they did other volunteer work in addition to their BSPO functions, the most common types being assistance in the nutrition program, participation in civic action groups, and participation in beautification and construction projects.

Family Planning Knowledge, Attitudes, and Practice

Ideal family size. All three types of respondents were asked how many children they thought it was best for a typical couple in the BSP area to have by the age of 50. For all three groups the most common responses were three and four (Table 7). FTOWs' responses were more homogenous, 83 percent of them saying either three or four children, versus 71 percent of the BSPOs and 68 percent of the wives. The BSPO response distribution did not differ notably from that of the wives; both had a mean of 3.7 children. The FTOWs had a slightly lower mean of 3.5. The corresponding mean from the 1978 COS had all been higher (FTOWs 3.8, BSPOs 3.9, and wives 4.0), indicating a slight reduction during the two intervening years. However, even the FTOW mean for 1980 was still far above the two-children ideal implicit in the POPCOM target of achieving replacement fertility by the year 2000.

Attitudes about contraception. With regard to attitudes toward "the use of modern family planning methods like pills, IUDs, or sterilization," the distributions of responses are shown in Table 8. It can be seen that virtually all the FTOWs and nearly as many BSPOs indicated approval, although the FTOWs were more likely to state that their approval was strong.

TABLE 7

PERCENTAGE DISTRIBUTIONS OF FTOWS, BSPOS, AND MW15-44 BY IDEAL NUMBER OF CHILDREN FOR COUPLES IN THE BSP AREA, 1980 COS

Ideal Number of Children	FTOWs	BSPOs	MW15-44
1-2	9.2%	10.1%	12.6%
3	40.6	33.4	30.9
4	42.5	37.9	37.0
5+	7.7	18.7	19.6
Mean	3.5	3.7	3.7

TABLE 8

PERCENTAGE DISTRIBUTION OF FTOWS, BSPOS, AND MW15-44 BY ATTITUDE TOWARD "MODERN FAMILY PLANNING METHODS LIKE PILLS, IUDS, OR STERILIZATION," 1980 COS

Attitude	FTOWs	BSPOs	MW15-44
Approve strongly	89.6	67.8	41.7
Approve moderately	9.0	23.6	30.6
No opinion, don't know	.3	0.0	1.6
Disapprove moderately	1.1	4.9	12.9
Disapprove strongly	0	3.7	13.2
Total	100.0	100.0	100.0

The MW15-44 were least likely to express approval; one-fourth (26 percent) said that they disapproved, about half of them strongly. These findings represented an improvement since 1978, when the proportions of FTOWs, BSPOs and wives approving strongly of "the use of family planning methods like pills, IUDs, or condoms" were 66, 60, and 34 percent, respectively. This difference is particularly striking in light of the fact that the reference to condoms in 1978 was changed to sterilization in 1980, since sterilization is more vehemently opposed by Roman Catholic Church officials in the Philippines than are the other "artificial" contraceptive methods.

Awareness of contreceptive methods. Awareness of the six program methods (pills, IUD, rhythm, condoms, ligation, and vasectomy) was universal among FTOWs and nearly so among BSPOs. Even among the wives, more than 90 percent said that they had heard of pills, the IUD, condoms, and ligation (Table 9). The proportions saying that they had heard of rhythm and vasectomy were closer to 80 percent. However, in light of the apparent popularity of the rhythm method, it seems likely that this finding is at least partly attributable to difficulties in understanding the description of the rhythm method rather than to a lack of awareness of at least one of its variants. All types of respondents were less likely to express awareness of non-program methods. With regard to each method the FTOWs consistently indicated the highest degree of awareness and the wives the lowest.

Experience with contraceptive methods. When asked about their experience with family planning methods, 93 percent of married FTOWs, 91 percent of married BSPOs, and 75 percent of the wives said that they had tried at least one method. The magnitude of the proportion among FTOWs is particularly striking in light of their low parity -- 10 percent had no children, and 26 percent had only one. Among all three groups of respondents, four methods were by far most heavily cited (Table 10): withdrawal, rhythm, condoms, and pills. Among the wives and the BSPOs, with-

TABLE 9

PERCENTAGES OF MARRIED FTOWS, MARRIED BSPOS, AND MW15-44 WHO SAID THEY HAD HEARD OF EACH METHOD, 1980 COS

Method	FTOWs	BSPOs	MW15-44
Pills	100.0	100.0	95.7
IUD	100.0	99.8	92.8
Rhythm	100.0	99.1	83.3
Condoms	100.0	100.0	95.5
Ligation	100.0	99.3	91.5
Vasectomy	100.0	98.7	79.2
Withdrawal	99.4	96.0	80.7
Abstinence	92.0	59.9	38.7
Foam	99.4	75.1	42.1
Injection	98.5	71.5	43.4
Any method	100.0	100.0	98.7
Mean number heard of	9.9	9.0	7.4

TABLE 10

PERCENTAGES OF MARRIED FTOWS, MARRIED BSPOS, AND MW15-44 WHO SAID THEY HAD EVER TRIED EACH METHOD, 1980 COS

Method	FTOWs	BSPOs	MW15-44
Pills	49.8	51.4	30.4
IUD	19.1	17.4	7.4
Rhythm	72.5	64.1	35.7
Condoms	76.1	63.7	27.8
Ligation	16.2	17.0	6.2[a/]
Vasectomy	.9	1.3	.5
Withdrawal	57.3	65.9	46.8
Abstinence	29.8	19.4	12.6
Foam	14.8	6.4	2.9
Injection	5.7	4.5	1.4
Any method	92.7	91.4	74.6
Mean number ever tried	3.4	3.1	1.7

a/excluding hysterectomy

drawal and rhythm appear to have been the most popular methods; among FTOWs, condoms and rhythm were the two most often mentioned. The program methods that were least likely to have been tried were the most effective: sterilization and the IUD. Almost all the sterilizations were ligations rather than vasectomy, regardless of respondent category. The mean number of methods the FTOWs, BSPOs, and wives had ever tried were 3.4, 3.1, and 1.7, respectively.

Current use. With regard to current practice, the picture was somewhat different (Table 11). The three respondent groups differed with respect to the most popular method. FTOWs tended to favor the combination of rhythm and condoms; BSPOs tended most to rely on tubal ligation, and MW15-44 were most likely to say they were using withdrawal. FTOWs were most likely to use clinical methods and MW15-44 least likely. On the other hand, there was relatively little difference among the three types of respondents with regard to the proportion using non-clinical methods. Overall, about two-thirds of the married FTOWs and BSPOs (slightly more of the former) were using a contraceptive method, versus less than half of the MW15-44.

TABLE 11

PERCENTAGE DISTRIBUTION OF MARRIED FTOWS, MARRIED BSPOS AND MW15-44 BY CURRENT CONTRACEPTIVE METHOD, 1980 COS

Method	FTOWs	BSPOs	MW15-44
Clinical Methods	35.7	29.7	14.1
Pills	12.1	8.4	5.0
IUD	6.0	2.6	1.8
Ligation[a/]	16.2	17.3	6.5
Vasectomy	.9	.8	.4
Injection	.5	.6	.4
Other Methods	36.2	35.9	31.4
Rhythm	5.2	8.1	7.9
Condoms	3.0	6.5	1.8
Withdrawal	1.0	5.5	13.5
Rhythm + withdrawal	1.1	3.6	3.4
Rhythm + condoms	23.8	9.6	1.2
Withdrawal + condoms	0	1.4	.7
Abstinence	1.4	1.0	1.9
Foam	0	0	.2
Others	.7	.2	.8
Any method	71.9	65.5	45.4
None	28.1	34.5	54.6
Total	100.0	100.0	100.0

a/Including hysterectomy

Potential future use. For each method previously tried but no longer in use, the respondents were asked whether they would like to use it again in the future or not. For each method not yet tried, they were asked whether they would like to try it in the future. The relative acceptability of the various methods can be assessed by combining those respondents who were using the method at the time of interview (and therefore implicity satisfied with it) with those who said they were willing to try it (or try it again) the first time. By this criterion the most acceptable methods for FTCWs and the BSPOs were ligation, rhythm, and condoms and for wives were rhythm and withdrawal (Table 12). Among the wives, the acceptability of the IUD, vasectomy, foam and injection appeared to be particularly low. Among clinical methods, the ones with greatest potential acceptability appeared to be ligation and pills.

Summary and Conclusions

As change agents, FTCWs and BSPOs should have high enough status to be acceptable as opinion leaders but not such high status as to set them apart from their clientile. They be well enough educated to benefit from training and to convey information accurately, but not so well-educated that they cannot communicate effectively with the couples in their areas of jurisdiction. They should be knowledgeable about and experienced with the contraceptive methods they are trying to promote and be positively oriented toward the practice of contraception, especially the more effective methods, and toward limitation of family size. By most of these criteria, the FTCWs and BSPOs seem to have been well selected. The FTCWs tended to be considerably better educated and of much higher status than the wives, and this may have set them apart from some of the lower status wives; however, it seems likely that this problem was minimized by the

TABLE 12

PERCENTAGES OF MARRIED FTCWS, MARRIED BSPOS, AND MW15-44 WHO SAID THEY WERE USING OR WOULD LIKE TO TRY EACH METHOD, 1980 COS

Method	FTCWs	BSPOs	MW15-44
Pills	35.5	22.7	28.7
IUD	36.8	15.6	12.5
Rhythm	57.5	45.6	48.2
Condoms	58.4	42.6	26.6
Ligation	66.1	41.9	32.1
Vasectomy	19.9	14.1	9.5
Withdrawal	21.9	33.7	41.0
Abstinence	32.2	17.0	18.5
Foam	25.1	8.9	6.5
Injection	27.7	16.2	9.6
Any method	95.1	83.1	86.3

fact that the BSPOs' status tended to be much more similar to (but nevertheless higher than) that of the wives. Thus, in terms of SES, the BSPOs tended to complement the FTOWs. Married FTOWs and BSPOs were highly aware of the various contraceptive methods that are readily available and had had a good deal of experience, usually with a variety of them, and most were actively practicing contraception at the time of the survey. They were more likely than the wives to approve strongly of practicing contraception, and they tended to view slightly smaller families as ideal for couples in the sample BSP areas.

However, there were some problems. Like the wives, the FTOWs and BSPOs were especially likely to be using less effective methods rather than clinical methods. In their view, the "ideal" number of children still tended to be far greater than the two-child norm that is required for meeting POPCOM's targets for the year 2000 -- only twenty years away. When the number of children already born and still alive was held constant, the expected family size of FTOWs and BSPOs did not differ greatly from that of the wives, despite the markedly higher SES of the FTOWs. Thus it appears that part of the family planning program's motivational strategy should be directed toward lowering the family size ideals and expectations of the program's own field workers and increasing their acceptance of more effective family planning methods.

TRAINING OF FTOWs AND BSPOs

FTOW Training

According to the 1978 COS, virtually all the FTOWs had received the standard three-week training course before beginning field operations. Almost all (90 percent or more) said that the training had covered each of the six topics that were specified in the training syllabus and that were asked about during the COS interview: group dynamics and human relations, motivational techniques, community organization, the monitoring system, contraceptive methods, and administration of the special checklist for potential pill acceptors who could not go to the clinic for initial prescription (Table 13). They were also asked whether or not they considered the training they had received on each topic sufficient for their needs. The proportions replying affirmatively varied little, ranging from 33 to 46 percent. It was thus apparent that most FTOWs felt they needed more training in all subject areas. When asked which three of the six areas they considered most important for their work, three-fourths (77 percent) specified motivational techniques, two-thirds (65 percent) contraceptive methods, 57 percent community organization, and 56 percent group dynamics and human relations. The monitoring system and the pill checklist were considered much less important. As we shall see below, the FTOW's lack of interest in these two training topics was also reflected in the quality of BSP records and the proportions who were screening potential pill clients rather than sending them to clinics.

Since most of the FTOWs interviewed in 1980 were already employed by 1978, the questions on past training were not repeated in the later survey. Instead FTOWs were asked in 1980 which of a modified list of topics they would select for a refresher course if given the choice. They were asked to indicate their first, second, and third choices. The specified topics and their responses are indicated in Table 14. The data

TABLE 13

PERCENTAGES OF FTOWS WHO WERE TRAINED IN SPECIFIC TOPICS, AND PERCENTAGES WHO CONSIDERED SUCH TRAINING SUFFICIENT, 1978 COS

Training Topic	% Trained	% Who Said Training Was Sufficient	% Among 3 Most Important Topics
Group dynamics and human relations	98	35	56
Motivational techniques	94	33	77
Community organization	97	36	57
Monitoring system	98	46	29
Contraceptive methods	99	36	65
Pill checklist	90	43	16

TABLE 14

FREQUENCY DISTRIBUTION OF FTOWS BY FIRST, SECOND, AND THIRD CHOICES FOR REFRESHER COURSE TOPICS, 1980 COS

Topic	First	Second	Third	Score[a/]
Motivation/communication techniques	168	62	34	662
Coordinating techniques	37	56	102	325
Contraceptive methods	39	64	44	289
Supervising techniques	28	59	65	267
Community organization	40	52	32	256
Management of field work	37	46	48	251
Record-keeping and reporting	10	20	34	104

a/Obtained by assigning three points for each first choice, two points for each second choice, and one point for each third choice.

on first, second, and third choices were aggregated into a single score, also given in Table 14. As in 1978, motivation and communication techniques received highest priority; record-keeping/reporting was again given lowest priority. Coordinating techniques and, to a lesser extent, contraceptive methods were deemed somewhat more important than the other remaining topics, but there was not much other variation The emphasis on coordination was probably influenced by increased attention paid to the problems of coordination during the year or so preceding the 1980 COS.

BSPO Training

BSPO training is less standardized than FTOW training. Furthermore many BSPOs had not yet received formal training but had only been informally oriented and instructed by the FTOW. In 1978, according to the FTOWs, only 25 percent of the single BSPOs had been trained; by 1980, the proportion had increased markedly to 47 percent. (The BSPOs themselves were somewhat more likely to report that they had been formally trained -- 34 percent in 1978 and 54 percent in 1980 -- but this may have been due to a misinterpretation of the difference between formal and informal training.) Since there were nearly twice as many BSPOs in 1980 as in 1978, the number of formally trained BSPOs had increased by more than three times. In most cases, formal BSPO training lasted three days and covered a wide variety of topics. Table 15 shows the proportions of formally-trained, informally-trained, and total BSPOs who said they had received sufficient training in each topic and the proportions who said that they had received no training in it. Among those formally trained, at least five-sixths said they had received some training in each of the specified topics except surveying/mapping and community organization. Even in these

TABLE 15

PERCENTAGES OF FORMALLY AND INFORMALLY TRAINED BSPOS SAYING THEY HAD RECEIVED SUFFICIENT TRAINING OR NO TRAINING ON SELECTED TOPICS, 1980 COS

Topic	Formally Trained		Informally Trained		All BSPOs	
	% Sufficient	% None	% Sufficient	% None	% Sufficient	% None
Supplying pills and condoms	45	2	28	14	37	8
Record-keeping	43	6	24	38	34	21
Motivating acceptors	44	5	21	46	33	24
Surveying, mapping	36	27	13	69	26	46
Remotivating dropouts	43	16	27	48	36	31
Handling complaints	40	12	10	55	26	32
Handling rumors	48	7	17	53	34	28
FP methods	45	9	19	46	33	26
Human reproduction	59	16	18	63	29	38
Community organization	32	25	11	62	22	42

two topics, three-fourths of the formally trained BSPOs said they had received some training. However, there was no topic in which a majority of the BSPOs felt they had received sufficient training. The informally trained BSPOs, were much more likely to say they had received no training and much less likely to say that they had been sufficiently trained. Only in five topics (supplying pills/condoms, record-keeping, motivating acceptors, remotivating dropouts, and family planning methods) did a majority of informally trained BSPOs say they had received instruction, and even in these topics, no more than 28 percent said they felt their training had been sufficient.

Most formally trained BSPOs had not received their training until after the BSP had already been in operation for some time. Forty percent had been trained in the month of BSP establishment, 17 percent one to three months later, 14 percent four to twelve months later, and 29 percent more than a year later.

Contraceptive Knowledge

Some questions asked of FTOWs, BSPOs, and wives on contraceptive methods and practice provide insights into the effectiveness of training for instilling useful knowledge beyond the simple awareness of contraceptive methods already discussed above. For instance, respondents were asked to compare three pairs of methods with regard to their effectiveness for preventing pregnancy when used by couples in the sample BSP area.

The responses are shown in Table 16. The "correct" responses, based on national-level analysis of use effectiveness (e.g., Laing and Alcantara, 1980) are denoted by asterisks -- double asterisks indicating the single best response and single asterisks indicating acceptable responses. The results indicate that the relative effectiveness of the various methods was not very well covered in training. With regard to pills and the IUD, in fact, most FTCWs and BSPOs said they believed, incorrectly, that pills are much more effective, possibly as a result of training. They were also more likely to say that condoms are much more effective than rhythm whereas research has indicated no difference or relatively small differences

TABLE 16

PERCENTAGE DISTRIBUTIONS OF FTCWS, BSPOS, AND MW15-44 BY PERCEIVED RELATIVE EFFECTIVENESS ON SELECTED PAIRS OF METHODS, 1980 COS

Comparison/response	FTCWs	BSPOs	MW15-44
Pills vs IUD			
Pills much more effective	68.5	60.1	38.1
Pills little more effective	8.7	12.2	15.8
No difference*	2.0*	4.8*	7.8*
IUD a little more effective**	4.7**	3.9**	7.1**
IUD much more effective*	15.7*	14.9*	13.7*
Don't know	.3	4.0	17.4
Rhythm vs condoms			
Rhythm much more	12.4	17.2	26.6
Rhythm a little more*	8.7*	9.8*	10.9*
No difference**	6.4**	5.5**	6.1**
Condoms a little more*	17.7*	15.7*	14.6*
Condoms much more	54.8	50.2	23.0
Don't know	0	1.7	18.8
IUD vs condoms			
IUD much more**	71.7**	30.6**	25.3**
IUD a little more*	7.0*	6.4*	10.9*
No difference	.5	3.9	8.3
Condoms a little more	6.1	14.1	13.5
Condoms much more	14.3	42.7	22.8
Don't know	.3	2.3	19.2

**Best response
*Acceptable response but not best

that tend to favor rhythm. There were no appreciable differences among the proportions of FTOWs, BSPOs, and wives giving responses marked with asterisks in comparing of pills and the IUD or rhythm and condoms, and none between BSPOs and wives with regard to the IUD and condoms. Only the FTOWs appeared to be aware that the IUD was much more effective than the condoms; a disturbingly high proportion (42 percent) of the BSPOs said they thought condoms were much more effective than the IUD, probably because of the special emphasis placed on condoms in the establishment and operation of the BSP. The only other major difference among the three types of respondents was that the wives were more likely to admit that they did not know the answer.

Another area of contraceptive knowledge that was tested concerned the best time for initiating contraceptive practice following a live birth. Immediate acceptance results in a long period of overlap with postpartum amenorrhea (about seven to eight months, on the average) during which the contraceptive method is unnecessary; many immediate acceptors can be expected to discontinue use before they resume ovulation. Those who delay acceptance until after the resumption of menstruation run the risk of getting pregnant, since ovulation may occur before the first menstruation. The best time to start contraception practice thus appears to be a few months after acceptance but before the time menstruation is likely to return. When given these three choices, the FTOWs, BSPOs, and MW15-44 gave the responses shown in Table 17. There was a tendency for FTOWs to select the "correct" response more often than the BSPOs and for the latter to select it more often than the wives, but even among the FTOWs, only 21 percent selected it. FTOWs were most likely to say "right away," which is the safer of the other choices, and wives were most likely to say "wait for menstruation." Thus it appears that training may have had some effect, but there is still much room for improvement.

TABLE 17

PERCENTAGE DISTRIBUTIONS OF FTOWS, BSPOS, AND MW15-44 BY PERCEIVED BEST TIME TO START USING CONTRACEPTION AFTER GIVING BIRTH, 1980 COS

Best Time	FTOWs	BSPOs	MW15-44
Wait for menstruation	23.5	43.4	56.4
After a few months*	21.0*	13.6*	9.4*
Right away	55.5	43.0	33.7
Don't know, depends	0	0	.5
Total	100.0	100.0	100.0

*Best response

Among breastfeeders, the mean number of months of breastfeeding was over a year. Among the MW15-44, 84 percent said they had breastfed their last child for at least one month. With such a high incidence of breastfeeding and the likelihood that contraception would be initiated by many couples while the wife is still breastfeeding, it is important that family planning motivators be aware of the need for breastfeeding women to avoid certain methods. Pills may inhibit ovulation, for instance, and injectables may affect the chemical composition of the milk. If the couple does not want to have more children, sterilization (either male or female) is the most effective method they can use and does not affect lactation. If the couple does not want more children, the most effective method consistent with lactation is the IUD. To determine their awareness of this, the following question was asked of the FTOWs:

> What method would you most strongly recommend for a woman who is breastfeeding and wants to have more children later on?

IUD received the highest proportion of responses (43 percent), but a majority of the FTOWs gave less satisfactory responses: condoms (33 percent), pills (14 percent), rhythm (6 percent), and others (4 percent).

Since calendar rhythm is a very popular method, it is important that the timing of the fertile period be known, especially by service providers. FTOWs were asked to indicate the first and last days they would recommend for a woman with a regular 28-day cycle. The textbook responses (Peel and Potts, 1960) are the tenth and the 17th days. Table 18 shows the FTOWs' joint response distribution, with the percentages based on the grand total. Eleven percent gave the textbook responses; 51 percent were within one day of the correct responses. The cells of Table 18 are coded with the letters C (for conservative, meaning that the abstinence period would probably be unnecessarily long), S (for safe), R (for risky, meaning the abstinence period would be for short), and M (for mixed, meaning that either both days are too late or both days are too early, making the period either risky at the beginning and conservative at the end or vice versa). One-third of the FTOWs gave unacceptable (risky or mixed) responses. One-fourth gave conservative responses, which are probably not so bad but may cause more chance-taking or earlier termination of use, since couples would tend to have more difficulty abstaining faithfully for unduly long time periods. Only 41 percent gave responses classified as "safe" (but not overly conservative), indicating a need to upgrade the knowledge of the FTOW about the rhythm method.

BSPOs and wives were not expected to have such detailed knowledge about the fertile period, but given the high incidence of rhythm use (two-thirds of the BSPOs and one-third of the wives had tried the method) it was expected that they would have an approximate idea of its timing. As a result, they were asked the following question:

> When do you think is the best time for a couple to <u>avoid sex</u> in order to prevent pregnancy: during the wive's menstrual period, right after the period, midway between periods, or immediately before the next period?

TABLE 18

DISTRIBUTION OF FTOWS BY RECOMMENDED FIRST AND LAST ABSTINENCE DAY FOR RHYTHM USERS WITH REGULAR 28-DAY CYCLES, 1980 COS (PERCENTAGES BASED ON GRAND TOTAL)

Last Day	First Day					Total
	≤8th	9th	10th	11th	≥12th	
≤15th	3.4(M)	.6(R)	.5(R)	.6(R)	.8(R)	5.9
16th	1.1(M)	1.7(R)	1.1(R)	1.4(R)	.8(R)	6.1
17th	2.0(C)	20.9(S)	11.2(S)	3.0(R)	1.4(R)	38.3
18th	.8(C)	4.7(S)	4.2(S)	2.8(R)	2.3(R)	14.8
≥19th	7.8(C)	6.4(C)	8.4(C)	6.7(M)	5.6(M)	34.9
Total	15.1	34.1	25.4	14.5	10.9	100.0

ΣC (Conservative) = 25.4%
ΣS (Safe) = 40.8%
ΣR (Risky) = 17.0%
ΣM (Mixed) = 16.8%
33.8%

The responses are shown in Table 19. The BSPOs were more knowledgeable than the wives, but still only 38 percent selected the correct response. Only about one-fourth of the wives answered correctly. Interestingly, hardly any of the respondents admitted that they did not know the answer. A good deal of the apparent inaccuracy may be due to the difficulty in understanding the response alternatives. For instance, many of the respondents who said "right after the period" may have been referring to the beginning of the abstinence period. As the FTOW responses in Table 18 indicate, some people believe that the first abstinence day should be in the first week following the onset of menstruation. Similarly, many of the respondents who said "immediately before the next period" may have known that the fertile period should be calculated in relation to the expected date of next period rather than in relation to the last period and considered this alternative to be the one that best reflected this principal.

The proportion of BSPOs giving the correct response was somewhat higher for those who had been formally trained (39 percent) than for those who had not (33 percent) and for those who had printed materials on rhythm (38 percent) than for those who did not (28 percent). Thus, again, training appears to have made a difference, but not a great one.

TABLE 19

PERCENTAGE DISTRIBUTIONS OF BSPOS AND WIVES (AGED 15-44) BY PERCEIVED BEST TIME FOR RHYTHM USERS TO ABSTAIN, 1980 COS

Best Time to Abstain	BSPOs	Wives
During menstrual period	.9	4.5
Right after period	33.7	41.7
Midway between period*	38.5*	23.3*
Immediately before next period	26.9	29.7
Don't know	0	.8
Total	100.0	100.0

*Best response

Summary and Conclusions

Though the FTOWs had nearly all completed the formal three-week training course, most of them felt they needed additional training in each of the major topics. The need was felt most acutely with regard to motivational and communication techniques. Though the FTOWs did not perceived a particularly great need for additional training in record-keeping or pill prescription, other COS data indicate that their training in these areas was deficient. The FTOWs' apparent lack of concern for these deficiencies suggests a need to reorient them to the importance of these functions as well as to provide them with additional training.

About half of the BSPOs had not yet received formal training, and most of those who had received only informal training said they had not been instructed in most of the major training topics. Even among those formally trained, less than half said their training in each topic had been sufficient for their needs. BSPOs were especially likely to say they felt a need for more training in community organization and survey work.

Knowledge about contraceptive methods was low for both FTOWs and BSPOs, although FTOWs exhibited more knowledge than BSPOs, who in turn were more knowledgeable than the wives in their BSP areas. The deficiencies in knowledge were particularly pronounced with regard to the relative effectiveness of the various contraceptive methods. A surprisingly high proportion of BSPOs said they thought that condoms were more effective than the IUD. Only about half of the FTOWs were able to specify correctly the first and the last days of the unsafe period for women with a regular 28-day cycle, even allowing a one-day margin for error in the first or last day. Still fewer BSPOs knew even that the unsafe period was about midway between menstrual periods, though they were more knowledgeable than the wives.

THE FTOW'S TERRITORY

With approximately 2,700 FTOW position (of which about 100 were vacant at the time of the COS) and an estimated 5.05 million MCRA outside Metro Manila in 1980, each FTOW was responsible for an average of about 1,870 couples. However, when the FTOWs themselves were asked to estimate the number of MCRA in their territories, their responses had a mean of only 1,690 -- a shortfall of 10 percent. This discrepancy could be due either to inaccurate estimation on the part of the FTOWs or to incomplete coverage of MCRA by designated FTOW territories. The former interpretation receives empirical support from comparison of the 1978 and 1980 data. In 1978, the FTOWs estimated an average of only 1,477 MCRA. Allowing for growth of the population during the intervening two years, it is estimated that the average FTOW territory covered 1,730 MCRA in 1978, indicating a shortfall in their estimates at that time of 17 percent. It appears that FTOWs began by underestimating the number of MCRA by a fairly wide margin but as they gained experience, especially with BSP surveys, they became aware that they were underestimating the number of MCRA and began revising their estimates upward.

Nearly half of the FTOWs (45 percent) said that the number of MCRA they were expected to cover was too large. The average number they said they would prefer (including the estimated numbers covered by those who were satisfied with their present number) was 1,322 -- 22 percent less than the average of 1,690 they estimated they covered and 29 percent less than the higher estimate of 1,870 actually covered.

Involvement of Municipal Officials

Technically, FTOWs are local government employees. The Outreach Project is administered through contracts between POPCOM and the various provincial and city governments, which pay part of the salaries and allowances of the FTOWs and provide administrative support. POPCOM sets salary and reimbursement levels, funds most Outreach activities, and provides training, supervision, other technical support, IEC materials, and contraceptive supplies. FTOWs are expected to work closely with municipal or city officials in carrying out their work and in return to receive support from them (apart from the local government's financial contribution set in the contract with POPCOM).

The FTOWs interviewed in the 1980 COS were asked whether, during the 12 months preceding the survey, municipal (or city) officials had provided them with specified types of assistance. The most commonly reported type of assistance (reported by 76 percent of the FTOWs) was through efforts to promote family planning. Nearly as many FTOWs (74 percent) said that they had been provided with office space. Nearly half (45 percent) reported that local officials had participated actively in organizing and maintaining a local population coordinating committee. Forty percent reported provision of various types of support, such as transportation, equipment, or other facilities to be used in population field work. Thirty-seven percent said they received help from municipal officials in selecting and recruiting BSPOs. And about one-third (34 percent) reported

that they received financial support beyond their basic salaries and allowances as provided for in the contracts with POPCOM.

No question was included in the 1980 COI on whether the FTOW had provided assistance to municipal officials apart from their regular family planning work, but such a question was asked in 1978, and 73 percent of the FTOWs said that they had provided such assistance. The most commonly cited forms of non-population assistance reported by the FTOWs at that time included assisting in organizing special events such as programs, parades, benefit dances, or sportsfests; entertaining visitors; helping in fund-raising campaigns; and assisting in beautification drives.

Organized Opposition

Most of the FTOWs (86 percent) reported no organized opposition in their territories to family planning or to particular methods. Almost all the remainder (13 percent) reported opposition from Roman Catholic groups, most commonly from the Catholic Women's League. The remaining one percent also reported religious opposition, from Islamic groups, Jehovah's Witnesses, and fundamentalist Christian sects. The opposition does not seem to have had much, if any, effect. The mean contraceptive prevalence rate in sample BSPs located in areas where FTOWs reported opposition from Catholic groups was 36 percent; in areas with no reported opposition, it was only 32 percent. (This difference does not mean that the opposition helped in the promotion of family planning. The positive relationship between opposition and prevalence is probably a spurious one, caused by a positive correlation of each with other variables, such as level of socio-economic development. On the other hand, it appears unlikely that a strong negative relationship would emerge if such other variables were held constant.)

There does not appear to have been substantial growth or diminution of religious opposition since 1978, when 15 percent of the FTOWs reported such opposition.

Family Planning Work of Other Agencies

A list of types of field workers commonly involved in family planning field work was read to the FTOWs, and they were asked to state for each type whether there was such a worker in the FTOW territory and, if so, whether that worker had actively promoted family planning during the three months preceding the interview. The responses are displayed in Table 20. The figures for the barangay health station (BHS) midwife and the rural health unit (RHU) workers may be inflated, since responses to a later question about clinics and BHSs serving the FTOW's territory indicated that 17 percent of the territories were without clinics and 20 percent without BHSs. (However, it is also possible that the latter figures are not entirely accurate.) The importance of the figures in Table 20 lies not so much in their precise values as in the relative values and orders of magnitude. Clearly, the medical and paramedical workers were the most active family planning workers among the types listed. Among the workers of non-clinical agencies, those of the Ministry of Social Services and Development (MSSD), the Bureau of Agricultural Extenstion (BAEx), and the

TABLE 20

PRESENCE AND FP ACTIVITY OF SELECTED TYPES OF FIELD WORKERS IN FTOW TERRITORIES, ACCORDING TO FTOW, 1980 COS

Type of Worker	% Present	% Promoting FP
BAEx HMT[a/]	81.9	54.9
MLGCD[b/] worker	71.0	33.5
MSSD[c/] Social Worker	87.4	66.2
MAR[d/] worker	38.6	13.2
BNS[e/]	63.6	55.0
BHS[f/] midwife	96.6	95.5
RHU[g/] worker	94.2	90.7
Other clinic-based worker	45.1	41.2

a/Bureau of Agricultural Extension Home Management Technician
b/Ministry of Local Government and Community Development
c/Ministry of Social Services and Development
d/Ministry of Agrarian Reform
e/Barangay Nutrition Scholar
f/Barangay Health Station (Ministry of Health satellite clinic)
g/Rural Health Unit (Ministry of Health municipal clinic)

nutrition program appear to have been the ones most actively involved in promoting family planning. The involvement of so many agencies points to the importance of coordination among the agencies to minimize unnecessary duplication of effort and to maximize coverage of households in efforts to promote family planning.

To this end, POPCOM has encouraged FTOWs to become involved in local coordinating committees, either for promoting economic development in general (including family planning) or specifically for promoting family planning. When asked whether there was "a coordinating committee for population in your territory," over half of the FTOWs (55 percent) said there was none. Four percent said they belonged to such a committee. Those who were members were asked when the committee had last met to discuss population activities. One-fourth (26 percent) said within the past month, 14 percent said two or three months before the interview, 30 percent said four to six months before, and 21 percent said more than six months before the interview date. Thus about one-sixth of all FTOWs

said that they belonged to a coordinating committee which had discussed population activities within three months before the interview date.

Theoretically, the committee should relieve some of the FTOW's burden by committing other types of workers to do some of the field work the FTOW would otherwise be expected to undertake. However, participation in such committees is itself time-consuming. FTOWs who were members were about equally divided in their perceptions of the effect of their membership on their workload. Thirty-eight percent said it increased their workload, and 39 percent said it decreased it; 23 percent said it had no effect.

Clinical Services

Virtually all FTOWs (98.3 percent) reported the presence of at least one clinic, hospital, or BHS providing family planning services to couples in their territories. They reported an average of 1.5 clinics, .8 hospitals, and 2.6 barangay health stations (BHSs) serving their territories. Since one clinic or hospital may serve more than one FTOW territory, many clinics and proportionately more hospitals were counted more than once. Most BHSs, on the other hand, were probably counted only once. The accuracy of the data on the number of BHSs may be assessed by multiplying the mean number of BHSs per FTOW by the estimated total number of FTOW positions (about 2,700) to get an estimate of the total number of BHSs. The result is about 7,000; this agrees well with the Ministry of Health's figure of 7,100 BHSs (Sabino, 1980).

In addition to stationary medical service points, there are itinerant teams that travel around, providing mostly sterilizations and usually doing their work at stationary clinics or hospitals. However, there are not enough teams to cover more than a minority of FTOW territories. In 1980, only 24 percent of the FTOWs reported such a visit to their territories during the year preceding the interview.

Referrals

FTOWs are expected to refer clients to clinics for methods they cannot obtain elsewhere. They are also expected to help follow up those clients of the clinic who live in the FTOW's territory and have missed appointments at the clinic. Two-thirds (68 percent) of the FTOWs said that they had referred at least one client to the clinic during the month preceding the COS interview. The mean number of referrals reported for that month was 3.2 per FTOW (including those FTOWs who reported none). This represented a decline from 1978, when 76 percent of the FTOWs reported referrals and the mean number reported was 3.8.

Nearly all the FTOWs (92 percent) said that they had at some time received referrals for follow-up from clinics, and 63 percent said that they had received such referrals within the preceding month, either actively, by going through clinic records themselves to find cases needing follow-up (25 percent); passively, being asked by the clinic staff to follow up clients (11 percent); or both (27 percent). Of those who said

that the clinic staff had ever asked them to follow up clients, 24 percent said that they had followed up all of them, 33 percent most of them, 21 percent about half, and 22 percent less than half. This distribution did not vary significantly by duration of time since the referral had been made. Among those who had received the referrals more than a month before the interview date, 46 percent had nevertheless followed up less than half.

Thirty percent of the FTOWs reported having referred clients to field workers of other agencies during the month preceding the interview and another 20 percent two or three months before. Similarly, 51 percent reported having received referrals from other field workers during the three months preceding the interview date. Of those who had received such referrals, 63 percent said that they had followed up most or all of them. When asked whether their referrals to other field workers had been followed up, 53 percent of the FTOWs said that most or all had been followed up and 47 percent said half or less. Thus the FTOWs tended to perceive that they were more conscientious about following up other fieldworkers' referrals to them than vice versa.

Establishment of BSPs

Since the Outreach Project was developed with a principal aim of reaching rural couples more effectively, the FTOWs had been instructed to concentrate at first on establishing BSPs in relatively remote portions of their territories, reserving until last the establishment of those closest to existing clinics (i.e., those in relatively urbanized areas). Data from the 1978 COS indicate that this pattern was followed more often than not. Outside Metro Manila, the proportion of the population in rural areas was estimated by the National Census and Statistics Office (NCSO) to be 76 percent. In contrast, the proportion of the sample BSPOs established in rural areas (using the same NCSO definition) was 84 percent by 1978 and 80 percent by 1980. However, these figures exaggerate the representation of rural areas somewhat, since urban BSPs tended to cover more MCRA. The proportion of MCRA in rural BSPs cannot be estimated on the basis of 1978 COS data, but in the 1980 COS, 77 percent of all enumerated MCRA were in rural BSPs, indicating that by that time the proportion rural was close to the national average outside Metro Manila. This finding, together with the trend toward proportionately fewer rural BSPs between 1978 and 1980, still indicates that the population of MCRA covered by BSPs in 1978 was disproportionately rural.

By 1978, an average of 8.7 BSPs had been established per FTOW. This was close to the target of two new BSPs per FTOW every three months, since the survey period centered on the middle of 1978 and most FTOWs had started establishing BSPs during the second quarter of 1979. At this rate, it had been anticipated, each FTOW would have about 13 BSPs by the end of 1978, and the entire FTOW territory would be covered by BSPs by the end of 1979. However, the 1978 COS also found that many of the BSPs were not yet fully operational. Five percent had no condoms on hand; 15 percent had no pills; 25 percent had not yet been completely surveyed to determine the number of MCRA covered and their contraceptive status; 47 percent had no printed IEC materials even for the reference

of the BSPO; and only one-fourth to one-third of the BSPOs had received formal training, as already noted. Partly as a result of these findings, FTOWs were instructed to go more slowly in future BSP establishment so that they could improve the quality of BSP establishment.

The FTOWs established an average of six more BSPs between 1978 and 1980, reporting an average of 15.0 BSPs in 1980. In 1978, the FTOWs had said that they expected ultimately to establish an average of 18.7 BSPs; by 1980, this estimate had risen to 20.2, probably at least in part as a result of growing awareness that the number of MCRA in the FTOW territory was proving to be greater than they had previously anticipated. In 1980, the FTOWs were asked whether they thought they would have enough time to visit all their barangays each month (including the ones still to be established). A little over half (55 percent) said yes without qualification; 21 percent said they could cover them all but that they would not be able to spend as much time as they thought they should in each; 24 percent categorically said that they could not visit them all each month.

Despite the apparent emphasis on establishing BSPs initially in more rural areas, 38 percent of the BSPs yet to be established were expected to be in remote areas. An additional 17 percent were to be established in "critical" areas (which are almost always rural) and only 17 percent in areas near clinics. However, most of the remaining 28 percent were to be either established in population centers without clinics (e.g., large barangays) or created by subdividing an existing BSP that had proven to be too large. Since most of these BSPs would be urban, it appears that about 55 percent of the projected new BSPs would be rural and 45 percent urban.

Summary and Conclusions

FTOWs tended to feel that their territories were too large. The mean preferred number of MCRA per FTOW territory was 1,322 -- 22 percent less than the 1,690 estimated by the FTOWs and 29 percent less than the 1,870 estimated on the basis of census data.

Most FTOWs reported having received support from municipal officials apart from contractually obligated contributions of government funds. The most common forms of support were assistance in promotional work and provision of office space. In return, most FTOWs reported that they had assisted in a variety of municipal or city projects apart from their family planning work.

Majorities of FTOW reported the presence and active participation in family planning promotion of field workers of the Bureau of Agricultural Extension, the Ministry of Social Services and Development, and the nutrition program. One-third reported such involvement on the part of the Ministry of Local Government and Community Development and 13 percent reported involvement of the Ministry of Agrarian Reform. Nearly all FTOWs reported that Ministry of Health personnel, from both rural health units and barangay health stations were actively promoting family planning in their territories.

Half of the FTOWs said that they belonged to committees that served to coordinate family planning activities, but only one-fourth said that such committees had met within the month preceding the COS interview. The FTOWs who belonged to such committees were about evenly split on the issue of whether their workload was increased or reduced as a result.

Nearly all FTOWs reported that their territories were served by at least one clinic, hospital, or barangay health station offering family planning. On the average, five such service points were reported per territory. One-fourth reported visits to their territories by mobile teams during the year preceding the COS interview. Most FTOWs reported that they had referred clients to clinics and followed up clients referred to them by clinics, but only two-thirds reported referrals of either type during the month prior to the COS interview. Moreover, over one-third of those who said they had been asked to follow up clients for the clinic admitted that they had in fact followed up less than half of them, even when such referrals had been made several months before the survey date. About half of the FTOWs reported referrals to or from field workers of other agencies during the three months preceding the survey.

The FTOWs had established an average of 15 BSPs and intended to establish five more in the future. The BSPs established first were disproportionately rural; about half the BSPs still to be established were in urban areas.

The main problems in the FTOW territories as a whole appeared to be that they were often too large for the FTOW to cover adequately and that coordination among the various agencies tended to be weak or non-existent. The two problems were related. If FTOWs could work out effective ways of extending family planning IEC and services through coordination of clinics, other fieldworkers, and BSPOs, they would not have so much difficulty covering all the MCRA in their territories. However, FTOWs are not generally in a position to initiate such coordination themselves, since they do not usually have the necessary status or authority in the eyes of clinic personnel or other field workers. It appears that what is needed is for local government leaders to take the initiative and for POPCOM and the other agencies to reach agreement at higher levels and enjoin their workers in the field to support increased coordination.

THE BSPS AND THEIR AREAS OF COVERAGE

Among the BSPs established by 1980, the mean date of establishment was May 1978, meaning that the average age of the BSPs was about two years. Most had been established after June 1977, but 15 percent were established before, including a few (three percent) that had been established even before January 1977, as part of earlier projects. Forty percent had been established between July 1977 and June 1978, 28 percent between July 1978 and June 1979, and 17 percent during the year since June 1979. Thus the rate of establishment of BSPs declined gradually during the three years before the 1980 COS.

BSPOs

According to the FTOWs, most of the sample BSPOs had been selected in consultation with others; only 27 percent had been selected by the FTOW alone. Nearly half (44 percent) said they had consulted barangay officials; most of the rest said they had consulted a broader cross-section of barangay residents, sometimes through barangay assemblies or organized groups in the barangay. A few said they did not know how the BSPO had been selected, since the selection had been made before they had become FTOWs. Other said they had acted on the recommendation of a former BSPO.

Three-fourths (76 percent) of the sample BSPO were the same ones selected when the BSP was first established. Of the BSPs established before the middle of 1977, 33 percent no longer had the original BSPO by 1980. Of those established between July 1977 and June 1978, 27 percent had a different BSP. Of those established during the following 12-month period, 24 percent had changed BSPs. And of those established within the 12 months preceding the survey, seven percent had changed BSPs. It appears from these figures that BSPs are most likely to drop out about one year after recruitment. After about one-fourth have dropped out (by about the middle of the second year), the attrition rate appears to diminish substantially.

FTOWs with sample BSPs where the current BSPO was different from the original one were asked why the last BSPO had been replaced. Of the 86 BSPOs whose reasons for termination were sought by this question, 38 percent had been too busy to do an effective job; 33 percent had moved away; seven percent had been inactive; six percent had quit because they received no compensation; and the remaining 15 percent were reported to have quit for a variety of reasons, such as poor location, disagreements with the FTOW, unspecified dissatisfaction, and death.

Location

The FTOWs were asked to estimate the average travel time for a typical resident of the BSP area to go "by usual means of transportation" to the nearest poblacion (town center). One-third (32 percent) said less than 15 minutes; one-fifth (21 percent) said an hour or more; the rest

gave estimates between these extremes. The median travel time was 20 minutes. This estimates was verified by asking the BSPOs how long it usually took them to reach the poblacion. Their median response was 15 minutes. It is reasonable that the BSPO's average travel time should be a few minutes shorter than that of the average BSP area resident, since the BSPO is more likely than average to live on or near a road leading to the poblacion. When the sample MW15-44 were asked how long it would usually take them to reach the BSP from their residences, the median response was five minutes.

FTOWs were also asked to estimate how long it would take a BSP resident to get to the nearest BHS as well as to the nearest clinics offering the IUD, female sterilization, and male sterilization. The response distributions are shown in Table 21. It should be noted that over one-fourth (28 percent) of the FTOWs reported that there was no BHS to which the residents of the BSP area could go, and these cases were all placed in the "60+" category. As a result the median travel time to the BHS was 30 minutes -- farther than the poblacion. However, among the BSPs located within range of a BHS, the median travel time to the BHS was 15 minutes. The median travel time to clinics offering the IUD was 31 minutes and to sterilization centers about an hour, regardless of the type of sterilization. Since most clinics offered the IUD but few BHS midwives had yet been trained in IUD insertion, it appears that the median travel time to the BHS was about half that to conventional clinics and that travel time to the BSP was about one-third that to the BHS. Thus the establishment of BSPs greatly increased the accessibility of the types of family planning services they were capable of offering.

This was true in both urban and rural BSP areas. In urban areas, the mean travel time to the BSP was four minutes, as opposed to 12 minutes for the IUD and 31 minutes for sterilization. In rural areas, the mean travel time to the BSP was nine minutes, as opposed to 40 minutes for the IUD and about 70 minutes for sterilization.

TABLE 21

FTOWS' ESTIMATES OF TRAVEL TIME FROM SAMPLE BSP TO NEAREST POBLACION, BHS, AND FP CLINICS, 1980 COS

Destination	Travel Time (Minutes)				Median
	0-14	15-29	30-59	60+	
Poblacion	32%	22%	25%	21%	20 min.
BHS	30	18	14	37	30
IUD clinic	26	22	22	30	31
Ligation clinic	10	16	25	48	57
Vasectomy clinic	10	16	22	52	63

Size

Though the BSP sampling frame was limited to those reported by the FTOW to cover between 30 and 200 MCRA, the numbers of MW15-44 enumerated by the COS field teams ranged from 19 to 351, reflecting some inaccuracy in the FTOWs' estimates. Two percent of the sample BSPs had fewer than 30 MW15-44 and three percent had more than 200. The mean number of MW15-44 per BSP was 87.4; they constituted an average of 12.5 percent of the total population enumerated in the BSP areas.

A more appropriate definition of MCRA from the standpoint of the FTOWs and BSPOs is the number of MW15-49 who thought themselves to be still fecund plus the number of MW15-44 protected by male or female sterilization. (The sterilized wives under age 45 should be included because most of them would presumably have been fecund if they had not been sterilized.) Such wives are hereafter referred to as 'MWFS". The average number of MWFS per BSP was 84.5 -- almost the same as the number of MW15-44. In rural barangays the mean number of MWFS was only 81.2; the corresponding mean in urban areas was 97.3. Thus the urban BSPs tended to cover about 20 percent more MCRA than the rural BSPs. There was a tendency for barangays in 1980 to be larger than in 1978, when the average number of MWFS was only 75.8. Population growth accounted for about 55 percent of the increase; the remainder was due to an increase in the size of BSPs established after mid-1978, probably because of the increasing proportion of new BSPs that were urban.

Another indicator of size available from the COS is the amount of time required for enumeration of the BSP areas. The COS field teams were required to keep track of the number of hours spent by each team member on enumeration. This number was influenced jointly by the number of households to be covered, their accessibility, and the topography and spatial dimensions of the geographic area to be covered. In 1978, the mean number of man-hours reported per BSP was 23.5; in 1980 it was 30.3. Similarly, the median number of man-hours rose from 19.9 in 1978 to 24.3 in 1980. This increase is surprising, since it is proportionately greater than the increase in the number of MCRA covered and since the increasing proportion of urban BSPs should have tended to make the households more accessible and the areas covered smaller. Perhaps the discrepancy is due to the fact that enumerators in 1980 were instructed to take more care in cross-checking the enumerated households with BSP records, which may have slowed them down. Otherwise, there was no difference in the procedures prescribed for enumeration.

The amount of time required for enumeration varied widely among BSPs. In 1980, the interviewers were deployed in teams of three; half of the BSPs (53 percent) could be covered by such a team in a day or less. Another 37 percent required a second day. Only one-tenth required three or more team-days.

BSPOs were asked to estimate how long it would take the farthest resident of the BSP area to reach the BSP. One-fourth (26 percent) said less than five minutes, and an additional one-fourth (24 percent) said six to 15 minutes. Slightly more (28 percent) said 16 to 30 minutes, 17 percent said 31 to 90 minutes, and 5 percent said more than 90 minutes.

Thus it can be seen that about half of the BSPs served a rather large geographic territory and a substantial minority served very large areas and were essentially inaccessible to the most remote of the MCRA in their areas of coverage. The mean distance from the BSP to the farthest MCRA residence was 26 minutes. It was three times as great in rural areas (33 minutes) as in urban areas (11 minutes).

It has already been noted that the interviewed wives were also asked how long it took to get from their residences to the BSP and that the median amount of time reported was five minutes. However, for a substantial minority of wives the distance was considerably greater. Over one-fourth (28 percent) lived 15 minutes or more away; 13 percent 15 to 29 minutes away, 11 percent 30 to 59 minutes away, and four percent an hour or more away.

Contraceptive Supplies on Hand

It has already been noted that five percent of the BSPs sampled in the 1978 COS had no condoms on hand and 15 percent had no pills. The situation in 1980 was similar, despite the reduction of the speed of BSP establishment precisely in order to avoid such problems: seven percent had no condoms, and 17 percent had no pills. Moreover, the mean numbers of condoms and pills per BSP had declined as well. In 1978 the median number of condoms on hand was 139; the 1980 median was 96. Similarly, the 1978 and 1980 median numbers of pill cycles on hand were 51 and 30, respectively. Nevertheless the 1980 quantities were more than adequate to meet the prevailing monthly demand. During the month preceding the 1980 interview, the BSPs had issued an average of 27.6 condoms and 4.2 pill cycles. Forty percent had issued no condoms, and 48 percent had issued no pills. Twenty percent of the BSPs had issued neither pills nor condoms during the preceding month. Most of the BSPs had at least a three-month supply of condoms and a six-month supply of pills.

When asked whether they considered their supplies of pills and condoms enough to meet their needs for the following month, 74 percent of the BSPOs said yes on both counts, 11 percent said they had enough pills but needed more condoms; nine percent said they needed more pills but not condoms; and six percent said that they needed more of both.

According to BSP records, nearly half (47 percent) of the recipients of pills from the BSP had last received three cycles. Twenty percent had been given more than three cycles, and 33 percent had been given less. About two-thirds (64 percent) of the condom recipients had received one dozen condoms; 16 percent had received less and 20 percent had received more.

IEC Materials

As noted above, in 1978, 47 percent of the BSPs had said they had no printed materials even for the reference of the BSPO. The situation was worse in 1980: 64 percent of the BSPOs reported that they had no printed IEC materials at all. Table 22 shows the percentages of BSPOs

TABLE 22

PERCENTAGES OF BSPS REPORTING AT LEAST ONE COPY OR MORE THAN ONE COPY OF PRINTED MATERIALS ON SELECTED TOPICS, 1978 AND 1980 COS

Topic	Have at Least One Copy		Have More Than One Copy	
	1978	1980	1978	1980
Pills	50	27	25	7
IUD	40	20	15	4
Ligation	31	20	12	8
Vasectomy	30	22	12	7
Rhythm	34	17	14	3
Condoms	44	19	15	3
Advantages of small families	37	16	15	2

in 1978 and 1980 who reported that they had at least one copy of specified types of printed materials as well as the percentages reporting that they had extra copies for distribution. For all types of materials, the proportions with supplies declined, and the decline was proportionately greater with regard to multiple copies than with regard to single copies.

The most popular type of printed IEC material is the comic book, but only 2.3 percent of BSPOs reported having multiple copies of comic books. Only 1.4 percent had given out comic books during the month preceding the survey, presumably because of limited supplies. Only 8.8 percent of the BSPOs reported that they had multiple copies of leaflets; 5.1 percent reported having given out leaflets during the month before the survey.

When the language of the available IEC materials is taken into account, the supply problem becomes even more pronounced (Table 23). When the BSPOs were asked what language was best for IEC materials distributed in the BSP area, about one-third indicated Tagalog and another one-third Cebuano. Two other dialects, Ilocano and Hiligaynon, accounted for another 21 percent of the BSPs; 12 percent specified other dialects. When asked whether most of the materials that had been given out so far were in the preferred dialect, about two-thirds to three-fourths of the BSPOs who said Tagalog and Cebuano were preferable answered affirmatively. Only 36 percent of those who said Ilocano was preferable, and 44 percent of those who said Hiligaynon was preferable answered in the affirmative. Similar or even smaller minorities replied affirmatively with regard to other dialects. It would probably be costly to produce and distribute materials in the less common dialects, but it appears that the situation could be improved by more careful planning of production and dissemination of materials in the four most common ones.

TABLE 23

PERCENTAGE DISTRIBUTION OF BSPS BY BEST LANGUAGE FOR IEC MATERIALS AND PERCENTAGES OF BSPOS REPORTING THAT MOST MATERIALS DISTRIBUTED HAVE BEEN IN THAT LANGUAGE

Preferable Language	% of BSPOs Saying This Language Is Preferable	% of BSPOs Saying Most Materials Have Been in Preferable Language
Tagalog	34.0	67.8
Cebuano	33.1	72.2
Ilocano	12.0	36.1
Hiligaynon	9.1	44.0
Bikol	3.3	33.3
Waray	2.8	40.0
Others	5.8	8.3

Involvement of Barangay Officials

According to the FTOWs, barangay officials had helped promote family planning during the year preceding the 1980 COS interview in two-thirds (67 percent) of the sample barangays. They had provided some sort of material support such as the use of equipment, transportation facilities, or other types of facilities, in 12 percent.

Family Planning Work of Other Agencies

FTOWs were asked whether each of several specified type of field workers of other agencies had done family planning work in the sample BSP area during the three months preceding the survey. The proportions of FTOWs replying are shown in Table 24. The most active workers were those representing rural health units and barangay health stations (62 and 71 percent, respectively); the least active were the workers of the Ministry of Agrarian Reform (four percent), the Ministry of Local Government and Community Development (12 percent), and clinics other than RHUs. One of the main reasons these last types of workers had such low activity rates in the sample BSP was that they were less likely to be active in the FTOW territory as a whole. To adjust for this bias, the number of FTOWs reporting family planning activity by each type of worker at the BSP level was divided by the number of FTOWs reporting such activity by that type of worker in the FTOW territory as a whole. The percentages thus obtained are also shown in Table 24. It may be seen that the activity levels of all types of workers except BHS and RHU personnel fell within a narrow range, from 29 to 43 percent.

When asked in more detail about the visits to the BSP area of the BHS midwives who do visit it, one-fourth indicated that the BHS midwife

TABLE 24

FAMILY PLANNING ACTIVITY OF WORKERS OF OTHER AGENCIES IN THE SAMPLE BSPS DURING THE THREE MONTHS PRECEDING THE SURVEY, 1980 COS

Type of Worker	% of BSPs[a/]	% of Workers in FTOW Territory[b/]
BAEx Home Management Technician	21	37
MLGCD Barangay Development Workers	12	34
MSSD Social Workers	20	39
MAR extension workers	4	29
Barangay Nutrition Scholars	27	43
BHS midwives	71	74
RHU personnel	62	65
Other clinic workers	15	35

a/Denominator = total BSPs
b/Denominator = total FTOWs reporting the presence of such workers in the FTOW territory

either lived there or visited it daily, one-third (34 percent) indicated that she visited it at least once a week but not daily, and the remaining 41 percent said that she visited it less than weekly.

Summary and Conclusions

Most BSPOs had been selected in consultation with barangay officials or other residents of the BSP area. Though the average age of the BSPs was about two years, three-fourths of the original BSPOs were still functioning. Most of those who had stopped seem to have done so about one year after recruitment, following which attrition appears to have been relatively slight.

The BSPs covered an average of 87 MW15-44 and 84.5 married women either fecund or surgically sterilized (MWFS). Urban BSPs tended to be about 20 percent larger than rural BSPs. The number of MWFS per BSP in 1980 was 11 percent larger than in 1978, partly as a result of population growth and partly as a result of the trend toward increasing numbers of urban BSPs.

Most BSPs covered a geographic area small enough that even the farthest residence was located less than 15 minutes from the BSP. However, 22 percent covered much larger territories, where the farthest MCRA lived more than 30 minutes away.

The existence of the BSP greatly increased the accessibility of family planning services for the couples living in the BSP area. The

median travel time to the BSP was only five minutes, versus 15 minutes to the BHS (if one was even located nearby), 30 minutes to the nearest clinic offering the IUD, and about an hour to the nearest sterilization center.

Most BSPs were well-stocked with pills and condoms, though 17 percent said they had no pills and 7 percent said they had no condoms. Three-fourths of the BSPOs said they had enough of both for the next 30 days. The BSPs as a whole were not supplying very many pill and condom users. Twenty percent had given out no supplies at all during the month preceding the COS interviews, and only 32 percent had given out both pills and condoms. The mean number of condoms given out during the past month had been 27 and the mean number of pill cycles had been 4, indicating that the average BSP was serving six or seven clients -- about seven or eight percent of the eligible wives in the BSP area.

Printed IEC materials of all types were in very short supply. The maximum proportion of BSPOs reporting multiple copies of any single type of printed material was only eight percent; only two percent said they had multiple copies of comic books. Five percent said they had distributed leaflets and 1.4 percent comic books during the month preceding the COS interview. Language of IEC materials posed a problem in some areas. In areas where Tagalog and Cebuano were preferred, most of the materials distributed had been in the preferred dialect, but in areas where other dialects were preferred, most of the materials tended to have been in other dialects.

Most BSP areas had been visited by workers of rural health units or barangay health stations who promoted family planning during the three-month period immediately preceding the COS interview. Workers of other agencies had promoted family planning during the same period in only a minority of the BSP areas.

Major problems appear to lie in motivating couples to use pills and condoms from the BSP, keeping the BSP well-stocked in IEC materials, and ensuring the presence and active involvement in family planning promotion of the workers of other, non-medical agencies.

BSP RECORDS

BSP Surveys

One of the first tasks of the FTOW and BSPO following the establishment of a BSP is supposed to be to conduct a baseline survey of the BSP area, in which all the MCRA are identified and listed, together with selected items of information about each (e.g., ages of husband and wife, education and occupation of the husband, number of children ever born and currently living). As noted above, it took the COS teams an average of approximately 30 man-hours to cover a BSP during the COS enumeration; the amount of time required for the BSP survey should be about the same. If both the FTOW and the BSPO work on the survey, it should be possible to complete it in an average of about two days; if only one does most or all of the work, it should not take more than one week except for the largest BSPs. Thus it should be possible to complete the baseline survey within a month or so after the date of BSP establishment. Since less than two percent of the BSPs had been established within one month before the 1980 COS, nearly all of the BSPs should have been surveyed by the time the COS was conducted. In fact, the FTOWs reported that an average of only 13.2 out of 15.0 BSPs (88 percent) had been completely surveyed. Similarly, they said that 87 percent of the sample BSPs had been completely surveyed. This was an improvement over 1978, when the FTOWs reported that only 75 percent of the BSPs had been completely surveyed. However much of the difference was probably due to the fact that a much higher proportion of BSPs in 1978 had been operating for only a few months. On the other hand, the 1980 COS data indicate that the lack of completed surveys was not limited to the BSPs that had been recently established. Among the few BSPs established in 1980, 38 percent still did not have completed BSPs; the corresponding figures for 1979 and the years before were 11 percent and 12 percent, respectively. It thus appears that nearly one-eighth of the BSPs never get surveyed completely, regardless of the amount of time allowed for enumeration.

About half (48.5 percent) of the FTOWs reported that they did not receive help from the BSPO in surveying the sample BSP. Only one-third reported that the BSPO did about half the work or more. Given the limited time the FTOWs have for any given BSP, it may be necessary to elicit a higher degree of involvement from BSPOs if the BSP surveys are to be done completely and promptly.

Number of MCRA

The main purpose of the BSP survey is to provide information on the number of MCRA and their characteristics. Such data can rapidly become out of date: couples move in and out of the BSP area; new couples get married; older couples become infecund; husbands or wives die; some couples have more children; and everyone gets older. It is therefore necessary to conduct periodic resurveys. For this reason the FTOWs were instructed to resurvey the BSP area annually. Of the sample BSPOs in 1980, 61 percent had been surveyed initially more than 12 months before the COS and should therefore have been resurveyed at least once. However, only

29 percent of these BSP areas had been resurveyed, according to the FTOWs, and only two-thirds (68 percent) of the resurveys had been within 12 months before the COS. In all, during the 12 months preceding the COS, only 26 percent of all the sample BSPs had had baseline surveys and an additional 12 percent had been resurveyed, leaving 62 percent that had not been surveyed at all during that period. Thus, most BSP survey data were either incomplete or out of date.

To determine whether the BSPOs attempted to compensate for the infrequency of surveys by updating their MCRA records, they were asked whether they had special procedures for learning about changes in the number of MCRA. About three-fourths (73 percent) of those who had not done resurveys said they did not. The remainder said they used relatively unsystematic (and therefore probably unreliable) procedures, like "asking around," asking local officials, asking pre-marital counsellors, or passively picking up information in the regular course of affairs. When asked what they would do if they learned that a couple was no longer eligible to be counted as a MCRA, 62 percent said that they would remove the record from the BSP file: 21 percent said they would simply note the change of status without removing the record from the file of legitimate MCRA, and 17 percent said they would do nothing.

The problem of getting accurate measures of the number of MCRA was compounded by the fact that the definition of MCRA used in BSP records was not uniform. From the standpoint of the FTOW and the BSPO, the most appropriate definition of MCRA is any couple either fecund or protected by surgical sterilization. The number of such couples is the same as the number of "MWFS" as defined above. However, less than two-thirds (64 percent) of the BSPOs said they would include fecund women over age 45, and only one-fourth said they would include sterilized couples even if they were under age 45. Only 11 percent of the BSPOs said they would include <u>both</u> fecund women over 45 and sterilized women under 45.

The mean number of MCRA listed in BSP records was 72.1. However, even before conducting the COS enumeration of the BSP area, the COS teams were able to find large numbers of cases that were clearly ineligible for inclusion even on the basis of the data appearing in the records: an average of 4.3 cases who resided outside the BSP area, an average of 2.5 cases of individuals without spouses, and an average of 6.1 cases of wives over age 50 and therefore almost certainly no longer capable of childbearing. Thus the records indicated an average of only 59.3 bona fide MCRA living in the BSP area. In contrast, as has already been noted, the COS enumeration turned up an average of 84.5 MCRA -- 78.2 who were currently fecund and 6.3 were protected by sterilization (either male or female). Thus, on the average, the BSP records undercounted MCRA by 25.2 cases or 30 percent. This is probably more than can be accounted for by changes since the last BSP survey even allowing for the FTOW's own admission that the BSP survey had not been completed in 13 percent of the sample BSPs. It thus appears that MCRA tended to be undercounted during the BSP surveys. Even disregarding the couples protected by sterilization (since many BSPOs said they did so) the mean difference was 18.9 couples (24 percent).

The tendency to undercount was not uniform in all BSPs. The number of bona fide MCRA indicated by BSP records was less than the COS count of

fecund married couples by at least ten cases in more than half (55 percent) of the BSPs, but it was greater by at least ten cases in 19 percent of the BSPs. COS enumerators were instructed to check the BSP records for cases not found during enumeration, and in the great majority (82 percent) of such cases the discrepancies were attributable to moves out of the BSP area or couples residing outside the boundaries specified by the BSPO; almost all the rest were cases where the wife was already beyond age 50 (nine percent) or where the marriage had been dissolved by death or separation (eight percent). The numbers of MCRA derived from the BSP records and the number of fertile married women according to the COS enumeration differed by less than ten in only about one-fourth (27 percent) of the cases.

The problem of undercounting MCRA was, as might be expected, greatest in those BSP areas where the FTOW said that the baseline survey was incomplete. Of such BSPs, 72 percent had counts based on BSP records that were less than the COS count by at least ten cases. However, undercounting was also pronounced in the BSPs where the FTOW said the survey had been completed; 52 percent of these BSPs had undercounts of ten cases or more. Overcounts were most common in the BSPs where the FTOW said that the baseline survey had been completed more than two years before the COS; 23 percent of such BSPs had overcounts of ten or more. In contrast the corresponding percentage for BSPs where the survey had been completed within two years before the COS was 10 percent, and the percentage for BSPs where the survey had not been completed was eight percent. These findings provide further support to the earlier conclusion that not conducting periodic resurveys can have pronounced effects on the accuracy of the data. The apparent association between overcounting and duration of time since last survey suggests a systematic tendency to add information on new MCRA or MCRA not previously counted, but not to remove records of those who move out of the BSP area.

Because of the tendency of out-of-date records to inflate the estimates of MCRA based on BSP records, the average of 59.3 MCRA per BSP indicated by BSP records to be bona fide was itself inflated. The extent to which it is inflated may be estimated roughly by examining the data in BSP records on the sample of MW15-44 interviewed in the COS. The method is not precise, because of the variations among BSPs with respect to the definition of "MCRA," but the approximation is probably not very misleading. Of the 3,907 MW15-44 interviewed in the 1980 COS (who were sampled from the list of MCRA generated by the COS enumeration), only 47.5 percent were represented in the BSP records. Thus only about half of the actual number of MCRA in the BSP area (an average of about 42 couples per BSP) were identified accurately by BSP records, and about 17 (29 percent) of the average of 59 MCRA that appeared to be bona fide on the basis of BSP records should in fact have been included.

The failure to conduct periodic resurveys caused errors in the data on MCRA apart from underenumeration. For instance, comparison of the wife's age according to BSP records on the sample MW15-49 with such records and the age reported during the COS interview by those same wives revealed a difference in median age of 1.4 years. The median age according to BSP records on these wives was 31.7 whereas the median age given

by the same wives during the COS interviews was 33.1. The difference, of course, reflects the difference in timing of the BSP survey and the COS.

Users of Contraception

The analysis of data from the BSP records is limited here to the records of those couples who appeared, on the basis of information in the records themselves, to be bona fide MCRA living in the BSP area (i.e., excluding those designated as having a wife over age 50, as single persons, or as living outside the BSP area). As already noted, the mean number of such records in each BSP was 59.3. The mean number of users reported among such couples was 22.7, indicating a prevalence rate of 38.3 percent. In contrast, the COS enumeration of the sample BSPs indicated a mean of 84.5 fecund MW15-49 (including those protected by sterilization) and 30.0 users, indicating a prevalence rate of 35.5 percent. In the aggregate, then, the BSP records appear to undercount numbers of users, but to agree reasonably well with the enumeration data in terms of rates; however, the interviews of wives indicated a corresponding prevalence rate of 48.2 percent. Thus, both the BSP records and the enumeration data indicate much lower prevalence levels than the interviews.

Some insights into the reasons for the differences in prevalence according to these three data sources may be gleaned by comparing their respective distributions of MCRA by current method (Table 25). For instance, comparison between enumeration and survey data indicate high agreement on the most effective methods (sterilization and the IUD) but large discrepancies for the least effective methods (rhythm, condoms, and "others"). There is a slight tendency for the enumeration to indicate higher pill use. Since the enumeration was conducted rather hurriedly, and since the respondent was not the wife herself in about one-third (35%) of the cases, it is not surprising that there was some discrepancy, particularly for methods that require the involvement of only the husband and wife, such as rhythm and withdrawal. It is likely that the respondents during the survey were more relaxed about discussing family planning practice since the questionnaire gradually worked up to the subject. It is also likely that they had a much better understanding of the full range of methods, since the question about current use was preceded by a series of questions about each method, including a description of each method for those respondents who did not name it spontaneously. Many respondents may have practiced rhythm or withdrawal but failed to report such use during the enumeration because they did not think that such practice qualified as a legitimate "method" for delaying or preventing pregnancy. During the survey, though, such respondents would have been led by the questionnaire to realize that those methods were legitimate and should be counted.

However, comparison with other surveys does suggest that part of the difference between the COS survey data and the COS enumeration data may have been due to over-reporting in the survey of use of less-effective methods. For instance in 1978, the Republic of the Philippines Fertility Survey (RPFS) indicated a prevalence rate of only 37.1 percent of MW15-44, as opposed to a 1978 COS estimate of 48.1 percent. Nearly all the differ-

TABLE 25

PERCENTAGE DISTRIBUTIONS OF MCRA BY CURRENT METHOD, ACCORDING TO BSP RECORDS, COS ENUMERATION, AND COS SURVEY OF WIVES, 1980

Method	Data Source		
	BSP Records[a]	COS Enumeration[b]	COS Survey[b]
Pills	8.1	6.2	5.0
IUD	2.0	2.0	2.0
Rhythm	8.5	8.7	12.2[c]
Condoms	9.6	2.5	3.8[d]
Ligation	5.2	6.9	6.7
Vasectomy	.4	.6	.6
Others	4.5	8.6	17.9
None	61.7[e]	64.5	51.8

a/Excluding records that indicate single person, non-resident, or wife over 50.
b/Limited to MW15-49 who believe they are fecund plus MW15-44 who are protected by sterilization.
c/Including combinations of rhythm and withdrawal.
d/Including combinations of condoms and either rhythm or withdrawal.
e/Including those with no information on status, who would have to be reported by the FTOW as non-users in the absence of data to the contrary. The average number of such cases per BSP was 16.1, indicating that a little over one-fourth of all records (28 percent) contained no information on status.

ence was accounted for by three methods -- rhythm, withdrawal, and condoms, or combinations thereof (Table 26).

It is likely that some of this difference was real, given the greater accessibility of condoms in BSP areas and the likelihood of heightened awareness of and interest in family planning in general as a result of Outreach motivational activities. However, it is unlikely that all of the difference is real, since respondents in the 1978 COS represented about one-third of all MCRA and since the BSP areas were disproportionately rural and therefore would probably have been less predisposed to contraceptive practice than average, other things equal, if the Outreach Project had not existed. It is possible that the COS overstated use of such methods, since the COS teams were brought to the community by the FTOW and usually used the BSP as their base of operations. Because their identification with program workers, the survey respondents may have been inclined to give "pleasing" responses once they had become relaxed about the interview and talking about family planning. On the other hand, it might be argued that the identification of COS teams with the program may have encouraged couples to talk more openly (and therefore more accurately)

TABLE 26

PERCENTAGE DISTRIBUTIONS OF MW15-44 BY CURRENT METHOD ACCORDING TO THE 1978 RPFS AND 1978 COS

Method	RPFS	COS	Difference
Pills	4.8%	5.2%	.4
IUD	2.4	2.0	-.4
Rhythm[a/]	8.9	13.8	4.9
Condoms[b/]	3.8	6.2	2.4
Ligation	4.7	3.3	-1.4
Vasectomy	.6	.8	.2
Withdrawal	9.5	12.4	2.9
Abstinence	1.8	3.3	1.5
Others	.5	1.1	.5
None	62.9	51.9	

a/Including the contribution of rhythm plus withdrawal.
b/Including combinations of condoms plus rhythm or withdrawal.

about their contraceptive practice than they might have otherwise and that the RPFS data understated contraceptive practice.

Similarly, during the COS enumeration, respondents may have been more guarded about their responses because the anumerator had not yet established rapport, whereas in the interview situation they may have been inclined to go to the other extreme and give pleasing answers that were not true. In this case, they would probably tend to over-report non-program methods to avoid detection. Furthermore, some may have been inclined to say they were using such methods in order to avoid later visits by the FTOW or BSPO to try to motivate them to accept family planning. The actual prevalence of use of such methods probably lies between the percentages obtained from the enumeration and survey data.

In any case, the data in Table 25 do point to a distinct tendency of [illegible] records to over-report use of pills and condoms (the two methods available from the BSP) and to underreport ligation and "others", like withdrawal and abstinence, even in comparison with the COS enumeration data. The over-reporting of condom use was especially pronounced, suggesting that many recipients of condoms from the BSP either did not use them or used them for only a short time but continued to be counted as condom users for a much longer period.

This interpretation is supported by examination of information in the BSP records on date of last contact. Each time the contraceptive status of a couple is updated, the date of contact is supposed to be indicated. However, among the 1,439 wives with BSP records who were inter-

viewed in 1980, only 40.6 percent of the BSP records had a date indicated for the last recorded status. Without a date of last contact as a guide, it is doubtful that the FTOW or BSPO would periodically follow up such cases to update their status and therefore likely that, on the average, the information provided would be at least several months old. Even of those cases with the date recorded, most did not bear recent dates. For instance, among those who were last recorded as pill users, the date indicated was before 1980 in 45 percent of the cases. The corresponding proportion for condoms was 44 percent, for the IUD 32 percent, for rhythm 37 percent, for other methods 67 percent, and for those recorded as non-users 90 percent.

In addition to indicating the date of last contact, the BSP records were supposed to indicate also a "deadline" date for the next contact. In the case of methods requiring resupply, this date was supposed to be the month in which the current supply would be expected to run out. In the case of users of other methods or non-users it was supposed to be left to the discretion of the FTOW and BSPO but no more than six months from the date of last contact. In fact, it was found that only 9.9 percent of the records even contained a "deadline" date. Furthermore, most of the dates that were reported were already overdue. Only 2.9 percent of the records had deadline dates that were not overdue (i.e., that were for the current month or later), indicating that this information was not being used to guide the scheduling of field activities as intended.

In Table 27, the information on "deadline" dates is broken down by method last recorded for the 2,034 interviewed MW15-49 for whom BSP records were found. Not surprisingly, almost none of the sterilization

TABLE 27

INFORMATION ON "DEADLINE" DATE FOR INTERVIEWED MW15-49 WITH BSP RECORDS, BY METHOD LAST REPORTED, 1980 COS

Last Method	(N)	% With No Deadline Date	% With Overdue Deadline Date	% With Deadline Date Not Overdue
Pills	183	59.0	28.4	12.6
IUD	41	93.6	6.4	0
Rhythm	182	85.2	7.7	7.1
Condoms	190	59.7	27.7	12.6
Sterilization	91	99.3	.7	0
Others	82	94.5	4.8	.7
None	565	97.1	2.9	0
No information on status	701	99.8	.2	0
TOTAL	2034	90.1	7.0	2.9

users had deadline dates, since this is the one method that is irreversible. However, almost none of the non-users or cases with no information on use (assumed to be considered non-users as well) had deadline dates. This is unfortunate, since they are the ones most in need of motivation. Very few of the users of IUD or "other" methods had been scheduled for follow-up, though changes of status were inevitable even over periods of a few months, especially for users of "other" methods. About 15 percent of the rhythm users and 40 percent of the pill and condom users had deadline dates. For all methods except the last three, virtually all the deadline dates were for months prior to the COI interview month and therefore overdue. Even among pill and condom users two-thirds of the deadline dates recorded were overdue, as were about half of the rhythm deadline dates.

Conclusions

Clearly, the record-keeping and reporting system for the Outreach Project was not effectively serving either of its two main intended functions: to provide information for project managers on contraceptive practice in the BSPs and to serve as a guide to FTOWs and BSPOs for scheduling their field activities. The records were out of date in terms of identifying the MCRA in the BSP area, in terms of the basic information on such matters as their addresses, ages, and parity, in terms of their contraceptive practice, and in terms of their need for follow-up. Even allowing for problems of timing of the BSP surveys, it appears that the MCRA were not completely covered at the time of the BSP survey. Many FTOWs and BSPOs appear to have ignored use of non-program methods, such as withdrawal and abstinence, despite the high prevalence of these methods. The failure of FTOWs and BSPOs to use the records to guide home visiting activities appears to have been largely responsible for a systematic upward bias in the reporting of condom and pill use, especially the former. These findings point to a need for major reforms in record-keeping and reporting at the BSP level.

FIELD OPERATIONS

FTOWs' Workload

When asked how many days they had worked during the week immediately preceding the interview date, one-fifth of the FTOW's reported that they had worked less than five days, presumably as a result of taking sick leave or annual leave for one or more days. On the other hand, 35 percent reported working six or seven days (20 percent and 15 percent, respectively). The mean number of days worked was 5.0, although less than half (46 percent) of the FTOWs reported working precisely five days. (If the FTOWs with absences -- i.e., those reporting less than a five-day week -- are excluded, the mean work week rises to 5.6 days.) The average work week of five days translates into an average of 22 work days per month, allowing for absences.

The mean number of working hours reported by the FTOWs for the same week was 42. However, the distribution of responses was highly skewed, with five percent reporting over 63 hours (an average of nine hours a day for seven days). Since it is likely that some of these high estimates are exaggerated, the median of 40.4 hours might provide a more realistic estimate of the average number of hours worked. The mean numbers of hours worked by those who said they worked 5, 6, and 7 days were 42, 51, and 57 hours, respectively -- a consistent average of a little over eight hours a day. The implied mean number of hours worked each month was about 185.

FTOW's Time Allocation

Each sample FTOW was asked to choose from a list of eleven tasks the three on which they spent most of their working time and the three on which they spent the least time. The tasks, listed in order of presentation to the FTOWs, are shown in Table 28. For each task, the percentages of respondents placing it among the three on which they spent most and least time are shown, together with the difference between the two percentages. The differences serve as a score for ranking the tasks in terms of the amount of time the FTOWs put into them. The ranks, shown in the last column, indicate that the FTOWs spent most of their time on recruiting and maintaining family planning users and on establishing and maintaining DSPs. The activities on which they spent least time were in helping with the municipal development plan, helping with non-family planning activities, coordinating with workers of other agencies, and pre-marital counselling. It is interesting to note that despite POPCOM's recent concern with improving interagency coordination in the field and the reflection of this concern in the FTOW's own stated preferences for additional training, coordination with other workers had particularly low priority in terms of time allocation.

The FTOWs were also asked whether they considered it more important for them to "emphasize family planning or assist in more general development work." Half specified family planning; one-sixth (16 percent) said they considered both equally important; and one-third (34 percent) said they considered general development more important. This finding, in

TABLE 28

DISTRIBUTION OF FTOWS BY ALLOCATION OF TIME AMONG SELECTED TASKS, 1980 COS

Task	Time Allocation		Difference	Rank
	% "Most"	% "Least"		
Coordinating with other workers	13.7	45.2	-31.5	9
Assisting in non-FP work	3.9	48.5	-44.6	10
Municipal development plan	.8	47.2	-46.4	11
Premarital counselling	9.5	38.4	-28.9	8
Establishing BSPs	44.7	13.6	+31.1	3
Maintaining/monitoring BSPs	51.0	15.1	+35.9	2
Lecturing on FP	37.9	18.4	+19.5	5
Organizing meetings for FP	11.7	20.3	-8.6	7
Motivating couples to accept FP	63.9	8.9	+55.0	1
Maintaining continuing users	41.2	17.4	+23.2	4
Following up dropouts	21.5	26.7	-5.2	6

conjunction with the time allocation data, suggests that some FTOWs are emphasizing family planning tasks in the course of their work because they are instructed to do so rather than because they believe it be their central function.

However, the great majority appear to be convinced that population problems are of special importance. In 1978, the FTOWs were asked to select from a list of nine priority areas of government development programs (nutrition, food production, population, education/manpower, housing, health, employment, industrialization, and environmental management, listed in that order) the three they considered most important. Population was cited by the highest proportion (83 percent), followed by nutrition (63 percent) and food production (52 percent). The remaining areas were cited by less than half; housing (five percent) and industrialization (three percent) were cited least. (The question was not repeated in 1980, but there is no reason to expect any major change; the distributions of responses in 1978 regarding time allocation and relative emphasis were very similar to those obtained in 1980.)

FTOWs' Visits to BSPs

A good deal of the FTOWs' time was taken up in maintaining BSPs, as already noted. FTOWs were instructed to visit each BSP at least once a month. Data on their visits to their BSPs as a whole may be inferred from responses to questions about the frequency and duration of their visits to the sample BSPs. When asked when they had last visited the sample BSP, 82 percent of the FTOWs said within the past month, indicat-

ing that they were visiting about four-fifths of their BSPs at least monthly, as instructed. Ten percent had been visited between 31 and 60 days before the interview, and eight percent more than sixty days earlier. With an average of 15 BSPs per FTOW, it appears that about 12, on the average, were visited each month. Some were visited more than once a month. Among those visited during the month before the COS, the mean interval since the last visit was 12 days, implying that the average frequency of visits to these BSPs was about once every 24 days -- a rate of 1.25 visits per BSP.

The reported duration of the last visit to the sample BSP (excluding travel time) ranged from less than one hour (15 percent) to eight hours or more (13 percent). The median duration was 2.4 hours, but the mean was higher -- about three hours (it cannot be computed exactly because of the open-ended category, "eight hours or more"). With an average of 12 BSPs being visited 1.25 times each month for about three hours, the implied amount of time spent by the FTOW in the BSPs was about 45 hours. On the average, then, about one-fourth of the FTOW's time was spent in BSP areas.

The median travel time to each BSP was 30 minutes. The distribution of travel times was highly skewed; 8.5 percent reported times of 90 minutes or more. Again the mean cannot be computed precisely, but it appears to have been close to 35 minutes. However, assuming that the more distant BSPs were visited less frequently than average, it seems reasonable to assume that each BSP visit in a given month required, on the average, no more than one hour of travel time for the round trip. In this case, the total time for BSP visits, including travel time, would be about 60 hours, or about one-third of the FTOWs reported work time, each month.

Since most of the activities that the FTOWs said occupied most of their time (maintaining BSPs, home visits, and other motivational work) would be done in the BSPs, it is surprising that a larger proportion of the FTOWs' work time was not allocated to BSP visits. Some time had to be spent outside the BSP in preparing reports, meeting with DPOs, establishing new BSPs, coordinating with workers of other agencies, doing some follow-up work for clinics, and perhaps doing some motivational work in non-BSP areas and helping municipal officials in non-family planning activities. However, with most of the MCRA in the FTOW territory already living in BSP areas, it is surprising that the FTOWs should need to spend nearly twice as much time on tasks outside BSP areas as on visiting the established BSPs.

FTOWs' Home Visits

When asked whether they had visited any MCRA at home during the week preceding the interview, 23 percent of the FTOWs said they had not. Since only three percent said they had worked at all during that week, it can be inferred that one-fifth of the FTOWs who did work did not visit any MCRA at home. For those who did home visits, the median number per FTOW was 10.8. Overall, including those FTOWs who did none, the median number of home visits was 8.1, and the mean was 13.5. The large difference between the mean and the median was due to the skewness of the dis-

tribution of this variable. About one-tenth (9.4 percent) of the FTOWs said they had done more than 30 home visits during the week preceding the interview.

Less than one-third (31 percent) of the FTOWs were able to show the interviewers written records of home visits. The rest either said that they had such records but that the records were not available at the time of the interview (11 percent) or that they did not keep such records (58 percent). The mean number of home visits according to written records was 12.1, whereas those FTOWs who relied on memory reported a mean of 14.3. It seems likely that the former is a more accurate estimate of the number of home visits than the overall mean (13.5), obtained by combining estimates based on records with those based on memory, since the latter were probably based toward reporting more visits than actually occurred. The weekly average of 12.1 visits translates into a monthly average of 53.

The implied number of home visits per FTOW per year is 629 (i.e., 52 x 12.1), or a ratio of about one home visit to three MCRA in the territory. With about 2,600 FTOWs (outside Metro Manila), this translates into 1.6 million home visits. Since many MCRA are visited more than once in a year, the average number of MCRA visited by FTOWs in a year is undoubtedly much smaller.

The FTOWs were asked to indicate how many of the preceding month's home visits had been conducted for each of the following purposes: motivating non-users to accept family planning, motivating users of less effective methods to change to more effective methods, following up users, conducting or updating BSP surveys, and others. Table 29 shows, for each type of visit, the mean number of visits, the proportion of FTOWs report-

TABLE 29

HOME VISITS BY FTOWS DURING PAST WEEK, BY TYPE OF HOME VISIT, 1980 COS

Type of Home Visit	Mean[a/]	% None[b/]	Maximum[b/]
For motivating non-users to use FP	4.4	37.6	70
For motivating users of less effective methods to shift to more effective methods	1.7	55.0	39
For follow-up of users	4.3	37.9	60
For BSP survey	1.5	78.4	50
For other purposes	.2	90.9	8
Total	12.1	22.6	(398)

a/Based on written records only.
b/Based on responses of all FTOWs including those without written records.

ing no such visits, and the maximum number of visits reported. On the basis of the means, it may be calculated that 36 percent of the visits were for motivating non-users to become users and 36 percent for following up users. Visits for motivating couples to change methods and for BSP survey work constituted 14 and 12 percent, respectively.

The frequency of home visits by FTOWs appears to have risen sharply between 1978 and 1980. In 1978, the FTOWs were asked how many motivational home visits they had done among non-users during the month before the COS, how many visits to dropouts, and how many other follow-up visits; the mean numbers reported were 12.6, 5.4, and 4.6 respectively. (No questions were asked regarding home visits for motivating users to change methods or for BSP survey work.) The weekly means reported in 1980 for motivational visits to non-users and follow-up visits of users translate into monthly means of 19 visits of each type, or an average of 38 visits of the two types combined, which is 65 percent higher than the corresponding 1978 average of 23 visits.

The average amount of time spent per FTOW on home visiting in 1980 can be roughly approximated on the basis of the above data plus information from the 1978 COS on the length of home visits. According to the FTOWs interviewed in 1978, they spent an average of about 40 to 45 minutes (the mean cannot be calculated precisely because of truncation) per motivational home visit; the median amount of time they reported for such visits was 35 minutes. They were not asked about the amount of time required for other types of home visits, but such visits would probably require less time, especially those for BSP surveys. On the basis of these considerations, it seems reasonable to assume an average of about 30 minutes for each home visit. In this case, the amount of time spent by FTOWs on home visits each month would be about 27 hours. Allowing for time spent going from house to house and making call-backs to couples initially not at home, the total amount of time consumed by home visits was probably close to 50 hours each month, on the average. Most of this time probably overlaps with the time spent in BSP areas (estimated above).

FTOWs' Use of IEC Materials

Most FTOWs reported that they had at least one flip chart for use in home visits that dealt with family planning methods (82 percent), human reproduction (82 percent) and/or the advantages of having small families (70 percent). When asked for which of these three topics they considered flip charts to be most useful, the BSFOs most commonly selected the advantages of small families (56 percent) and least commonly selected human reproduction (13 percent). Nearly all the FTOWs who did not have flipcharts on any given topic, even human reproduction, said that they needed one.

Next to personal communication through home visits, the major IEC activity of the FTOWs is supposed to be to distribute printed IEC materials. These materials are usually in the form of leaflets and comic books. The latter are, of course much more expensive to produce, but they are also more in demand. Of the FTOWs interviewed in 1980, only 28 percent said that they had given out any leaflets and only 10 percent

any comic books during the week preceding the interview. (These percentages included distribution to BSPOs, local officials, workers of partner agencies, etc., as well as to MCRA, and refer to the entire FTOW territory rather than to the sample BSP area.) The mean numbers given out (per FTOW, including those who gave none) were 9.9 leaflets and 1.6 comic books. These weekly means work out to annual means of 515 leaflets and 83 comic books per FTOW. With 2600 FTOWs, the implied distribution of such materials is 1.3 million leaflets and 216,000 comic books, for a target population (outside Metro Manila) of 5.05 million couples. It should be noted that most leaflets are focused on single methods, and therefore more than one are often given to the same couple.

The disturbingly low proportions of FTOWs who said they distributed IEC materials during the week before the COS interview can be traced to inadequate supplies of such materials. Only 49 percent of the FTOWs said they had extra copies of leaflets for distribution at the time of the COS interview; the remainder had only single copies for their own reference or none at all. Eighty percent had no extra copies of comic books for distribution.

When the FTOWs were asked how many they would like to give out each week, the median numbers specified were 32 leaflets and 30 comic books. These were probably high estimates, owing to the current level of unmet demand. If they had plenty of IEC materials over a long period of time the number needed each week would probably decline markedly. Nevertheless, just to supply them with one week's supply at this level would require about three times as many leaflets and 19 times as many comic books as they were giving out at the time of the survey, indicating at least a temporary shortfall of serious dimensions.

With regard to printed IEC materials (either leaflets or comics) on specific topics, the FTOWs' current supply levels can be seen in Table 30. The types of materials available in the greatest quantities were those on pills and sterilization. Those least available were on rhythm, condoms, and the advantages of small families. The lack of materials on rhythm, especially on the correct application of calendar rhythm (which is the type used by nearly all rhythm users) is especially important, since this method is widely used but knowledge about how it should be used is very low.

Another major IEC resource that might be used by FTOWs is the radio. Every region has produced and aired IEC material for the radio, ranging from short public-service messages and jingles to talk shows and dramas. However, when the FTOWs were asked whether there was a radio program that could be heard in their territory at the time of the COS interview, only 43 percent said yes. When asked whether they recommended these programs to MCRA, 92 percent of those who knew of a program said they did, but only two-thirds (66 percent) said they themselves listened to them, and about half (53 percent of those who knew of a program, or 22 percent of all FTOWs) said they discussed them with MCRA.

However, the FTOWs do not appear to have informed their BSPOs about such programs. When asked whether radio programs on family planning could be heard in the sample BSP area, only 34 percent of the sample BSPOs said

TABLE 30

PERCENTAGE DISTRIBUTION OF FTOWS BY AVAILABILITY OF SELECTED TYPE OF IEC MATERIALS, 1980 COS

Subject Matter	Number of Copies on Hand			Total
	None	One Copy	More than One Copy	
Pills	14.4	50.4	35.2	100.0
IUD	26.7	47.7	25.6	100.0
Ligation	22.6	41.7	35.7	100.0
Vasectomy	18.3	43.2	38.5	100.0
Rhythm	49.3	42.1	8.6	100.0
Condoms	42.1	42.0	15.9	100.0
Advantage of small family	56.8	32.3	10.9	100.0

they knew of a program. Of the BSPOs whose FTOWs said they knew of a radio program, only 44 percent said they knew of such a program. Furthermore, of those whose FTOWs said that they knew of no family planning program, 18 percent said they did know of one. Even in the 70 cases where both the BSPO and the FTOW said there was a program, the great majority of the paired responses indicated different programs. (The precise number of cases where the FTOW and BSPO agreed on the same program cannot be ascertained, since many could not remember the titles, and additional information on frequency, time and station was usually incomplete. However, it appears that no more than one-third of the matched responses -- seven percent of all 359 FTOW/BSPO pairs -- referred to the same program.)

Service Provision by FTOWs

The FTOW can provide two important services to BSP residents that cannot ordinarily be provided by the BSPO: screening for pill acceptance and instruction in the rhythm method. One of the major elements in the original design of the Outreach Project was the training of FTOWs to use a checklist to screen potential pill acceptors for contraindications and the authorization for them to dispense initial supplies of pills to those cases without contraindications. Accordingly, FTOWs were trained in the checklist and authorized to recruit new pill acceptors without clinical intervention. However, it soon became apparent that this policy was widely opposed by personnel of partner agencies with family planning clinics, and some POPCOM regional and provincial offices instructed their FTOWs to refer potential pill acceptors to clinics in the interest of harmonious relations with the partner agencies. As a result, half of the FTOWs interviewed in 1978 said that they had been instructed not to recruit new pill acceptors without clinical intervention. Moreover, two-thirds of the remainder said that they did not feel sufficiently well-trained

to decide whether a woman should accept pills and for this reason did not try to recruit new pill accepters without referring them to clinics, leaving only 16 percent of all FTOWs who said that they did so.

Between 1978 and 1980, through discussions involving POPCOM Central Office and the heads of the various partner agencies, the policy on FTOW recruitment of pill acceptors was modified: the FTOWs were authorized to use the checklist and provide the first supply of pills to MCRA living far from the clinic on condition that they recommend that the wife attend the clinic subsequently for medical examination. In addition, most FTOWs underwent further training in the checklist to give them greater confidence. In the 1980 COS, the FTOWs were asked,

> If a wife were willing to accept pills and had no contraindications but could not go to the clinic, would you give her pills or recommend that she try another method?

Despite the new policy and additional training, only 55 percent of the FTOWs replied that they would give her pills.

With regard to rhythm instruction, the FTOWs could serve an important role, since all of the varieties of rhythm are relatively difficult to understand and teach. FTOWs are better equipped educationally and can spend more time learning about rhythm during training than BSPOs. Since rhythm is widely used, and often incorrectly, there is a need for someone in the field to work on upgrading the quality of rhythm practice, and the FTOWs seem best suited to this role. However, of the FTOWs interviewed in 1980, only 65 percent said that they had instructed any couple in the entire FTOW territory during the month preceding the survey. Three percent said they had never done so, and 13 percent said they had last done so more than three months before the interview date.

BSPOs' Workload

FTOWs and BSPOs were both asked to compare each other with regard to the amount of time spent on family planning work in the BSP area. The results are shown in Table 31. Both types of respondents were more

TABLE 31

PERCENTAGE DISTRIBUTIONS OF BSPS BY RELATIVE INPUTS OF FTOWS AND BSPOS, AS REPORTED BY FTOWS AND BSPOS, 1980 COS

Relative Inputs	Reported by: FTOW	Reported by: BSPO
FTOW > BSPO	38.2%	45.9%
Equal	17.4	14.2
BSPO > FTOW	44.4	40.8

likely to say they thought the other was doing more work. It seems likely that the BSPOs' judgments were more accurate than the FTOWs' since the BSPOs are in the BSP all the time and can see how much time the FTOW spends there, whereas the FTOW can observe the BSPO directly only during visits to the BSP. In any case, the differences are not great, and both response distributions indicate that, on the whole, BSPOs and FTOWs put in similar amounts of time on family planning in any given BSP.

BSPOs were more likely to say they were spending more time on family planning work in the BSP area than the FTOWs if they had been formally trained, had received some sort of incentive during the year preceding the COS interview, or had been selected with the help of barangay officials rather than by the FTOW alone or with the advice of other barangay residents (Table 32). BSPOs also tended to be more active than FTOWs in rural areas than in urban areas. However, responses to other questions indicate that this last relationship results from greater FTOW activity in urban areas rather than less BSPO activity. For instance, it will be seen (Table 34, below) that urban BSPOs were more active than rural BSPOs. Since it has been found that the amount of time spent by FTOWs on home visits fell far short of what was needed to cover all their MCRA, it is important that efforts be made to increase the active participation of BSPOs. It appears that such an increase may be facilitated

TABLE 32

PERCENTAGES OF BSPOS REPORTING THAT THEY DID MORE FP WORK THAN THE FTOW IN THE BSP AREA, BY SELECTED INDEPENDENT VARIABLES, 1980 COS

Independent Variable	% Saying BSPO Did More Work
BSPO Training	
Formally trained	51.4
Informally trained	29.4
BSPO Incentive in Past Year?	
Yes	59.1
No	35.1
Who Selected BSPO?	
FTOW alone	32.4
With advice from barangay officials	43.4
With advice from barangay residents	37.9
Type of Barangay	
Urban	33.8
Rural	41.6

by increased formal training of BSPOs, increased provision of formal incentives, and increased consultation with barangay officials in selecting BSPOs.

FTOWs and BSPOs were both asked whether the sample BSPOs had engaged in specific types of activities during the month preceding the CCS interviews. Again, the FTOWs appear to have overestimated the participation of BSPOs relative to the BSPOs' own responses (Table 33), and again it is assumed that the BSPOs' responses were more accurate than the FTOWs', since they were in a better position to know what they had done. As with the level of BSPO activity relative to that of the FTOW the proportions of BSPOs conducting specific activities tend to be higher among those formally trained but not necessarily among those given incentives or those selected with the help of barangay officials (Table 34). On the contrary, the BSPOs selected with the help of barangay officials tended to report the lowest activity levels except with regard to distribution of IEC materials. Perhaps those recommended by barangay officials tend to be too busy with other activities to devote as much time to family planning activities

About half (53 percent) of the BSPOs reported that they had done no home visits of any kind during the month before the COS interview. This was higher than the corresponding proportion from the 1978 COS (36 percent). Similarly, the mean number of BSPO home visits reported in 1980 (3.5, including those reporting no home visits) was lower than the corresponding figure for 1978 (5.8). Thus, there appears to have been a substantial reduction in home visiting activity by BSPOs between 1978 and 1980.

BSPOs' IEC Support

It has already been noted that nearly two-thirds (64 percent) of the BSPs had any IEC materials on hand and that less than ten percent had multiple copies of any given type of IEC material. It has also been noted

TABLE 33

PERCENTAGES OF BSPOS ACTIVE IN SPECIFIC WAYS DURING THE PAST MONTH, ACCORDING TO FTOWS AND BSPOS, 1980 COS

Type of BSPO Activity	According to: FTOW	BSPO
Tried to recruit new acceptors	54.1	29.0
Gave out IEC materials	25.1	16.9
Referred couples to clinics	26.5	24.7
Visited pill or condom users at home to give resupply	50.4	24.6
Followed up users of other methods	64.5	23.9

TABLE 34

PERCENTAGES OF BSPOS REPORTING SPECIFIED TYPES OF MOTIVATIONAL WORK, BY SELECTED INDEPENDENT VARIABLES, 1980 COS

Independent Variables	Percentages Who Reported That They:					
	Tried to Recruit	Gave IEC Material	Referred to Clinic	Delivered Resupplies	Followed up Users	Made Any Home Visits
BSPO Training						
Formally trained	33.8	18.0	34.5	31.6	26.5	53.6
Informally trained	24.9	16.0	16.1	17.7	21.1	40.1
BSPO Incentive in Past Year?						
Yes	29.2	15.8	34.0	30.1	25.3	48.0
No	29.1	17.3	22.5	23.0	23.3	46.1
Who Selected BSPO?						
FTOW alone	33.4	14.9	22.5	30.0	27.0	52.2
With advice from barangay official	27.1	17.9	25.1	20.1	19.5	42.8
With advice from barangay residents	29.5	16.8	26.3	25.0	27.4	46.3
Type of Barangay						
Urban	34.0	15.5	22.8	33.7	28.9	50.2
Rural	27.7	17.3	25.2	22.2	22.6	45.7

that only about one-third of the BSPOs knew of a radio program about family planning. Similarly, only eleven percent reported having a flip chart on family planning methods or the advantages of having a small family, and ten percent on human reproduction. Nearly all BSPOs (93 to 95 percent, depending on the subject matter) said they needed such flip charts. They were most likely to select flipcharts on family planning methods as most useful (52 percent) and least likely to select those on human reproduction (6 percent).

Mobilization of Community Resources

Given the dearth of IEC support through the mass media and the difficulty of covering all MCRA through home visits, it is important to find alternative strategies for communicating with MCRA. To this end, POPCOM has encouraged FTOWs and BSPOs to seek barangay-level organizations through which family planning messages may be channeled.

For instance, one way to reach a large number of MCRA in a short period of time is to meet with them during barangay assemblies, either by attending one or more regularly scheduled meetings or by arranging with barangay officials to call a special meeting. Forty-three percent of the FTOWs said that they had "used barangay assemblies for promoting family planning" in the sample barangay during the 12-month period preceding the COS interview. Estimates of the number of MCRA represented at the last such meeting ranged from three to 100, with a median of 29. Three-fourths (77 percent) of the FTOWs who said they had used such meetings reported that the BSPO had helped boost attendance by inviting MCRA to attend; the median number of MCRA estimated to have been invited to the last such meeting by the BSPOs who helped in this way was 20.

Another way to reach large numbers of couples in the barangay -- and to do so on a continuing basis -- is to establish a family planning club. As initially envisioned by program planners, such clubs would be set up for family planning users; accordingly, the term "satisfied users club (SUC)" was coined to denote such special-purpose family planning clubs. However, many of the clubs that have been established, though called SUCs, have in fact been open to non-users and dropouts as well. When the BSPOs interviewed in 1980 were asked whether such a club had been established in the sample BSP, three percent (a total of eleven respondents) answered in the affirmative. The dates of establishment of these clubs ranged from July 1977, shortly after the FTOWs were first sent to the field, to April 1980, shortly before the COS interviews, indicating that such clubs were still being formed but at only a very gradual pace.

According to the BSPOs, six of the eleven clubs so far established had been initiated by the FTOW, three by the BSPO, and one each by an MSSD worker and the municipal mayor. The median number of members was 37, but the range was great -- from 9 to more than 86 (the highest codable number). Eligibility for membership was extended to include non-users in two out of the eleven clubs, men in six, and even unmarried women in three. Five of the clubs were reported to meet monthly, three of them more frequently, two of them only twice or three times a year, and one annually.

As for activities, eight of them were reported to have had family planning lectures or classes, seven to have conducted home visits to motivate non-users to accept or reaccept, and seven to have conducted home visits to maintain current users. Five of them were reported to have undertaken other (non-family planning) types of activities during the past year, including financing of small agricultural projects, training in tailoring and dressmaking, benefit dances, and a Christmas program. All eleven BSPOs with such clubs responded affirmatively when asked whether they considered them "helpful enough for promoting family planning practice to justify the effort required to established and maintain them."

A much more common technique for using clubs to spread family planning messages is to include family planning among the concerns of existing mother's clubs, such as the rural improvement clubs sponsored by BAEx. Nearly half (46 percent) of the BSPOs reported the integration of family planning into such a club in the BSP area. Five percent reported the

incorporation of family planning into the functions of other types of groups, such as religious groups, political groups (e.g., barangay brigades), adult classes, and youth groups. In all, 52 percent of the BSPOs reported the presence of some sort of club or group in the BSP that was involved in family planning promotion.

Summary and Conclusions

The FTOWs reported an average of about 40 hours' work during the week before the COS interview, even allowing for the fact that one-fifth reported working less than five days. One-third said that they had worked more than five days.

According to the FTOWs, most of their time was spent on recruiting and maintaining family planning users and on establishing and maintaining BSPs. They said they spent least time on activities relatively unlikely to have a direct effect on contraceptive practice: helping with the municipal development plan, helping in non-family planning activities, coordinating with workers of other agencies, and premarital counselling. However, one-third said they felt their job should be to promote development in general rather than to focus on promoting family planning, and only about one-third of their working time could be accounted for by visits to BSPs and home-visiting activities, including travel time.

It has already been noted that IEC materials were in extremely short supply at the BSP level, and the FTOWs' responses indicated a similar problem, though of lesser magnitude, at their level as well. Half of the FTOWs said they had no extra copies of printed IEC materials; only one-fourth said they had distributed leaflets and only one-tenth said they had distributed comic books during the week preceding the COS interview, including distributions to BSPOs and other workers as well as directly to MCRA.

Only half of the FTOWs said they would give initial pill supplies to women who were free of contraindications and couldn't go to the clinic. Despite the high prevalence of rhythm practice and the lack of understanding about how to use this method effectively, one-third of the FTOWs said they had not instructed any couple in the use of rhythm during the month preceding the interview.

On the whole, the FTOWs and BSPOs tended to report that BSPOs were putting in about as much time on family planning work in the sample BSP areas as the FTOWs. However, although the FTOWs reported doing more home visits in 1980 than in 1978, the BSPOs reported doing fewer. Furthermore, no more than one-third of the BSPOs reported having tried to recruit new acceptors during the month preceding the COS interview, and even smaller proportions reported other activities during the same time period, like referring couples to clinics, following up users, providing home delivery of supplies or distributing IEC materials.

The problem of shortages in printed IEC materials was alleviated in some BSP areas by use of community assemblies, special-purpose family planning clubs, and other types of clubs incorporating family planning.

promotion among their activities. The use of barangay assemblies during the year preceding the COS interviews was reported in 43 percent of the sample BSPs. Three percent were reported to have active family planning clubs. And about half of the sample BSPs had other types of clubs that promoted family planning among their members.

The major shortcomings revealed by the data were the relatively small proportion of the time spent by FTOWs in BSP areas, especially on home visiting, the small proportion of BSPOs reporting that they actively promoted family planning, the shortage of IEC materials, and the large proportion of BSP areas where group support for family planning had not yet been mobilized.

SUPPORT AND SATISFACTION OF FTOWS AND BSPOS

Supervision of FTOWs

When asked whether they felt a need for "more guidance or support from" the DPO, nearly half (47 percent) of the FTOWs said they did not. About one-fourth (26 percent) said they felt the DPO should spend more time in the field or should assist more in IEC work. The remainder cited a variety of needs: moral support (six percent); guidance and/or feedback on their work (six percent); help in coordinating with local officials (three percent); help in BSPO selection (three percent); help in getting forms, IEC materials, and money for BSPO incentives (three percent); and other kinds of assistance (six percent).

Two-thirds of the FTOWs (65 percent) reported that the DPO had visited their territories within the month preceding the COS interview; four percent reported that the last visit had occurred more than two months before. In contrast, almost all (96 percent) said they felt the DPO should visit their territories at least once a month. Given the small numbers of FTOWs per DPO (ranging from two to ten and averaging 5.5), this does not seem to be an unreasonable expectation. A majority (56 percent) said they would prefer to be visited at least twice a month. The mean desired number of visits per month was 2.0. The median amount of time spent by the DPO in the FTOW's territory during the last visit reported by the FTOWs was 3.9 hours, and this was close to the median ideal of 4.2 hours.

Most FTOWs (94 percent) reported that they saw the DPO at least once a month at the latter's office; 19 percent reported two or three such visits a month, and 13 percent reported at least one such visit each week. However, visits to the DPO's office could not be an adequate substitute for visits by the DPO to the FTOW's territory.

Visits by the DPO to individual BSPs were, of course, much less frequent. One-third of the FTOWs reported that their DPOs had never visited the sample BSP; 39 percent said they had visited it within the three months preceding the COS interview. The likelihood of a DPO visiting a BSPO was inversely correlated with the distance from the DPO's office to the BSP. Only one-fourth of the BSPs less than 25 minutes had not yet been visited, whereas nearly half (46 percent) of those 75 minutes or more away had not yet been visited.

Payments of FTOWs

The distribution of FTOWs with regard to reported salary was bimodal. Forty percent reported a monthly salary of 420 pesos, and 22 percent reported a salary of 490 pesos, reflecting a change in salaries during the course of the COS field work. The salaries were set at uniform levels by POPCOM, but some FTOWs received additional amounts from local funds. (Twelve percent of the FTOWs reported salaries less than 420 pesos, but the reasons for this are not clear. They may have been referring to net amounts after deductions.) When asked whether they thought "this salary

is adequate for the work that you do," only five percent said yes. The median preferred monthly salary was 602 pesos; 38 percent of the FTOWs said they preferred a salary of 600 pesos.

To cover their territories thoroughly, the FTOWs need liberal amounts of travel money. Travel reimbursements tended to be more variable than salaries, reflecting differences among FTOW territories, but more than half (55 percent) of the FTOWs reported a "usual" monthly travel reimbursement of 170 pesos, indicating that this was the maximum level allowed for a large proportion of FTOWs. Only 12 percent reported a greater amount. The highest amount reported was 270 pesos. As with salary levels, most FTOWs (89 percent) felt that their present travel allowance was inadequate. The median amount preferred was 247 pesos; 30 percent said they preferred 200 pesos, 23 percent 250 pesos, and 23 percent 300 pesos. The range was from 120 to 700 pesos.

One-fifth of the FTOWs (21 percent) reported delays of more than two weeks in receiving their salaries, 9 percent reporting delays of six weeks or more. Over half (59 percent) reported delays of more than two weeks in receiving travel reimbursements; 41 percent said the delay was more than six weeks. The greater delays in travel reimbursements were apparently due to the increased paperwork, owing to the variable nature of the payments and the need for actual expenses to be reported verified.

Difficulty of FTOW Work

The FTOWs were asked to rate their work as very difficult , moderately difficult, moderately easy, or very easy. The great majority of FTOWs (90 percent) said they found their work difficult, but only 19 percent said it was very difficult. Nine percent said they found the work moderately easy, and one percent said they found it very easy.

In 1978, the same question had not been asked, but the FTOWs were asked to state whether they agreed or disagreed with the statement, "The work of the FTOW is difficult," and indicate whether their agreement or disagreement was strong or moderate, thus creating a similar four-point scale. At that time, 69 percent of the FTOWs said they agreed (35 percent strongly); 31 percent said they disagreed (eight percent strongly). Thus, extreme responses (strongly agree or disagree) were more commonly elicited in 1978, and the overall assessment at that time seemed to be that FTOW work was easier. The apparent shift may reflect an increase in workload with the establishment of more BSDs; it may also reflect decreasing optimism concerning the ease with which couples can be persuaded to practice contraception effectively.

Satisfaction of FTOWs

In 1980, the FTOWs were also asked, "On the whole are you satisfied with your work as an FTOW?" Again they were asked to rate their satisfaction on a four-point scale: very much, moderately, not so much, or not at all. Only one-fourth said they were very satisfied; 57 percent said

they were only moderately satisfied; 12 percent said they were not so satisfied, and six percent said they were not at all satisfied.

The FTOWs interviewed in 1978 had answered a similar question: "On the whole do you enjoy your work as an FTOW?" If the answer was yes, "How much: very much, moderately, or not so much?" Nearly two-thirds (64 percent) said they enjoyed their work very much, 31 percent moderately, 3 percent not so much, and 1 percent not at all. Thus the 1978 responses appeared to be far more favorable than the 1980 responses.

Part of the difference between the 1978 and 1980 responses may have been due to the change in wording. The question in both survey came immediately after the series of questions on salary and travel reimbursements, and in both surveys these questions elicited evidence of widespread dissatisfaction with remuneration. It is likely that the respondents were able to dissociate the concept of "enjoyment" from their monetary problems (in 1978) but considered such problems an important element of their "satisfaction" with their work (in 1980). However, the apparent shift in the perceived difficulty of the FTOW's work suggests that there may have been a real shift toward less satisfaction, since the 1980 respondents apparently perceived their work to be more difficult and satisfaction was found to be inversely correlated with perceived difficulty (Table 35).

The FTOWs who said in 1980 that they were less than "very satisfied" with their work were asked, "What do you think could be done to make your work more satisfying?" The 271 FTOWs who were asked this question made a total of 472 suggestions. The major response categories are listed, in order of frequency in Table 36.

TABLE 35

PERCENTAGE DISTRIBUTION OF FTOWS', JOB SATISFACTION BY PERCEIVED DIFFICULTY OF WORK, 1980 COS

	Perceived Difficulty		
Satisfaction	Very Difficult	Moderately Difficult	Not Difficult
Very satisfied	18.4%	27.2%	32.5%
Moderately satisfied	56.6	59.3	57.5
Not so satisfied or not at all satisfied	25.0	13.5	10.0
Total	100.0	100.0	100.0
(N)	(76)	(243)	(40)

TABLE 36

DISTRIBUTION OF FTOWS' AND BSPOS' SUGGESTIONS FOR MAKING THEIR WORK MORE SATISFYING, 1980 COS

Type of Respondent and Suggestion	Number	Percent of Responses	Percent of Respondents
FTOWs			
Higher salary/allowances	161	34.1	59.4
Salary/allowances paid on time	60	12.7	22.1
Improved transportation provisions	46	9.7	17.0
Supplies other than IEC materials	37	7.8	13.7
Improved IEC support	35	7.4	12.9
Better management	32	6.8	11.8
Incentives for BSPOs	24	5.1	8.9
Smaller FTOW territories	20	4.2	7.4
More/better training	11	2.3	4.1
Clarified or improved FTOW status	11	2.3	4.1
Lighter workload	7	1.5	2.6
Insurance or extra pay for hazardous work	6	1.3	2.2
Better coordination with other agencies	5	1.1	1.8
Others	17	3.6	6.3
Total	472	100.0	174.2
BSPOs			
Payment, reimbursement	129	62.6	65.8
Training, retraining	23	11.2	11.7
IEC support	14	6.8	7.1
More help or guidance from FTOW	12	5.8	6.1
Things for work (except IEC)	11	5.3	5.6
Non-monetary incentives	10	4.9	5.1
Less work or a helper	5	2.4	2.6
Insurance	2	1.0	1.0
Total	206	100.0	105.1

The most prevalent concerns were with salaries and transportation. More than half (59 percent) of the respondents specified increased salaries or travel reimbursements, and 22 percent specified a need for prompt payment. One-sixth (17 percent) indicated a need for improved transport-

ation facilities, most commonly by providing FTOWs with motorcycles. One-fourth of the respondents called for increased availability of supplies, about half of them referring to IEC materials, especially leaflets, and the other half referring to a variety of things, especially record-keeping forms, office supplies, audio-visual aids for lecturing, bags, uniforms, and contraceptive supplies. In some cases requests for increased availability of leaflets specified that they should be in the local dialect, indicating that some materials were already available but in a different dialect. Twelve percent called for improved management (e.g., better supervision) less paperwork, improved scheduling of meetings. Nine percent suggested that POPCOM provide more incentives for BSPOs.

Other types of responses, each of which accounted for less than eight percent of the respondents, included suggestions for smaller territories (in terms of both population size and land area), more or higher-quality training, clarification or upgrading of the FTOW's status, a lighter workload, insurance or special pay for hazardous work, and better coordination with other agencies. The call for clarified or improved FTOW status covered a variety of concerns, such as failure to receive salary increased at the same time as other government employees; desire to be viewed as POPCOM (national) rather than local employees; lack of recognition of the FTOW locally as a family planning specialist; and disregard of seniority in setting salary levels and granting promotions.

Supervision of BSPOs

It has already been noted that 82 percent of the FTOWs said they had visited the sample BSP during the month immediately preceding the COS interview and eight percent more than two months before. When BSPOs were asked the same question, only 70 percent said they had been visited by the FTOW during the preceding month, and 14 percent said they had last been visited more than two months before. The difference may indicate a tendency of FTOWs to overstate the frequency of their visits, but at least part of it may be due to visits when the BSPO was not there. FTOWs reported a median duration of last visit of 2.4 hours, but the BSPOs reported a median duration of only 1.3 hours. However, the discrepancy may well be due to the wording of the questions. The FTOWs were asked specifically how much time they spent in the BSP area, whereas the BSPO was asked how long the FTOW had spent "here." Since the term "here" may well have been construed by many of the BSPOs as referring to the BSP itself rather than to the BSP area, a large proportion of the BSPOs' responses may have excluded time spent in home visits and other activities in the BSP area but away from the BSP itself.

In the analysis presented above of the time spent by FTOWs on work in BSP areas, the FTOWs' reports were used, since they are more likely to know how much time they spend in the field. For the present question of BSPO supervision, though, it is more appropriate to use the BSPOs' responses, since supervision requires interaction between the FTOW and BSPO and since the BSPO is the intended beneficiary of the supervision.

Most of the BSPOs (74 percent) said they felt they were visited often enough. However, of those last visited more than one month ago, the cor-

responding proportion was only 54 percent. Of those who said they wanted more frequent visits, the median number of visits desired per month was 2.0. When asked how many hours they would like each visit to last, two-thirds (66 percent) of the BSPOs indicated a time that was the same or shorter than the reported duration of the last visit; one-third indicated they would prefer longer visits. Thus, most BSPOs indicated that they were satisfied with the frequency and duration of FTOW visits to the BSP, but a sizable minority indicated dissatisfaction on each count.

Other Support for BSPOs

Apart from supervision, BSPOs reported two other types of support: incentives and membership in BSPO associations.

About one-fifth (21 percent) of the BSPOs said they had received some sort of incentive, either monetary or non-monetary, since becoming BSPOs. FTOWs were also asked whether the sample BSPO had received any incentive within the past year, and 18 percent said they had. When asked about the last incentive received, the majority (56 percent) of the BSPOs who had received incentives said it had been in the form of a low-cost non-monetary gift, such as food, t-shirts, bags, ballpens, and Christmas gifts. Fifteen percent said that they had received monetary payments, usually in the form of transportation allowances (for instance, to attend training), small cash payments for recruitment of acceptors, or donations from pill or condom recipients. Twenty-one percent reported that they had been given small life insurance or accident insurance policies. The remaining eight percent said they had received certificates or other honors or had been invited to parties or excursions.

Sixteen percent of the sample BSPOs said that there was an association of BSPOs to which they could belong, and 14 percent (89 percent of those who could join) said that they were members. Of those who were members, 85 percent said that their associations set guidelines for BSPO work; 35 percent said that the associations did fund-raising work to help support BSP activities; and 13 percent said they did other types of activities, such as coordinating with workers of partner agencies, assisting in community improvement projects, and organizing meetings for MCRA. Some of these associations had been established for as long as three years by the time of the COS, but half had been established since June 1979, indicating an accelerating rate of establishment.

Satisfaction of BSPOs

Like the FTOWs, the BSPOs were asked how satisfied they were with their work. The great majority (83 percent) said they were either moderately satisfied (45 percent) or very satisfied (38 percent). Ten percent said they were not so satisfied, and seven percent said they were dissatisfied. The responses in 1980 were somewhat less favorable than those in 1978 (when 43 percent had said they were very satisfied and five percent has said they were dissatisfied), but the difference was small and, as with the corresponding FTOW responses, may reflect the effect of changing the wording of the question (asking about satisfaction instead of enjoyment) rather than an actual shift of attitude.

The BSPOs who were less than "very satisfied" were asked for their suggestions for making their jobs more satisfying. Nine percent of those who were asked indicated that they had no suggestions. The remaining 196 BSPOs made a total of 206 suggestions (Table 36). Two-thirds (66 percent) of the respondents specified some sort of monthly payment, ranging from reimbursements for job related expenses to regular salaries. Twelve percent called for more training. Most of the rest called for additional IEC support, such as flip charts, printed materials, film showings, and lectures; for non-monetary incentives like t-shirts or medicines or for incentives in general without specifying whether monetary or non-monetary; for more help or guidance from the FTOW; and for work-related supplies other than IEC meterials (e.g., contraceptive supplies, bags, umbrellas, and blackboards). A few called for less work (or someone to assist the BSPO) or for insurance.

It might be anticipated that rural BSPOs would be more satisfied with their work than urban BSPOs for a number of reasons: rural communities are generally thought to be more cohesive, which might instill a stronger sense of satisfaction from contributing to community welfare; the cash economy is not so well developed in rural areas, which might make monetary payment less important to the rural BSPOs; and the rural BSPOs reported less activity than the urban BSPOs. However, the 1980 COS data indicated that urban BSPOs were more likely to say they were very satisfied or moderately satisfied (90 percent) than the rural BSPOs (79 percent). Perhaps the tendency of rural BSPs to cover a larger geographic area, the lower receptivity of rural couples to family planning, and the relatively infrequent visits of the FTOWs to rural BSPs are among the factors that explain this difference.

Summary and Conclusions

About half of the FTOWs said they felt they needed more supervision or guidance from their DPOs, mostly in the form of visits to the field and assistance with IEC work. One-third said their territories had not been visited by the DPO during the month preceding the interview. The mean duration of the last visit had been four hours. With an average of about six FTOWs per DPO, these figures imply that DPOs visit four of their FTOWs a month for an average of four hours apiece -- a total of only two working days in the field. Even allowing for multiple visits to the same FTOW and travel time, it seems unlikely that DPOs average more than three to four days a month in such visits. Since their main function is supposed to be supervisory, this finding raises questions about why they are not able to visit all their FTOWs and why they spend so little time on direct supervision.

Nearly all FTOWs were dissatisfied with their salary levels and travel reimbursements, indicating that they felt they should be receiving salaries about one-third higher and travel reimbursements 45 percent higher than they had been receiving. Only nine percent reported delays of six weeks or more in receiving their salaries, but 41 percent reported such delays in their travel reimbursements.

Comparison of FTOWs' responses in 1970 and 1980 indicated a trend toward perceiving the work of the FTOW as increasingly difficult, but even in 1980, only one-fifth said they found the work "very difficult." Nearly one-fifth of the FTOWs interviewed in 1980 said they found their work "not so satisfying" or "not at all satisfying". The main reasons for dissatisfaction were low salaries and travel allowances, inadequate travel provisions and supplies, and lack of incentives for BSPOs.

Seventy percent of the BSPOs said they had been visited by the FTOW during the month preceding the interview, and the mean duration per visit was two hours. One-fourth of the BSPOs said they felt they should be visited more frequently, and about one-third said they would prefer longer visits.

Only one-fifth of the BSPOs said they had received any incentives (monetary or non-monetary) at any time since becoming BSPOs. One-sixth said they belonged to BSPO associations, and such membership appears to have served as an incentive. Of those BSPOs in territories where there was a BSPO association, 89 percent were members, attesting to the popularity of such associations among BSPOs.

One-sixth (17 percent) of the BSPOs said they were "not so satisfied" or "not at all satisfied" with their work. By far the main reasons given for dissatisfaction was the lack of monetary payment. Secondary reasons included inadequate training, supplies, and supervision and lack of even non-monetary incentives.

On balance the chronic problems of inadequate compensation for both BSPOs and FTOWs does not seem to have generated a high level of dissatisfaction, but there was evidence of increasing dissatisfaction. The potential for increasing disillusionment is great and will probably remain as long as FTOWs and BSPOs continue to believe they are inadequately compensated.

WIVES' EXPOSURE TO PROGRAM COMMUNICATIONS

Mass Media

The interviewed wives were asked about their frequency of exposure to selected mass media: newspapers, comics, magazines, radio and television. The percentage distributions by frequency of exposure to these media are shown in Table 37. The radio was by far the most accessible medium; three-fourths of the MW15-44 said they listened to the radio at least weekly. Comics were a distant second, with one-third of the MW15-44 saying that they were exposed to this medium at least weekly. One-fourth of the wives said they were exposed to television as frequently and only one-sixth to newspapers or magazines.

Exposure to these media was consistently higher in urban areas than in rural areas, especially in the case of print media (Table 38). In rural areas only about one-tenth of the wives said they were exposed to newspapers or magazines at least weekly, whereas about one-third of the urban wives fell in this category. Half of the urban wives were exposed to comics and television versus only about one-fourth and one-sixth, respectively, of the rural wives. The differential was relatively small in the case of radio; three-fourths of the rural respondents said they were exposed to this medium at least weekly as compared with five-sixths of the urban respondents.

At a later point in the interview, the wives were also asked whether they had heard anything about family planning during the past year through selected media. The proportions answering affirmatively are shown in Table 39. As might be expected, the most commonly cited source of information about family planning was the radio; 60 percent of the MW15-44 said they had heard about family planning on the radio during the year preceding the interview. Nearly one-third cited newspapers or magazines, and one-fifth cited printed materials supplied by the family planning program.

TABLE 37

PERCENTAGE OF MW15-44 BY FREQUENCY OF EXPOSURE TO SELECTED MASS MEDIA, 1980 COS

Medium	Frequency of Exposure			Total
	Never	Less Than Weekly	At Least Weekly	
Newspapers	62.1	22.0	15.9	100.0
Comics	44.3	21.4	34.3	100.0
Magazines	62.7	21.2	16.1	100.0
Radio	14.5	9.1	76.4	100.0
Television	59.0	17.1	23.9	100.0

TABLE 38

PERCENTAGES OF URBAN AND RURAL MW15-49 EXPOSED AT LEAST WEEKLY TO SELECTED MASS MEDIA, 1980 COS

Medium	Urban	Rural
Newspapers	35	10
Comics	48	28
Magazines	30	11
Radio	83	74
Television	50	17

TABLE 39

PERCENTAGES OF MW15-44 WHO SAID THEY HAD BEEN EXPOSED DURING THE PAST YEAR TO FP MESSAGES THROUGH SELECTED MEDIA, 1980 COS

Medium	Percent Exposed
Newspapers, magazines	30.3
Program leaflets or comic books	20.1
Radio	58.9
Television	14.0
Movies	13.6
Stage productions	5.0
Lectures	18.0

Lectures, most of them attributable to the program, were cited by nearly one-fifth of the wives as well. Television programs and movies with family planning messages were cited by about one-seventh of the respondents. In some areas program-sponsored stage productions have been presented to promote family planning, but such productions were cited by only five percent of the MW15-44.

Exposure to family planning messages through the mass media was correlated with such indicators of socio-economic status as the wife's educational attainment and the husband's occupational status (Table 40). Exposure to family planning messages through print media and television was especially strongly associated with such measures.

TABLE 40

PERCENTAGES OF MW15-49 EXPOSED TO FP MESSAGES THROUGH SELECTED MEDIA DURING THE PAST YEAR BY EDUCATIONAL ATTAINMENT AND HUSBAND'S OCCUPATION, 1980 COS

Independent Variable	Percent Exposed to FP Messages Through:				
	Radio	TV	Newspaper	Program Printed Materials	Lecture
Wife's Education					
None	29	2	1	3	6
Grades 1-4	54	6	8	9	14
Grades 5-7	65	7	23	19	17
High school (1-4 years)	71	16	44	30	18
College (one year or more)	78	30	78	49	29
Husband's Occupation					
Farming/fishing	61	6	19	15	16
Others	66	17	39	28	19

The wives were questioned further about various types of printed materials produced by the family planning program: comic books on the advantages of small families and on family planning methods, leaflets on family planning in general, and leaflets on specific methods. Regarding each type of material, the respondents were asked whether they had seen such materials during the past year, whether they had been given a copy, and, for those who had not yet seen such materials, whether they wanted to see them. The results are shown in Table 41. The types of material most likely to have been seen were the two types of comic books, despite the evidence from both the 1978 and 1980 COS that they were in especially short supply. The proportions of wives who had seen comic books were three times the proportions who had received them, whereas the proportions who had seen the various types of leaflets were only about twice the proportions who had received them, suggesting that comic books were more likely to be shared with others.

Despite their apparent popularity, the two types of comic books had been seen during the year preceding the interview by only about one-fourth and one-fifth of the MW15-44, respectively, and to have been received by only eight and seven percent. The proportions who said they had seen leaflets were only about half as great as the proportions who said they had seen comic books, and the proportions who said they had been given such materials ranged from four to six percent. The materials least likely to have been seen were those on ligation and vasectomy, the most effective methods available. Regardless of type of material, the apparent demand for such materials was great. Among those who had not seen any given type of material during the past year, between 83 and 88 percent said they wanted to see such materials.

TABLE 41

PERCENTAGES OF MW15-44 WHO SAID THEY HAD SEEN, RECEIVED, AND WANTED TO SEE SPECIFIED TYPES OF PROGRAM PRINTED MATERIALS, 1980 COS

Type of Materials	Percent Who Had Seen	Percent Who Had Received	Percent Who Wanted To See (of Those Who Had Not Yet Seen)
Comic books on			
- Advantages of small families	27	8	88
- FP methods	20	7	87
Leaflets on			
- FP in general	12	6	87
- Pills	16	6	85
- IUD	13	6	84
- Rhythm	14	5	87
- Condoms	13	6	84
- Ligation	9	4	85
- Vasectomy	9	4	83

When asked what language they would prefer for printed materials, 43 percent of the wives specified Tagalog and 28 percent specified Cebuano. Only three other languages accounted for more than three percent of the respondents: Ilocano (eight percent), Hiligaynon (six percent) and English (four percent). All other dialects together accounted for only 11 percent of the MW15-44. When asked whether most of the materials they had seen had been in the preferred dialect, two-thirds (67 percent) of those who said they had seen program materials said yes. Among those who said they preferred Tagalog, 76 percent said yes; among those who preferred Cebuano, Hiligaynon, or English, the proportions saying yes were close to 60 percent; among those who preferred Ilocano, only 42 percent said yes. Most of those who said the materials they had seen had been in a different dialect were about equally divided between saying the materials they had seen were in English and saying they were in Tagalog.

Interpersonal Communication

Four-fifths (79 percent) of the MW15-44 said they had ever discussed with their husbands the number of children they should have, and 74 percent said that they had agreed on the number to have. Of the five percent who said they had discussed the matter but had not reached agreement, nine out of ten said they wanted fewer children than their husbands; only one in ten said they wanted more than their husbands. The age groups most likely to report such discussions were 20-24 and 25-29 (83 percent in each). The 15-19 and 30-34 age groups were nearly as likely to report such dis-

cussions (80 and 81 percent, respectively), but the percentages fell off rapidly after age 35 (72, 66, and 48 percent, respectively for the 35-39, 40-44, and 45-49 groups). This pattern probably reflects a trend in recent years both toward more egalitarian marriages and toward an increasing concern with rational planning of childbearing. Interspouse discussion of family size was also related to indicators of socio-economic status and modernity. The percentage reporting such discussions ranged monotonically from 56 percent among those with no schooling to 89 percent among those with at least one year of college. Whereas 71 percent of those wives whose husbands were farmers or fishermen reported such discussions, the corresponding percentage for the other wives was 81 percent. Eighty percent of the urban respondents versus 74 percent of the rural respondents reported such discussions.

When asked whether their husbands had talked to them about family planning specifically (i.e., about use of contraception), two-thirds of the wives said yes (Table 42). This was somewhat less than the 72 percent who said that friends, relatives or neighbors had talked to them about family planning, but more than the proportions who said the same thing about other potential influentials, such as schoolteacher (26 percent) barangay officials (22 percent), and priests or nuns (11 percent). Those who said they had heard about family planning from any of those sources were also asked whether the things they had heard had encouraged them to practice family planning, discouraged them, or had no effect. There was not much variation among the various sources in this regard: the percentages who said they had been encouraged ranged only from 64 to 76 percent; the percentages who said they had been discouraged ranged from five to 12 percent. Priests, nuns, friends, relatives and neighbors tended to be least encouraging; barangay officials, teachers, and husbands tended to be most encouraging.

TABLE 42

PERCENTAGES OF MW15-44 WHO SAID THAT SPECIFIED TYPES OF PERSONS HAD TALKED WITH THEM ABOUT FAMILY PLANNING DURING THE PAST YEAR, AND PERCEIVED EFFECTS, 1980 COS

Type of Person (x)	Percent Who Said x Had Talked About FP	Of Those Who Said x Had Talked About FP	
		Percent Encouraged	Percent Discouraged
Catholic priest or nun	10.9	65.5	12.0
Teacher	25.5	71.0	4.9
Barangay official	21.7	75.5	6.0
Friends, relatives, neighbors	71.8	64.4	9.4
Husband	66.3	72.9	9.3

The wives were asked whether, during the year before the COS interview, specified types of field workers had discussed family planning with them. Three of the types specified were non-medical workers of partner agencies who were expected to include family planning promotion among their activities: the home management technicians of the Bureau of Agricultural Extension (BAEx), the social workers of the Ministry of Social Services and Development (MSSD), and the barangay nutrition scholars (BNS) of the nutrition program. Doctors, nurses, and midwives were grouped together into a single category, representing the partner agencies that operate clinics. The FTOWs and BSPOs, of course, represented the Outreach Project. Only very small proportions of the wives said that any of the first three types of field workers had discussed family planning with them during the preceding year: three percent apiece for BAEx and MSSD workers and 5 percent for BNSs. In contrast, 31 percent said that a medical worker had discussed family planning with them, ten percent that an FTOW had, and 18 percent that a BSPO had.

Some of the difference between the proportions for FTOWs and BSPOs may be due to the fact that the BSPO is a local resident and therefore more readily identifiable to others in the BSP area than the FTOW; on the other hand, despite the tendency of FTOWs and BSPOs to say they were doing about equal amounts of work in the BSP areas, it is plausible that the BSPO would find more time than the FTOW to discuss family planning with local residents.

In 1978, 24 percent of the MW15-44 said they had been visited at home by the FTOW and 18 percent said they had been visited by the BSPO. Comparison of the two surveys indicates a reduction in the average number of home visits per BSP that is consistent with the fact that the number of BSPs nearly doubled during the intervening period. It should be noted that the question in 1978 asked about home visits whereas the one in 1980 asked about discussions (regardless of the place where the discussion occurred); the responses are therefore not strictly comparable. However, the consistency of the responses concerning BSPOs suggests that comparisons would not be greatly misleading.

Many of the respondents who had discussed family planning with FTOWs had also discussed it with BSPOs as well, and many of those contacted by Outreach workers (FTOWs or BSPOs) had also been contacted by medical persons (Table 43). Over half of the respondents (56 percent) said they had not been visited by any of these types of personnel during the year preceding the 1980 COS interview. Among those visited by at least one of the three types of workers, the greatest proportion (17 percent of all MW15-49) said they had been visited only by a medical person; 8 percent said they had been visited only by the BSPO, and 4 percent said they had been visited only by the FTOW. The most commonly reported combination of sources was the BSPO and medical persons (five percent). The other three types of combinations accounted for three percent each. Disregarding visits by medical persons, a total of 26.6 percent of the MW15-49 reported that they had been visited by one or both types of Outreach workers; one-fourth of them (six percent of the total) reported that they had been visited by both.

TABLE 43

PERCENTAGE DISTRIBUTION OF MW15-49 BY WHETHER VISITED DURING THE PAST YEAR BY MEDICAL PERSONS, FTOWS, OR BSPOS, 1980 COS
(PERCENTAGES BASED ON GRAND TOTAL)

Visited by FTOWs?	Visited by BSPOs?	Visited by Medical Persons?		Total
		Yes	No	
Yes	Yes	3.3	3.0	6.3
Yes	No	3.2	4.2	7.4
No	Yes	5.1	7.8	12.9
No	No	17.1	56.3	73.4
	Total	28.7	71.3	100.0

Given the constraints on the FTOW's time, the greatest potential for increasing the number of MCRA reached through the outreach project lies in increasing the active involvement of BSPOs' IEC efforts. The data from the 1980 COS suggest that such increased involvement can be attained through increased BSPO training and provision of incentives and through reducing the size of BSP areas. For instance, in those areas where the BSPOs said they had been trained in motivating acceptors, 22 percent of the wives said they had discussed family planning with the BSPO versus only 11 percent in areas where the BSPOs said they had not received such training. Similarly, in areas where the FTOWs said the BSPOs had received incentives during the year preceding the survey, 24 percent of the wives said they had discussed family planning with the BSPO, as opposed to 18 percent in areas where the BSPO had not received incentives. In relatively small BSPs, with less than 65 MCRA, 24 percent of the wives reported such discussions; the proportion declined monotonically with increasing BSPO size to only 16 percent in those with 120 MCRA or more.

Among those MW15-44 who had discussed family planning with the FTOW, about half reported that the FTOW had recommended that they go to a clinic. Among those who had discussed family planning with the BSPO, the corresponding proportion was 38 percent. This difference suggests a need for BSPOs to be more strongly encouraged to refer potential acceptors to clinics for the more effective clinical methods. Of those who had been referred to clinics by either the FTOW or the BSPO only about one-fourth (26 percent in each case) said they had actually gone. Of all the MW15-44, 1.3 percent said they had gone to a clinic at the behest of the FTOW and 1.8 percent at the behest of the BSPO.

As with mass media the likelihood of having discussed family planning with clinical personnel tended to be positively correlated with

educational attainment and to be greater for urban and non-farm couples (Table 44). However, the relationship with SES measures was not so clear-cut for FTOWs or BSPOs. FTOWs appeared to favor more highly educated women somewhat, but the relationship was weak. BSPOs tended to favor women with moderate educational levels over those with no formal education or those with high attainment. Both FTOWs and BSPOs appear to have favored more rural couples, especially farming and fishing couples, although the differences were not great. Thus the Outreach workers appear to some extent to have reversed the traditional bias of program operations in favor of higher SES couple, though there was still considerable room for improvement.

However, the FTOWs and BSPOs both tended to concentrate their attention more on the MCRA who lived near the BSP than those who lived relatively far away (Table 45). Though 17 percent of those living within two minutes from the BSP said they had discussed family planning with FTOWs and 30 percent with BSPOs, only 11 percent of those living more than 22 minutes away said they had discussed family planning with either type of Outreach worker. In contrast, though the respondents who lived very near the BSP were also especially likely to say they had discussed family planning with a medical person, there was no clear relationship with distance among those who lived more than two minutes away. Medical persons were much more likely than either the FTOW or the BSPO to have discussed family planning with such couples. Medical persons and BSPOs were about equally likely to have discussed family planning with the

TABLE 44

PERCENTAGES OF MW15-44 WHO REPORTED DISCUSSIONS ABOUT FP WITH MEDICAL PERSONNEL, FTOWS, OR BSPOS, BY SELECTED SES INDICATORS, 1980 COS

SES Indicators	Medical Personnel	FTOWS	BSPOS
Educational Attainment			
None	6.7	10.1	13.5
Grades 1-4	20.9	11.4	19.3
Grades 5-7	28.8	12.8	20.8
High school (1-4 years)	36.5	17.6	18.8
College (1 year or more)	44.1	17.2	15.6
Type of Barangay			
Urban	38.1	11.9	15.1
Rural	27.0	14.0	19.9
Husband's Occupation			
Farmer, fishermen	24.0	14.4	20.3
Other	35.5	12.5	17.7

TABLE 45

PERCENTAGES OF WIVES WHO HAD DISCUSSED FP WITH MEDICAL PERSONS, FTOWS, AND BSPOS DURING THE PAST YEAR, BY DISTANCE OF RESIDENCE FROM THE BSP, 1980 COS

Distance (in Minutes)	Medical Persons	FTOWS	BSPOS
0-2	29.7	17.0	30.4
3-7	22.3	14.4	19.6
8-22	27.3	12.6	17.0
23+	23.6	10.8	11.4

couples living within a minute or two of the BSP -- about 19 percent of all couples. FTOWs were least likely to have discussed family planning with MCRA at all distances less than 23 minutes. The bias in favor of MCRA living near the BSP was most pronounced among the BSPOs. This finding points to a need to establish more BSPs covering smaller numbers of MCRA in order to increase the coverage by BSPOs.

In 1978 (but not in 1980) the wives were also asked whether they wanted the FTOW to visit them in the future (or to visit them again in the case of those already visited). Nearly half (47 percent) of the wives said yes. Interestingly, the favorable response was more common among those already visited at least once (56 percent) than among those not yet visited (44 percent), suggesting that repeat visits may be necessary for effective motivation.

Awareness and Membership in Clubs Promoting Family Planning

In 1980, the interviewed wives were asked whether they knew "of any club or association in this barangay that has been established for the purpose of promoting family planning" and, if so, whether they had been members of such clubs or were currently members. Only a few (3.0 percent) said that they knew of such clubs, and only one-fourth of them (.8 percent of all MW15-44) said they were currently members. In BSPs where the BSPOs said they had established such clubs, 15 percent of the wives knew of them. Most (83 percent) of the members said they had been either active or very active in club activities during the past year. When asked what kinds of club activities they had appreciated most, half mentioned family planning activities (41 percent learning about family planning and 10 percent distributing contraceptive supplies). The rest mentioned child care activities (25 percent), income-generating activities (15 percent), parties and celebrations (five percent) and discussions (three percent, consisting of one case who cited discussions about cooking).

Summary and Conclusions

Radio was the only one of the principal mass media that appeared to be readily accessible to a majority of wives and through which a majority of wives heard family planning messages. In general, exposure to the mass media and to family planning messages through them tended to be rather strongly correlated with socio-economic status, although the relationship did not seem quite so strong for radio as for others. Exposure to print media and television tended to be especially highly correlated with indicators of socio-economic status and modernity.

Printed IEC materials produced by the family planning program were seen by relatively small proportions of wives, ranging from nine percent to 27 percent, depending on the types of materials. Comic books were more likely to have been seen during the preceding year (or at least to be remembered) than leaflets. Even smaller proportions of wives, ranging from four to eight percent, reported that they had been given printed IEC materials produced by the program. Of those who had not seen such materials during the year before the survey, the great majority (about seven-eighths) said they would like to.

About two-thirds of the wives who had seen program IEC materials said that the materials they had seen had not been in the dialect they would have preferred. This especially true for those who preferred dialects other than Tagalog.

Four-fifths of the wives said they had discussed family size with their husbands at some time, and two-thirds said that they had heard their husbands talk about family planning during the year preceding the interview. Seventy percent said they had heard friends, relatives, or neighbors talk about family planning during the past year. Much smaller proportions reported that they had heard community leaders (22 percent) or schoolteachers (26 percent) talk about family planning, and still fewer (11 percent) Catholic priests or nuns. Interestingly, in light of Catholic teaching on contraception, one-eighth of those who said they had heard about family planning from a priest or nun said they had been discouraged from practicing family planning by what they heard; two-thirds said they had been encouraged.

Of the types of field workers that the wives were asked about, only medical workers and Outreach workers were mentioned by ten percent or more as having discussed family planning with them during the year preceding the survey. Workers of BAEx, MSSD, and the nutrition program were mentioned by five percent or less. Medical workers were mentioned by more wives than Outreach workers, probably because a large proportion wives had visited a health center or hospital during the year before the survey. Among Outreach workers, more wives reported discussions with BSPOs (18 percent) than with FTOWs (ten percent).

There was considerable overlap in home visits by FTOWs, BSPOs, and medical persons. Fifteen percent of the MW15-49 said that more than one of the three types of workers had discussed family planning with them. Twenty-nine percent reported a discussion with a medical person during the year preceding the interview; 44 percent reported a discussion with

a medical person or an Outreach worker, meaning that the Outreach Project increased such contact with MCRA by about fifteen percentage points. (In fact, the difference may be slightly greater, since some of the wives who saw medical persons may have done so only as a result of a referral by an Outreach worker.)

FTOWs tended to refer a somewhat larger proportion of the MCRA they contacted to clinics, but since BSPOs tended to contact more women, the total number of referrals by BSPOs was somewhat greater than the number of referrals by FTOWs.

Discussions with medical persons tended to be reported more by higher-SES wives, but the relationship was not as pronounced as between media exposure and SES. The relationship between FTOW discussions and SES was mixed (depending on the SES indicator) and weak. The BSPOs tended to discuss family planning most with middle-SES wives and least with either high- or low-SES wives, but again the relationship was weak.

Data from the 1978 CCS indicate that many MCRA want to be visited by population workers more than once, suggesting that for some couples effective motivation may be achievable only through repeated visits. If this conclusion is correct, it underscores the need for increasing the ratio of BSPOs to population and for inducing BSPOs to spend more time on home visits, since the FTOWs cannot visit all the MCRA in their territories single-handedly even once. It also suggests that the incidence of overlap (visits to the same couple by more than one type of worker) may not be so inefficient as it may appear to be at first glance.

Very few of the wives were aware of clubs for promoting family planning, even in areas where such clubs were said to have been established. Even among those who were aware of such clubs, only one-fourth said they were members. The apparent low degree of popularity of such clubs may be due in part to the nature of their activities. If such clubs focus primarily on family planning, they may not generate as much interest as they might if they also engaged in income-generating activities, skills training, or other activities that are intrinsically more motivating than family planning.

WIVES' FAMILY PLANNING ATTITUDES AND KNOWLEDGE

Family Size Attitudes

Some data on the wives' family size attitudes have already been presented in Table 7, which shows the distribution of the MW15-44 with regard to the number of children they considered best "for an average couple in this barangay." This measure is useful for comparing the family size attitudes of the wives with those of the FTOIs and BSPOs, using a common reference point. The wives were also asked whether they themselves wanted more children, which is another measure of their attitudes regarding family size and has the advantage of referring to the respondent's own situation rather than to an abstract "average couple."

About two-thirds (68 percent) of the MW15-44 said they did not want to have any more children. The response to this question was, of course, strongly affected by the number of children they already had. Only seven percent of those with no living children said they wanted none; 36 percent of those with one or two children said they wanted no more, as did 77 percent of those with three or four, 92 percent of those with five or six, and 98 percent of those with seven or more.

They were also asked whether they thought their husbands wanted more children or not. Fifty-five percent said they thought their husbands wanted no more, 41 percent thought they did not, and four percent said they did not know how their husbands felt. Thus, husbands were seen as wanting more children than the wives. The wives' tendency to perceive that their husbands wanted more children than they did was verified by the 1978 COS, in which husbands were asked directly about their desire for more children. Comparing the responses of interviewed husbands and their wives (omitting the responses of those wives whose husbands were not interviewed), it was found that only 30 percent of the wives said they wanted more children, whereas 39 percent of the husbands said they wanted more. However, the wives perceptions of their husbands' desire for more children tended to exaggerate this difference: 45 percent of the same wives reported that their husbands wanted more children, in contrast to the 39 percent of the husbands who said they wanted more.

Comparison of data from the 1978 COS and the 1980 COS indicate a decreasing desire for additional childbearing among women with two or more children. Table 46 shows that among those wives with no children or only one, the proportion desiring additional children rose, but that at each higher parity the proportion declined. The absolute differences were highest for those with two to four children, but the relative declines, as indicated by the ratios, were greatest for those with four or more children. The declines outweighed the increases, with the result that the proportion of the total sample of fecund, non-pregnant MW15-49 who said they wanted more children declined by 3.5 points or ten percent.

TABLE 46

PROPORTIONS OF FECUND, NON-PREGNANT MW15-49 WHO SAID THEY WANTED MORE CHILDREN, BY NUMBER OF LIVING CHILDREN, 1978 COS AND 1980 COS

Number of Living Children	Year of Survey		Difference	Ratio
	1978	1980		
None	96.4	100.0	+ 3.6	1.04
1	78.7	83.3	+ 4.6	1.06
2	51.4	42.1	- 9.3	.82
3	32.0	25.4	- 6.6	.79
4	21.2	10.6	-10.6	.50
5	9.0	6.7	- 2.3	.74
6	5.7	3.5	- 2.2	.61
7+	4.2	2.8	- 1.4	.67
All parities	34.1	30.6	- 3.5	.90

Attitudes Toward Modern Contraceptive Methods

It has already been shown in Table 8 that nearly three-fourths (72 percent) of the MW15-44 said in 1980 that they approved of the use of "modern family planning methods like pills, IUDs, or sterilization." Thirteen percent said they disapproved moderately and another 13 percent said they disapproved strongly. As might be expected, they tended to perceive that their husbands approved less. Only 62 percent said they thought their husbands approved; 14 percent thought they disapproved moderately and 19 percent thought they disapproved strongly: the remaining five percent said they did not know how their husbands felt. Of those who said their husbands had talked to them about family planning, 67 percent perceived that their husbands approved of modern methods; only 44 percent of the rest thought their husbands approved.

Table 47 shows the relationship between approval of modern family planning methods and selected independent variables. It can be seen that more educated wives and those living in urban areas tended to approve more. Despite the difference in religious stance on contraception, there was no difference between Catholics and Protestants; adherents of the Iglesia Ni Cristo (which actively promotes family planning) were more likely to approve than other Christians, and Muslims were less likely to approve. Perceived approval of one's own religion was particularly influential, but those who thought their religion was opposed to such methods were only slightly less likely to approve than those who were unaware of their religion's stand or thought it had none. In areas where the FTOW said that there was organized opposition (mostly religious) to family planning, the wives were somewhat less likely to approve than elsewhere, but the difference was not great.

TABLE 47

PERCENTAGES OF MW15-49 APPROVING OF MODERN CONTRACEPTIVE METHODS BY SELECTED INDEPENDENT VARIABLES, 1980 COS

Independent Variable	% Approving
Education	
None	58.1
Grades 1-4	64.9
Grades 5-7	69.4
High school (1-4)	75.4
College (1+)	83.4
Place of Residence	
Urban	76.3
Rural	69.2
Religion	
Roman Catholic	70.1
Iglesia Ni Cristo	83.5
Protestant	70.8
Muslim	63.3
Perceived Stand of Religion	
Favorable	77.5
Opposed	48.8
Neither	51.3
Don't know	58.8
Organized Opposition in BSP Area? (Reported by FTOW)	
Yes	63.9
No	70.8
Heard About FP from Friends, Relatives or Neighbors?	
Yes	75.3
No	58.6
Heard About FP...	
...on the Radio?	
Yes	74.3
No	63.2
...on TV?	
Yes	83.4
No	68.6
...in a Movie?	
Yes	80.2
No	68.7
...in a Lecture?	
Yes	76.0
No	68.7
Read About FP...	
...in a Newspaper?	
Yes	79.8
No	66.6
...in a Leaflet	
Yes	80.4
No	67.6
Discussed FP with...	
...Medical Person?	
Yes	80.5
No	66.1
...FTOW?	
Yes	79.7
No	68.7
...BSPO	
Yes	79.5
No	68.0

It appears that the Roman Catholic position on family planning was not widely known. Of the Catholic respondents, only 19 percent said they thought their religion disapproved "of modern family planning methods like pills, IUDs, condoms, or sterilization." Eight percent said they did not know the Church's stand, and one percent that it had no stand. The remaining 72 percent said they thought the Church approved of such methods. In contrast, 40 percent of the Muslim respondents thought Islam was opposed to such methods (perhaps referring specifically to sterilization) and only 41 percent said they thought it approved. Four percent thought it had no position, and 15 percent said they did not know its position. Nearly all adherents of the Iglesia Ni Cristo (95 percent) correctly perceived that it approved of such methods. Interestingly, only 70 percent of the Protestant respondents said they thought their religions approved of modern contraceptive methods, and 15 percent thought they were opposed. Most of the mainstream Protestant sects do not oppose such methods, but some of the many small fundamentalist sects may.

Exposure to communications about family planning, either through interpersonal sources, through mass media, or through field workers, tended to be associated with favorable attitudes. These correlations are not very surprising; hence there is no need to dwell on them. However, it should be noted that the observed relationships, especially those involving communication variables, are not necessarily causal; much, if not all, of the relationship observed between exposure to fieldworkers, for instance, and family planning approval is probably due to the correlation of both independent and dependent variables with socioeconomic status rather than to any direct effect of contact with the fieldworker.

Willingness to Try Family Planning Methods

Table 12 has already shown the proportions of MCRA who said they were either were using each method, willing to try using it in the future, or willing to resume use (in the case of those who had tried it previously). It was found that 86 percent of the MW15-44 indicated either current use or willingness to use some method. As with stated approval of modern methods, the proportion using or willing to use any method was associated in similar fashion with indicators of socio-economic status, religion, perceived institutional opposition to family planning and exposure to communications about family planning. The precise figures are not shown since the direction of the relationships and the magnitudes of the differentials are similar to those shown in Table 47.

With regard to specific methods, it was found that the relative willingness to try either of two methods was partly a function of the perceived relative effectiveness of the two methods (Table 48). For instance, those wives who thought pills were more effective than IUD were more likely to say they were willing to use pills than those who thought they were less effective, and those who thought the IUD was more effective than pills were more likely to be willing to use the IUD than those who considered it to be less effective. Those who thought the pills were much more effective than the IUD were four times as likely to indicate willing-

TABLE 48

PERCENTAGES OF MW15-49 USING OR WILLING TO TRY SPECIFIED METHODS BY PERCEIVED RELATIVE EFFECTIVENESS OF SELECTED PAIRS OF METHODS, 1980 COS

Pairs of Methods and Perceived Relative Effectiveness	Percent Willing to Try:			
	Pills	IUD	Rhythm	Condoms
Pills vs. IUD				
Pills much more effective	39.0	11.6	-	-
Pills a little more effective	30.1	10.2	-	-
No difference	16.5	7.8	-	-
IUD a little more effective	24.6	18.8	-	-
IUD much more effective	21.3	27.6	-	-
Rhythm vs. Condoms				
Rhythm much more effective	-	-	65.6	24.6
Rhythm a little more effective	-	-	57.8	22.7
No difference	-	-	42.9	23.4
Condom a little more effective	-	-	44.6	33.2
Condom much more effective	-	-	46.9	41.2
IUD and Condoms				
IUD much more effective	-	24.3	-	26.1
IUD a little more effective	-	15.8	-	24.0
No difference	-	7.6	-	16.6
Condoms a little more effective	-	9.2	-	31.4
Condoms much more effective	-	9.1	-	41.9

ness to try pills as to indicate willingness to try the IUD. However, those who considered the IUD much more effective were only somewhat more likely to indicate willingness to use it, reflecting the fact that considerations other than effectiveness were influential as well, making the pills on balance more popular than the IUD. The only major exception to this pattern was that those who perceived no difference in effectiveness were least likely to indicate willingness to use either method, suggesting that the "no difference" category reflected apathy about the methods rather than a real comparison.

Similar patterns were observed for other pairs of methods, with some minor exceptions. Rhythm appeared to be more acceptable than condoms, even among those who considered condoms much more effective, but willingness to use each method was higher than average among those who considered it a little more effective and higher still among those who considered it much more effective. Similarly, wives tended to indicate greater willingness to use condoms even if they thought the IUD was much more effective, but the difference in willingness increased with increasing divergence in the perceived effectiveness of the two methods.

Willingness to try a method in the future tended to be either the same or greater if the respondent had already tried it than if she had never tried it (Table 49). There was no appreciable difference in the case of pills, the IUD, foam, or injectables, but those who had tried rhythm, condoms, withdrawal, or abstinence were more likely to say they intended to use them in the future than those who had not. These methods are also the ones that past users were most likely to say they would use again, indicating a tendency to reject the more effective methods after initial trial, probably as a result mostly of side effects. Among the never-users, only pills and ligation appear to have been as acceptable as withdrawal, and neither appears to have been as acceptable as rhythm or abstinence.

Willingness to use the IUD, rhythm, and ligation appear to have been substantially improved by exposure to printed IEC materials on these methods (Table 50), but such exposure seems to have had little or no effect on willingness to use pills, condoms, or vasectomy. It should be noted that the respondents who said that they had not seen such materials and were not interested in seeing them were omitted from the calculations in Table 50, since their predisposition toward the method was already low and their inclusion would have spuriously increased the differences observed.

Family Planning Knowledge

Table 9, 16, 17, and 19 have already presented marginal response distributions for the MW15-44 regarding, respectively, awareness of specific methods, perception of differences in use effectiveness, perception of the best timing for acceptance in relation to delivery and postpartum

TABLE 49

PERCENTAGES WILLING TO TRY EACH METHOD IN THE FUTURE BY PREVIOUS USE OR NON-USE, 1980 CCS

Method	Tried Before But Not Using Now	Never Tried
Pills	26.5	25.9
IUD	10.0	11.8
Rhythm	57.4	46.8
Condoms	34.9	21.4
Ligation	-	30.4
Vasectomy	-	11.4
Withdrawal	46.4	28.9
Abstinence	63.6	37.3
Foam	15.2	15.1
Injectables	22.2	21.3
Any method	83.9	70.0

TABLE 50

PERCENTAGES USING OR WILLING TO USE THE SIX PROGRAM METHODS, BY EXPOSURE DURING PAST YEAR TO PRINTED IEC MATERIALS ON THE METHOD, 1980 COS

Method	Seen Materials on the Method?	
	Yes	No, But Wants to
Pills	33.4	30.8
IUD	19.3	13.3
Rhythm	60.4	51.6
Condoms	33.7	30.5
Ligation	40.6	28.2
Vasectomy	13.2	12.0

amenorrhea, and perceived timing of the abstinence period for rhythm users. There is little worth adding here regarding these variables. Like attitude measures, the knowledge measures tended to be correlated with measures of socio-economic status and exposure to family planning communications, but, again, the differences were not great.

However, with regard to the relationship between communications from medical persons and Outreach workers on the one hand and knowledge of specific methods on the other (Table 51), there are some interesting contrasts. Generally, the percentages able to name a contraceptive method were higher when the respondent or her husband had discussed family planning with one of the three types of worker than when they had not. If all respondents had been included in the calculations for Table 51, the differences would have been larger. However, those respondents who said they had discussed family planning with any of the specified types of workers and were already using contraception at the time of the last such visit were omitted so as to exclude those who were already relatively knowledgeable before seeing the worker and would therefore be expected to be more knowledgeable than average even without the discussion. As a result, the differences shown in Table 51 tend to be conservative estimates of the relationship between discussion and knowledge.

The differences tended to be largest and most consistently positive in relation to discussions with medical persons, indicating that such workers were providing the most comprehensive information about family planning methods. For all six program methods the differences were six percentage points or more. Discussions with FTCWs, in contrast, appear to have had much less effect on awareness of pills, the IUD and rhythm, although the differences regarding condoms and sterilization were comparable to those found in relation to discussions with medical persons. Discussions with BSPOs appear to have increased awareness of only two methods: the IUD and condoms. The apparent effect regarding the IUD is probably a statistical aberration rather than an indication of a

TABLE 51

PERCENTAGES OF MW15-49 WHO NAMED SPECIFIC METHODS, BY WHETHER THEY SAID THEY HAD DISCUSSED FAMILY PLANNING[a/] WITH MEDICAL PERSONS, FTOWS, OR BSPOS DURING THE PAST YEAR, 1980 COS

	Talked to:								
	Medical Person?			FTOW?			BSPO?		
Method	No	Yes[a/]	Diff.	No	Yes[a/]	Diff.	No	Yes[a/]	Diff.
Pills	75.0	81.0	6.0	77.9	74.9	-3.0	77.0	80.9	3.9
IUD	49.2	61.3	12.1	52.8	57.7	4.9	52.7	58.7	6.0
Rhythm	49.5	59.7	10.2	53.3	52.1	-1.2	52.9	50.3	-2.6
Condoms	61.4	69.5	8.1	63.7	73.1	9.4	62.3	71.6	9.3
Ligation	33.6	42.3	8.7	35.4	41.5	6.1	35.8	40.2	4.4
Vasectomy	12.2	17.5	5.3	13.0	18.7	5.7	13.4	13.2	-.2
Withdrawal	44.9	46.6	1.7	48.3	40.1	-8.2	47.7	38.5	-9.2
Abstinence	12.2	11.9	-.3	12.3	14.3	2.0	11.8	13.8	2.0
Foam	4.7	6.4	1.7	6.0	6.0	0	6.1	6.5	.4
Injections	3.4	4.3	.9	4.0	5.6	1.6	4.1	4.8	.7
Any method	91.3	97.9	6.6	92.9	94.0	1.1	92.4	96.3	3.9

a/Among those who reported such discussions, those who said they were using a method at the time of the last such discussion were omitted to reduce the upward bias in knowledge due to previous use of family planning. The differences are thus understated.

causal relationship, given the data on the BSPOs' own knowledge of that method. It is interesting to note that awareness of pills does not appear to have been significantly affected by either FTOW or BSPO discussions, despite the intention that the Outreach Project would place special emphasis on promoting this method. It is also interesting to note that discussions with the FTOW and the BSPO were associated with a reduced likelihood of naming withdrawal as a family planning method -- suggesting that Outreach workers may have made a point of discouraging the use of this method.

With regard to the question on the timing of the abstinence period, the accuracy of the response is affected by the respondent's knowledge of and experience with rhythm. Of those respondents who said they had not heard of rhythm, only 10 percent answered correctly that the time to avoid sex is midway between menstrual periods. Of those who said they had heard of the method but did not name it spontaneously, the proportion was nearly as low -- 22 percent. Twenty-eight percent answered correctly among both those who named it (but had not tried it) and those who had tried it but were no longer using it. Among the current users, one-third

(34 percent) answered correctly. Thus, use of rhythm is associated with greater knowledge of the timing of the fertile period, but even among current users of rhythm, two-thirds were not able to answer correctly.

It appears that wider provision of printed IEC materials on the rhythm method could produce a substantial increase in knowledge about the timing of the fertile period. Of those who had not seen any such materials, only 24 percent answered correctly; of those who said they had seen such materials but had not been given a copy, 32 percent answered correctly; among those who had been given such materials, 38 percent answered correctly.

One question on family planning knowledge that was asked of the wives but has not yet been discussed here concerns their understanding of vasectomy. Each interviewed wife was asked first whether she knew the difference between vasectomy and castration. Only six percent of the respondents in 1980 said they knew the difference. These respondents were then asked to describe the difference. Of the respondents who thought they knew the difference, three-fourths (74 percent) described it correctly. The remainder gave incorrect responses or responses which indicated an inadequate understanding of the difference. The most frequent misperceptions were that vasectomy was for men, whereas castration was for animals, that vasectomy is less effective for preventing pregnancies, that vasectomy involves removal of or operation on the testes, that vasectomy is for women, and that vasectomy lowers the sex drive.

It is clear that there is much room for improvement in program communication about vasectomy. The proportions of wives who said they knew the difference varied slightly by educational attainment and by experience with vasectomy, but even among wives of men with vasectomies and those with some college education, 88 percent said they did not know the difference. The proportion who said they knew the difference was unrelated to indicators of exposure to program communications. However, those who thought they knew the difference were only slightly more likely to indicate willingness for their husbands to try vasectomy (18 percent) than those who said they did not know the difference (12 percent). Thus even if understanding about vasectomy were substantially increased, the method would probably continue to encounter considerable resistance.

Summary and Conclusions

The findings presented in both this section and earlier sections on the attitudes and knowledge of wives in the ESP areas indicate generally favorable attitudes but rather serious deficiencies in knowledge. There was still a substantial minority of wives who said they did not approve of modern methods, suggesting that there may be a need for special communication strategies for these "hard-core resistors." The lack of detailed knowledge about contraceptive methods is not surprising in light of the findings regarding the knowledge of Outreach workers reported earlier.

The data on desire for additional children were encouraging in that they indicated that most women with more than two children said they wanted no more. Even among those with only three or four children, three-fourths said they wanted no more, and among those with five or more, the proportion was over 90 percent. Husbands tended to want more children than wives, and this undoubtedly presented a barrier to contraceptive practice for some wives who otherwise would use contraception without hesitation. Comparison of the 1978 and 1980 CO3 data indicated a shift toward increasing desire to avoid childbearing among women with more than one child.

Family planning attitudes in general and willingness to use specific methods tended to be related to measures of socio-economic status, religious influences, and exposure to communication about family planning. However, the relationships were not generally strong. Furthermore, most Roman Catholic respondents appear to have been unaware of the Roman Catholic position regarding modern contraceptives, which may have tended to vitiate the strength of religious influence on attitudes.

Willingness to try particular methods did appear to be influenced by perceived effectiveness of those methods, but other factors clearly came into play. For instance, those who correctly considered the IUD much more effective than condoms were nevertheless slightly more likely to indicate willingness to use the condoms. Similarly, those who considered that condoms were much more effective than rhythm were more likely to indicate willingness to use rhythm. Differentiating between those who had never tried a method and those who had tried it but were no longer using it, willingness to use it in the future was higher for the latter with regard to more effective methods, indicating less satisfaction among ever-users of the more effective methods.

Discussion of family planning with medical persons appears to have increased awareness of all program methods. In contrast, discussion of family planning with FTCWs appeared to have had little or no effect on awareness of pills or rhythm, and discussion with BSPOs was associated with increased awareness only of condoms and the IUD.

Rhythm users and those who had been given printed IEC materials on rhythm were more likely than others to answer correctly about the timing of the fertile period in relation to menstruation, but even among these respondents, nearly two-thirds nevertheless answered incorrectly.

Nearly all of the wives admitted that they did not know the difference between vasectomy and castration, and about one-fourth of those who thought they knew the difference gave erroneous responses when asked to explain it. Such knowledge was only slightly related to educational attainment and actual experience with vasectomy. It was not found to be related to measures of exposure to communication about family planning, suggesting a need to improve the quality of program communications about this method. However, knowledge about the difference between vasectomy and castration was not strongly related to willingness to use vasectomy in the future, suggesting that just increasing knowledge about vasectomy will probably not be sufficient to produce much increase in motivation to use this method.

CONTRACEPTIVE PRACTICE

Levels and Trends

The proportions of MW15-44 who reported having ever used each method of contraception have already been shown in Table 10, and the distribution of MW15-44 by current method has been shown in Table 11. The most important finding from these tables is that less-effective methods, especially rhythm and withdrawal were much more commonly used than modern, clinical, program methods (pills, IUD, and sterilization). About one-sixth (18 percent) of the MW15-44 reported current use of withdrawal, either alone or in combination with other methods, and one-eighth (12.5 percent) reported use of rhythm, again including combinations. In all, one-fourth (27 percent) of the MW15-44 reported current use of one or both of these methods. In contrast, only 14 percent reported use of any of the clinical methods, even including hysterectomies, most of which were probably undertaken primarily for medical rather than contraceptive reasons.

Some idea of the acceptability of the various methods following initial use can be gleaned from looking at the ratio of the number currently using each method to the number who had ever used it. These ratios should not be confused with conventional continuation rates, since they disregard duration of use, but they can be used to identify those methods most likely to be rejected in the long run. The methods least likely to be rejected by this criterion are, of course, the two types of sterilization. Out of 241 ligation acceptors, 238 (99 percent) were still using ligation. Presumably the other three believed they had experienced reversal of the method. Of 18 respondents who said their husbands had had vasectomies, 16 (89 percent) said they were still protected by this method. The other two had experienced pregnancy since the vasectomy was performed. (However, one or both of these respondents could still have been protected by the vasectomy, since the pregnancies may have resulted from unprotected intercourse shortly after the operation while live sperm were present in the husband's ejaculate.)

Among the reversible methods, the ones least rejected (i.e., with the highest ratios) were withdrawal (38 percent), rhythm (35 percent), injectables (31 percent), and the IUD (25 percent). The lowest ratios, indicating greatest rejection, were found for foam (six percent), condoms (13 percent), abstinence (15 percent), and pills (16 percent). It is interesting to note that the two methods most heavily promoted by the Outreach Project, pills and condoms, appear to be among the least popular methods in terms of this criterion. The relatively high ratio for injectables, though based on only 52 cases, is worth noting, especially in light of the relatively high cost of this non-program method. The very low ratio for foam may be an artifact of the availability of this method rather than an indicator of its relative popularity, since it was once provided by some clinics which no longer offer it. If it were still as widely available as pills and condoms, its ratio might well have been as high or even higher than the pill and condom ratios.

Comparison of the 1978 and 1980 COS findings on current use in the BSPs established before mid-1978 reveals an increase in the use of clinical methods (from 11.4 to 13.4 percent to MW15-44) and a decrease in the use of less effective methods (from 36.7 to 34.3 percent). Thus, though there was virtually no change in the overall level of prevalence (from 48.1 to 47.7 percent), the quality of the methods used improved during the two-year period. If the BSPs established since mid-1978 are included in the 1980 calculations, the trend is even more pronounced: the proportion using clinical methods rose by nearly three points (from 11.4 to 14.1 percent) and the proportion using less effective methods declined by over five points (from 36.7 to 31.3 percent), resulting in a net decline of nearly 3 points in contraceptive practice as a whole (from 48.1 to 45.4 percent).

Quality of Contraceptive Practice

When asked whether they always use their current method according to instructions, 79 percent of the current users said yes. Eight percent admitted that they deliberately take changes, five percent that they sometimes forget to use the method, and nine percent that they sometimes make mistakes in using the method. There was some variation by method (Table 52). Rhythm and withdrawal users were most likely to admit to incorrect use, primarily as a result of making mistakes and taking chances, though it is not clear what "making mistakes" means in the case of withdrawal. Users of pills were especially likely to admit that they forget to take their pills but relatively unlikely to admit to either taking chances or making mistakes. Since these figures are self-reported, they probably understate the incidence of incorrect use.

Data on the availability of pills and condoms in the house at the time of the survey suggest that the numbers of respondents reporting use of these methods were overstated. Of those who said they were current pill users, for instance, 14 percent said they had no unfinished packs.

TABLE 52

PERCENTAGE DISTRIBUTIONS OF MW15-49 BY REGULARITY OF USE, BY CURRENT METHOD, 1980 COS

Regularity	Method				
	Pills	Rhythm	Condoms	Withdrawal	Combinations
Always uses correctly	89.1%	73.1%	86.5%	74.1%	87.7%
Takes chances	1.6	8.6	4.8	3.9	4.5
Forgets to use	7.3	3.8	4.8	5.0	3.2
Makes mistakes	2.1	14.5	3.8	12.0	4.5
(N)	192	372	104	560	220

Since all the pills provided by the program are supposed to be taken every day without any break between cycles (i.e., they all come in 28-pill packs), and very few pill users obtain their pills from non-program sources, only one-twenty-eighth (four percent) of the current pill users should report that they have no unfinished packs. The data on condoms show a similar pattern. Since condoms are usually given out by the dozen, only about eight percent of current condom users should report that they are out of stock, but nearly one-fourth of the condom users reported that they had no condoms on hand.

Users of combinations of two methods were asked how they combined the methods. For instance, users of rhythm and withdrawal were asked whether they used withdrawal for protection if they had sex during the unsafe period or abstained during the fertile period and used withdrawal for added protection during the "safe" period. The latter would probably be more effective (but also more difficult to use) than the latter. Eighty-two percent said they used withdrawal during the fertile period and only 18 percent said they used it during the safe period. Similarly, in the case of rhythm and condom users, 89 percent said they used condoms during the fertile period and 11 percent during the safe period. Users of condoms and withdrawal were asked whether they alternated between these methods (which should not provide any appreciable advantage in terms of effectiveness) or used both of them during each act of sex (which could increase effectiveness substantially); 78 percent said they used them alternately and only 22 percent together. Thus, for each of the three types of combination, the variation likely to improve contraceptive effectiveness more greatly was practiced by only a minority of users.

The effectiveness of each method, as used by the interviewed wives, can be calculated on the basis of a "calendar" of contraceptive practice that was obtained for each respondent. In 1980, this "calendar" indicated, for each month from January 1978 to the interview date (or to June 1980, in the case of those interviewed after July), whether the respondent was using contraception, amenorrheic, or pregnant. Non-users who were not pregnant or amenorrheic were also asked why they did not use any method. For months of conception, the respondent was also asked whether or not she had been using a method at the time conception had occurred. Using this information, it was possible, for each month, to determine how many of the wives were using any given method and how many became pregnant while using the method. By aggregating these figures for all months and dividing the number of accidental pregnancies by the number of users, it was possible to generate a Pearl pregnancy rate for each method, indicating the numbers of pregnancies occurring per hundred women-years of use.

The Pearl rates are shown in Table 53 for both 1978 and 1980. The rates for 1978 were calculated somewhat differently but are included since they tend to corroborate the 1980 findings. The major differences are that the 1978 rates tend to be somewhat upwardly biased because the incidence of accidental pregnancies was calculated from the 1978 data by comparing statuses for adjacent months and assuming all pregnancies that followed a month of use were accidental, whereas in fact some of them occurred shortly after termination of use of the method. However, there is a countervailing downward bias in the 1978 data as well, since amenor-

TABLE 53

ESTIMATES OF PEARL PREGNANCY RATES, 1978 AND 1980 COS

Method	Pearl Rate		Number of Woman-Years of Observation	
	1978	1980	1978	1980
Ligation	0.7	0.0	150	416
Vasectomy	4.0	(.7)	50	27
IUD	8.0	3.6	162	165
Abstinence	16.5	(16.7)	133	39
Pills	20.6	19.2	417	423
Combinations	23.9	21.9[a]	297	346
Rhythm + withdrawal	u	17.0[a]	u	246
Rhythm + condoms	u	(31.4)[a]	u	71
Condoms + withdrawal	u	(39.7)[a]	u	29
Rhythm	38.9	33.4	743	710
Withdrawal	39.6	43.7	844	767
Condoms	48.2	60.4	174	114
No method but sexually active, fecund, and menstruating	105.0	110.5	1,397	1,806

Note: Parenthesis denote rates based on less than 100 woman-years of use and therefore relatively unreliable.

u - unavailable

a/The numerators for 1980 rates for combinations were obtained by comparing statuses for adjacent months, as in 1978, rather than relying on the respondent's reported use of contraception at the time of conception, since the use of combinations at that time tended to be somewhat underreported.

rheic women who were also using contraception were included there but excluded in the calculations based on 1980 data. The differences between the 1978 and 1980 Pearl rates were six points or less for all categories of respondents shown in Table 53 except condom users, whose 1980 rate was 12 points higher than their 1978 rate. Given the differences in computational methods and the small sample sizes for many of the methods, it is unlikely that any of these differences is indicative of a real trend over time.

The two surveys are consistent in the ranking of methods. The relative ranking of sterilization, the IUD, pills, rhythm, and condoms is consistent with findings from the 1976 National Acceptor Survey (Laing and Alcantara, 1980). However, the gap between the IUD and pill rates was unexpectedly large, and the rankings of abstinence (allowing for chance-taking) and combinations of relatively ineffective methods were unexpectedly high. It is also worth noting that the pregnancy rates for withdrawal in both surveys were lower than those for condoms, suggesting that active promotion of condom use may actually be counter-productive when it succeeds in drawing couples away from withdrawal.

In 1978, it was not possible to distinguish between different combinations of methods, but this was done in 1980. The combination of rhythm and withdrawal was found to be most effective. It was also the most commonly used combination, probably because neither rhythm nor withdrawal requires supplies or the intervention of persons other than the husband and wife.

The effectiveness of a method can be expressed as the proportion by which its use reduces the probability of conception. Algebraically,

$$PRC = 1 - PPR/EPR,$$

where PRC is the percentage reduction in conceptions, PPR is the Pearl pregnancy rate among users, and EPR is the equivalent "expected pregnancy rate" in the absence of contraceptive use. The values of EPR can be obtained by calculating a Pearl-type rate for non-users who are not pregnant or amenorrheic and who believe themselves to be fecund and are sexually active. Since both PPR and EPR can be expected to vary widely by age, it is preferable to standardize each by age. Table 54 presents

TABLE 54

ESTIMATES OF PRC DERIVED FROM 1978 AND 1980 DATA

Method	1978	1980
Ligation	.99	1.00
Vasectomy	.98	.99
IUD	.93	.96
Abstinence	.81	.84
Pills	.81	.83
Combinations	.76	.77
Rhythm	.61	.62
Withdrawal	.60	.51
Condoms	.57	.34

estimates of PRC derived by means of this procedure from both the 1978 and 1980 COS data. The age standard is the combined distribution of all users and non-pregnant, menstruating, fecund, and sexually active non-users.

It can be seen that the rank-order of methods remains the same as in Table 53 with the one exception that the PRC value for users of combinations is less than that for pill users in both 1978 and 1980, a reflection of the fact that users of combinations tend to be older than pill users. The estimates of PRC from the two surveys tend to be more consistent than the estimates of the Pearl pregnancy rates. Only for condom and withdrawal users was there a substantial difference, in both cases a decline in PRC. Given the small sample of condom users, it seems likely that a good deal of the apparent decline was caused by change fluctuations rather than an actual trend over time.

The magnitudes of PRC indicate that use of even the least effective methods reduces the conception rate by about half or more; that use of pills, combinations, and abstinence reduces it by about four-fifths; that use of the IUD reduces it by about 95 percent; and that sterilization, as expected, virtually eliminates the possibility of conception.

Continuation Rates

The "calendar" of contraceptive status can also be used to calculate monthly continuation rates, which can be converted into 12-month continuation rates by means of the formula,

$$CR_y = (CR_m)^{12},$$

where CR_y is the 12-month (yearly) rate and CR_m is the monthly rate. The 12-month rates resulting from application of this procedure to data from both the 1978 and 1980 COSs, are shown, in the form of percentages, in Table 55. The magnitudes of the rates from the two surveys are all within five points of each other. These differences are too small to indicate trends over time; as with the pregnancy rates and estimates of PRC, they indicate a reasonably high degree of reliability.

The mean period of consecutive couple-months of use (CMU) can also be calculated on the basis of the monthly continuation rate, by means of the formula,

$$CMU = 1/(-\ln CR_m).$$

The values of CMU derived from 1978 and 1980 COS data are also shown in Table 55. Condom and abstinence users averaged only five to six months of continuous use, whereas IUD users averaged nearly three years of continuous use and users of combinations averaged more than two years of use. The averages for users of pills, rhythm, and withdrawal fell between these extremes, ranging from about a year to 18 months.

TABLE 55

TWELVE-MONTH CONTINUATION RATES AND AVERAGE CMU, BY METHOD, 1978 AND 1980 COS

Method	Continuation Rates		Average CMU	
	1978	1980	1978	1980
Clinical Methods				
Pills	47	42	15	14
IUD	69	70	27	34
Other Program Methods				
Rhythm	48	51	15	18
Condoms	16	10	6	5
Combinations	64	67	24	30
Non-Program Methods				
Withdrawal	41	43	13	14
Abstinence	9	13	5	6

Things Like and Disliked About the Current Method

Each current user was asked to state the thing she most liked about her current method and the thing she most disliked about it (Table 56). Overall, about half (52 percent) of the respondents said the thing they most liked about the method was that it was not painful or harmful; one-fourth (26 percent) cited its effectiveness; one-sixth cited its convenience; the remainder cited a variety of things, such as low cost, lack of knowledge of alternatives, moral acceptability, and attitude of husband. The responses varied by method. Rhythm was especially likely to be appreciated for its lack of side effects; ligation and vasectomy were most appreciated for effectiveness. No method was preferred primarily for convenience by more than one-fifth of the respondents.

When asked what they disliked most about their current method, the great majority of the users (34 percent) said there was nothing they disliked about it; however nine percent mentioned side effects (including fears about dangers to their health), six percent mentioned inconvenience, and one percent mentioned the risk of pregnancy. Pill users were especially concerned about side effects, and users of combinations and condoms were more likely than others to complain of inconvenience. Users of pills, the IUD, and combinations were most likely to say they disliked something about the method (23, 24, and 21 percent, respectively); rhythm users were by far least likely to say they disliked anything (three percent).

TABLE 56

PERCENTAGES OF USERS CITING THE MOST COMMONLY REPORTED TYPES OF THINGS LIKED AND DISLIKED ABOUT THEIR CURRENT METHODS, 1980 COS

Current Method	Percent Who Said They Liked It Because of:			Percent Who Said They Disliked It Because of:		
	Not Painful or Harmful	Effectiveness	Convenience	Side Effects	Pregnancy Risk	Inconvenience
Pills	61	16	18	21	0	2
IUD	53	25	19	17	1	6
Rhythm	71	9	15	0	2	1
Condoms	47	31	19	10	1	8
Ligation	16	75	4	15	0	2
Vasectomy[a/]	(18)	(68)	(0)	(13)	(4)	(0)
Withdrawal	53	22	18	6	2	4
Combinations	60	19	16	10	2	10
All methods	52	26	16	9	6	1

a/N = 22

Reasons for Non-Use of Contraception

Of all the MW15-49 who were interviewed in 1980, 43 percent said they were using a method of contraception, 18 percent said that they were pregnant and thus had no need for contraception, 10 percent said they thought they were no longer able to bear children, three percent said they were not sexually active at the time (mostly due to temporary absence of the husband), six percent said they wanted to get pregnant, and 12 percent were not using contraception but were nevertheless reasonably well protected from pregnancy because they were amenorrheic.

Only eight percent indicated that they were not using contraception and not otherwise protected from unwanted pregnancy. Among these unprotected cases, no single reason for non-use stood out as most important. The reasons they most commonly gave were perceived low fecundity, fears about side effects, husbands' objections, acceptance of God's will, lack of knowledge about family planning methods, old age, lack of time to get supplies, and reliance on hilots (for abortions by message), in that order.

Reasons for Non-Use of Clinical Methods

Women who were currently using less effective methods were asked why they preferred these methods to pills, the IUD, or sterilization. The main reason for rejecting pills was fear of side effects; it was

mentioned as the main reason by 37 percent of the respondents. Other reasons, none of them mentioned by more than two percent of the respondents, included the following: does not know where to get pills, forgets to take pills, presently breastfeeding, and husband objects.

As with pills, the predominant reason for non-use of the IUD was fear of side effects, but respondents were less likely to give this reason for the IUD (74 percent) than for pills; five percent were concerned, ironically, about the risk of pregnancy with the IUD, five percent said they disliked the procedure involved (examination of the genital area, having something inserted there), five percent said they did not know about the method or where it could be obtained, four percent were concerned about involuntary expulsion of the device, and smaller proportions cited such things as inaccessibility of the clinic or objections of their husbands.

With regard to sterilization, 61 percent cited fears, and 17 percent said they still wanted more children. Five percent said they were old already, four percent said their husbands objected, and smaller proportions said they did not knew about sterilization, that it was too expensive, that they could not get to the clinic or did not know where sterilization was offered, that they should not have the operation because they did heavy work, that they were too young, or even that they were worried about the risk of pregnancy.

Source of Contraceptive Services

Current users of contraception were asked about their most recent major source of services. Sterilization users were asked where the operation had been performed; IUD users were asked where the device had been inserted; users of methods requiring resupply were asked about the source of their last supply; and users of methods that require only information were asked about their source of instruction. Information on source of service was obtained in two stages: first the respondents were asked who had performed the operation or insertion, provided the last supply, or instructed them; then they were asked where that had occurred.

With regard to "who," 44 percent of the users cited a doctor, nurse, or midwife; 22 percent cited a friend, relative, or neighbor; 15 percent cited their husbands; eight percent cited the BSPO; three percent cited the FTOW; and the remaining eight percent cited a variety of sources, including other types of field workers, sales persons, themselves, lectures, traditional healers, teachers, mass media, and religious workers or clergy.

The breakdown of this variable by current method is shown in Table 57. Pills were equally likely to have been obtained last from a medical person or Outreach worker; only five percent had received their last supply of pills from other sources. Medical persons were the only source for the IUD. Rhythm instruction was about as likely to have been received from friends, relatives, or neighbors as from medical persons. Only six percent of the rhythm users had been instructed in rhythm by Outreach workers. The BSPO was the chief source of supply for condoms; together, the BSPO and FTOW had provided 61 percent of the condom users with their

TABLE 57

PERCENTAGE DISTRIBUTION OF MW15-49 BY SOURCE OF SERVICE BY CURRENT METHOD, 1980 COS

Source	Method					All Methods[a/]
	Pills	IUD	Rhythm	Condoms	Withdrawal	
Who?						
Doctor, nurse, midwife	48%	100%	36%	32%	15%	44%
Friend, relative, neighbor	3	0	33	5	42	22
Husband	0	0	9	0	33	15
BSPO	42	0	2	48	2	8
FTOW	5	0	4	13	1	3
Others	2	0	16	2	7	8
Where?						
Clinic	37	81	15	21	7	32
BHS	9	13	4	9	2	4
BSP	36	0	2	27	1	7
Home	7	1	38	26	62	36
Elsewhere	11	5	41	17	28	17

a/MW15-44

most recent supply. However, medical persons were still supplying about one-third of the condom users. Most wives said they received information about withdrawal either from friends, relatives, or neighbors or from their husbands. Almost none cited an Outreach worker as their source, but 15 percent said they had been instructed in withdrawal by medical persons.

With regard to location of services, a little over one-third (36 percent) said they had received them at home, and the same proportion cited a clinic or a barangay health station. Only seven percent said they went to the BSP. One-sixth cited other places, mostly neighbors' houses (11 percent of all users) but including offices of private doctors (1.2 percent) commerical stores (.6 percent), churches, auditoriums, meetings halls, and other public places. The breakdown by method (Table 57) reveals that, despite the relative accessibility of BSPs for pills and condoms, more users of these methods had received their current supply from a clinic or BHS than from the BSP, apparently because some BSPOs provided home delivery. Though the clinic was the chief source for the IUD, 13 percent of the IUD users reported that the insertion had been performed at a BHS and some even reported domicilliary insertions, either at their own homes or at the homes of neighbors.) Most rhythm and withdrawal users had learned of these methods at home, at neighbors' homes, or at meetings.

There are some other interesting differentials in source of supply. For instance, younger and less-educated users were more likely to rely on friends, relatives, or neighbors or to use the BSP or BHS, whereas older and better-educated users were more likely to have been helped by a clinic or by the FTOW. Rural respondents, and especially wives of farmers and fishermen, were less likely than others to rely on clinics or medical persons. The likelihood of citing the BSPO as a source was inversely related to distance of residence from the BSP. Of those living within two minutes' distance, 15 percent cited the BSPO as their source; of those living more than 22 minutes away, only four percent cited the BSPO. Of those users who knew of the BSP, 29 percent cited a clinic or BHS as their source; the corresponding proportion among those who did not know of the BSP was 34 percent. Thus, knowledge of the BSP made only a relatively slight difference in the likelihood of using a clinical source.

In 1978, the interviewed wives were asked whether they knew of the existence of the BSP, and only 42 percent of the MW15-44 answered in the affirmative. This finding indicated an important shortcoming of the program, and the question was repeated in the 1980 COS to determine whether the problem had been alleviated. Unfortunately, in 1980 the question was inadvertently placed in such a way that it was asked only of current users. Though comparison between the two surveys was not possible for the total sample of wives, it could be made for the subset of users. In 1978, 50 percent of the current users said they knew of the BSP; the corresponding proportion in 1980 was also 50 percent, indicating no change during the intervening two years. However, it should be noted that shortly after the 1980 COS fieldwork was completed, a large proportion of the BSPs were provided with large, conspicuous signboards identifying them as such. As a result, it is likely that a substantial increase in knowledge about the BSP would have been found if the second found of the COS had been conducted in 1981 instead of 1980.

Only 3.7 percent of the MW15-44 were currently using supplies received from the BSPO. However, 12.3 percent said they had at one time or another received pills or condoms from the BSP and 10.7 percent that they had used them, indicating a high attrition rate. The BSPs that had been established longest tended to have somewhat higher proportions of ever-users of pills or condoms from the BSP than those established most recently, but the difference was not great. In BSP areas established before the end of 1977, 12.7 percent of the MW15-49 said they had used pills or condoms from the BSP, in contrast to 7.1 percent in the BSP areas established since mid-1979. Thus the additional two years of BSP operations in the older BSPs meant only a five-point increase in the proportion of wives who had used supplies obtained from the BSP.

Of the wives who had received supplies at least once from the BSP, 81 percent said they had gone there to get them; the remaining 19 percent said the initial supply had been delivered at home. Half of the ever-users of BSPs said they had received supplies from the BSP more than once. Of those who had received more than one supply, 88 percent reported that they had gone to the BSP for the last supply.

One-third (32 percent) of the MW15-44 reported that they had attended a family planning clinic, and 84 percent of them (27 percent of the total) said they had used a method obtained from the clinic. Thus, the clinics, despite the fact that they tended to be less accessible than the BSP, had been considerably more successful than BSPs in attracting acceptors. Furthermore, despite the longer duration of clinic operations, the clinics were not subject to such high attrition rates. Sixteen percent of the MW15-44 were still using a method obtained from a clinic.

Referrals

When asked how they had learned about their current source of family planning supplies or information, 59 percent of those users relying on medical, Outreach, or commercial sources cited a doctor, nurse or midwife. Only 15 percent cited other program sources (Table 58). Both clinic users and BHS users were about equally likely to cite medical or paramedical persons (about 60 percent) and friends, relatives, or neighbors (about 20 percent). Only 8 percent of clinic users and six percent of BHS users said they had been referred by an Outreach worker. BSPOs were more likely than FTOWs to have referred users to the BHS; FTOWs were more likely than BSPOs to have referred them to a clinic. Conversely, Outreach workers, especially the BSPOs, were more likely to have recruited BSP users; only 10 percent said they had been referred to the BSP by a doctor, nurse, or midwife. Only 13 percent of the BSP users reported that they had been referred by friends, relatives, or neighbors, in contrast to 20 percent or more of the clinic and BHS users. These findings

TABLE 58

PERCENTAGE DISTRIBUTION OF CURRENT CLINIC, BHS, AND BSP USERS, BY INFORMANT ABOUT AVAILABILITY OF FAMILY PLANNING FROM CURRENT SOURCE, 1980 COS

Informant	Current Source		
	Clinic	BHS	BSP
Doctor	25	8	2
Nurse, midwife	36	56	8
BSPO	2	4	55
FTOW	6	2	16
Other field worker	1	0	2
Friend, relative, neighbor	23	20	13
Other[a/]	7	14	4
(N)	(476)	(79)	(128)

a/Mostly local leaders, religious leaders, and self.

indicate that there is much room for improvement in the referral of clients by Outreach workers to clinics and BHSs and by clinic personnel to BSPs. Furthermore, only one percent of all users cited referrals by field workers of non-clinical partner agencies to their current source, indicating the need to encourage more referrals by such workers.

Accessibility of Current Source

The current users reported a median travel time of 15 minutes to their current source of family planning service. However, there was much variability. About one-third (32 percent) reported that it took less than five minutes to reach the source, and one-fourth reported that it took more than 30 minutes to reach the source.

Nearly half said they had last gone to the source by means of public transportation. The median round-trip fare reported by these respondents was ₱2.02. However, 10 percent had paid more than ₱10; among sterilization users, 24 percent had paid more than ₱10.

Most users said they had not had to pay anything for the services they had received. Nearly one-fourth (23 percent) reported having paid ₱5 or more, and 13 percent reported payments of ₱30 or more. Payment patterns varied rather sharply by method (Table 59). The IUD was the only method for which a majority of users had paid, and most of them had paid about five pesos or less. A little over one-third (36 percent) of the pill acceptors had paid for their last supply, almost all of them paying only one or two pesos. Still fewer had paid for rhythm or condoms and the amounts were similarly small. About half of the sterilization acceptors said they had paid for services, including 30 percent who had paid more than 27 pesos. Thus sterilization was the only method for which cost might have posed a serious barrier to wider acceptance.

TABLE 59

PERCENTAGE DISTRIBUTIONS OF USERS[a/] BY AMOUNT PAID FOR SERVICES BY METHOD, 1980 COS

Amount Paid	Method				
	Pills	IUD	Rhythm	Condoms	Sterilization
None	64	39	82	90	51
₱1-2	32	24	16	8	3
₱3-7	3	26	1	2	7
₱8-27	1	5	1	0	0
₱28+	0	6	0	0	30
(N)	162	72	76	59	192

a/Limited to those who had obtained their most recent supply from a clinic or BHS, private physician, commercial source, or BSP.

Correlates of Contraceptive Practice

The use of contraception was correlated with numerous other variables. The strength of the relationships tended to be greater for use of clinical methods than for use of other, less-effective methods. To simplify presentation, the analysis here is limited to the correlates of practice of clinical methods except in those few cases where the nature of the relationship for the other methods was different.

Table 60 summarizes the most important differentials in the use of clinical methods. Substantial differentials were found for all the variable listed with one exception (whether discussed with priest or nun, which is included to demonstrate the lack of an adverse effect of communications from Catholic religious leaders on practice of clinical methods). The relationship with age was curvilinear, the use of clinical methods peaking at ages 35-39 (16 percent), rising from a low of two percent at ages 15-19 and declining to three percent at ages 45-49. Use of clinical methods was directly correlated with desire to stop bearing children, with indicators of socio-economic status, urbanization, and accessibility of clinical services, with religion, with own attitude and perceived attitude of husband, with perceived relative effectiveness of the IUD over condoms, and with various indicators of exposure to communications about family planning. The last set of relationships must be treated with caution, since both exposure to communications about family planning and practice of family planning are correlated with socio-economic status and therefore render any interpretation of a causal relationship questionable.

Only two deviations from these patterns were noted with regard to the use of less effective methods (apart from weaker relationships): (1) Roman Catholics were the ones most likely to be using such methods (33 percent), followed by Protestants (29 percent), Iglesia Ni Cristo adherents (22 percent), and Muslims (11 percent); (2) wives who thought the IUD was much more effective than condoms were least likely to use less effective methods (27 percent) and those who thought condoms were much more effective were most likely to do so (41 percent).

Though religious affiliation was related to use of contraception, the perceived stand of one's religion was not. Of those who said they thought their religion approved of modern methods, 12 percent were currently using clinical methods and 32 percent were using less effective methods; of those who thought their religion disapproved of modern methods, 11 percent were using clinical methods, and 30 percent were using less effective methods.

Summary and Conclusions

Quality of contraceptive practice did not seem to be a matter of much concern to the wives. They tended to prefer less-effective methods. A substantial minority admitted to taking chances or making mistakes, and it is likely that such deviations were actually much more widespread. Many who said they were currently using pills or condoms had none in the house at the time of the survey, calling into question

TABLE 60

RANGE OF PERCENTAGES OF MW15-44 REPORTING USE OF CLINICAL METHODS BY SELECTED INDEPENDENT VARIABLES, 1980 COS

Independent Variable (With High/Low Categories in Parentheses)	High/Low Percents
Age of respondent (35-39/15-19)	16/ 2
Want more children? (no/yes)	16/ 8
Education (college/none)	19/ 4
Occupation of respondent ("white collar"/farming)	18/ 8
Type of barangay (urban/rural)	20/10
Minutes from BSP to poblacion (0-7/60+)	20/ 6
Religion (Iglesia Ni Cristo/Muslim)	18/ 4
Attitude toward modern methods (Approves strongly/disapproves strongly)	20/ 1
Perceived attitude of husband (same categories)	23/ 2
Perceived relative effectiveness of IUD and condoms (IUD much more effective/condoms much more effective).	20/ 7
Discussed family planning during past year with:	
husband? (yes/no)	16/ 6
friends, relatives, neighbors? (yes/no)	20/ 7
barangay officials? (yes/no)	16/10
Catholic priest or nun? (yes/no)	12/11
medical person? (yes/no)	22/10
FTOW? (yes/no)	18/10
BSPO? (yes/no)	17/10

the meaning of "current use" to these respondents. Some respondent reported use of two or more methods in combination, presumably to improve on their effectiveness, but some of them admitted to taking chances and making mistakes, and most of them combined the methods in less than optimal ways.

The ranking of the program methods with regard to their estimated effects on the probability of conception was as expected on the basis of earlier surveys, but the gap between the IUD and pills was unusually large. Among other methods, abstinence and combinations appeared to be approximately as effective as the pills, and withdrawal appeared to be somewhat more effective than condoms but less effective than rhythm. Among combinations of methods, rhythm plus withdrawal appeared to be most effective, possibly because these are the two most popular methods in the Philippines and may therefore be practiced more faithfully than other combinations.

With regard to continuation, the IUD and combinations of methods appeared to be used continuously for the longest periods of time (about two years or more); condoms and abstinence tended to be used continuously for the shortest periods of time (about six months).

The wives' chief concern in rating the various methods appears to have been the likelihood of side effects, including perceived long- term dangers to health. When asked what they liked most about their current method, most users cited its relative lack of side effects. Very few users specified things they disliked about their current method, but a majority of those who did specify things disliked mentioned side effects as the most important.

The main reasons for non-use of contraception were that the respondent was currently pregnant or amenorrheic, that she perceived herself to be infecund, that she and her husband were not sexually active at the time of interview, or that they wanted another pregnancy. Only eight percent of the MW15-44 said they were not using contraception for other reasons. Thus there was not much leeway for recruiting new acceptors from among those currently in need of contraception and not otherwise protected from unwanted pregnancy.

A more important need was to motivate couples to shift from less-effective methods to modern, clinical methods. The main reason for rejecting clinical methods was fear of or past experience with side effects, including perceived long-term dangers to health. Lack of access to clinical services was only rarely given as a reason for non-use of such methods.

The BSPO or the FTOW was identified as the most recent supply source for only two methods: pills and condoms. In the case of pills, the proportion obtaining their most recent supply from a medical person was about the same as the proportion receiving it from an Outreach worker. In contrast, Outreach workers were most likely to have provided condom users with their most recent supply. Use of the BSP might have been increased considerably if its existence and services had been

better publicized. Only 42 percent of the residents of BSP areas in 1978 said they knew of the BSP, and the proportion does not appear to have changed markedly by 1980.

Referrals between clinics or BHSs, on the one hand, and BSPs, on the other, do not appear to have been very common. Only eight percent of the clinic users and six percent of the BHS users in 1980 said they had learned of the clinic or BHS services primarily from the BSPO or FTOW, and only 10 percent of the BSP users said they had learned about the BSP primarily from a medical person.

Contraceptive practice, especially of clinical methods, was correlated with age (in curvilinear fashion, with prevalence peaking at ages 35-39); desire to stop having children; indicators of socio-economic status, ubanization, and modernization; religion (but not by the perceived approval or disapproval of modern methods by that religion); own attitude and husband's attitude; perceived relative effectiveness of the various methods; and exposure to communications about family planning by all except religious sources.

OUTREACH PROJECT EFFECTS ON CONTRACEPTIVE PREVALENCE

Introduction

To this point, the analysis of the COS data has been largely descriptive. Little has been done to explore the relationship between FTOW and BSPO inputs on the one hand and the prevalence of contraceptive practice on the other. The purpose of this concluding section is to study this relationship, using data from the 1980 COS. This section is drawn from a paper prepared for publication in Studies in Family Planning (Laing, 1981).

The analysis is conducted at the community level, with the BSP as the unit of analysis. The variables are drawn from the surveys of FTOWs and BSPOs and from the aggregation of data obtained in the transcription of information from BSP records and in enumeration of the BSP area. Given the design of the COS, a similar analysis could be conducted at the individual level, with the wife as the unit of analysis. In this case, the dependent variable would be the wife's use or non-use of contraception and the independent variables could be drawn from both the survey of wives and the community-level measures, the latter being treated as contextual variables. However, this type of analysis suffers from two difficulties: (1) the dependent variable is a dichotomy, which may distort the results from a simple least-squares model of the sort presented here; and (2) the community-level measures do not vary within any given community, whereas the behavior of individual wives does. As a result of the latter problem, the proportion of variance explained by the community variables at the individual level is severely limited.

Two measures of prevalence are employed in the present analysis. The primary measure is the ratio of the number of MW15-44 in the BSP area currently using clinical program methods (pills, IUD, and sterilization) to the total number of MW15-44 in the BSP area. This measure is referred to for convenience as "clinical prevalence." A second measure, "overall prevalence," is also included in the analysis. It is like clinical prevalence except that the numerator includes users of non-clinical methods as well as users of clinical methods. Since use of clinical methods is more reliably measured than use of other methods, clinical prevalence tends to be more highly correlated than overall prevalence with other variables.

The present analysis uses unweighted data. According to the enumeration data, the unweighted mean of the clinical prevalence rates for the 360 sample BSPs was 12.4 percent. The unweighted mean of the overall prevalence rates was 32.5 percent. As noted above, this estimate is considerably lower than the prevalence rate of 44.5 percent obtained from the interviews with wives. However, it is likely that variations in the rate derived from enumeration data follow much the same pattern as variations in the rate derived from survey data.

Hypothesized Determinants of Prevalence

The design of the COS permitted the testing of a wide variety of possible hypotheses regarding the relationships between community-level variables and prevalence. A total of 187 variables thought to be potential determinants of prevalence were measured and tested. Most of the measures may be classified as follows:

Community Socio-Economic Status (SES)

1. Mean scores of the households and household heads with regard to furnishings, housing materials, educational attainment.

2. Indicators of urban-rural status, including the official census classification, proportion of household heads engaged in farming or fishing, and distance from nearest Poblacion (town center).

Non-Outreach Inputs of the Family Planning Program

1. Accessibility of medical facilities (e.g., estimated travel time to nearest clinic or Barangay Health Station (BHS) offering family planning services; frequency of visits to BSP area by BHS midwives; number of family planning clinics and BHSs serving the FTOW's territory).

2. Motivational work by field workers other than FTOWs and BSPOs (e.g., reported family planning promotional activity of various categories of workers in the FTOW's territory and in the sample BSP; presence of women's clubs or mothers' classes organized by such workers and including family planning information and promotion among their concerns).

3. Support from local (municipal and barangay) officials for family planning activities, as reported by the FTOW and the BSPO.

Outreach Project Inputs

1. Background characteristics of FTOWs and BSPOs (e.g., age, sex, marital status, number of living children, education, occupation).

2. Family planning knowledge, attitudes, and practice of FTOWs and BSPOs.

3. Training and work experience of FTOWs and BSPOs, including duration of employment.

4. Motivational activities of FTOWs and BSPOs (e.g., number of home visits for various purposes, number of referrals to clinics, priority of such activities relative to others).

5. Other activities of FTOWs and BSPOs (e.g., establishment of new BSPs, survey work, establishment of family planning clubs, coordination with clinics and field workers of other agencies, home delivery of pills and condoms to continuing users, premarital counseling, and priorities among such activities).

6. Information-education-communication (IEC) support (e.g., stock and flow of various types of printed IEC materials at the FTOW and BSPO levels; availability and use of family planning radio broadcasts).

7. Other professional support for FTOWs and BSPOs (e.g., supervision and guidance: adequacy and promptness of salary payments, travel reimbursements, and incentives; membership in BSP associations).

8. Job satisfaction of FTOWs and BSPOs.

9. Characteristics of the sample BSP (e.g., age, size, completeness and timing of BSP surveys; organized opposition to family planning in the BSP area.)

As this list suggests, most of the hypothesized determinants of prevalence that were studied were indicators of the implementation of the Outreach Project.

Bivariate Analysis

The first step in analysis was to determine which of the hypothesized determinants were appreciably correlated with either of the measures of prevalence without controlling for other variables. For this purpose, each of the 187 independent variables was cross-classified with each of the prevalence measures. On the basis of this exercise, 46 independent variables were identified that appeared to be highly enough correlated with prevalence to justify inclusion in multivariate analysis. Seven were community SES measures; ten were measures of non-Outreach program inputs; and 29 were Outreach variables. No rigid mathematical or statistical criteria were used in selecting these variables. Some that correlated moderately highly with one or both measures of prevalence were omitted because other, similar variables were correlated much more highly; in contrast, some other variables that were less highly related to either measure of prevalence were nevertheless included because they seemed to be measuring something not reflected in the more highly related independent variables.

Multivariate Analysis: Clinical Prevalence

The main objectives of the multivariate analysis were (1) to determine whether the Outreach Project had an effect on contraceptive prevalence, (2) to determine the magnitude of this effect, and (3) to determine the relative importance of various aspects of the Outreach Project in influencing prevalence. The bivariate analysis established that some

measures of Outreach operations were correlated with prevalence. However, none of the relationships was very strong, and there was no way of inferring that the relationship was causal. If two variables, X and Y, are correlated, it can be inferred that the relationship is causal only if the correlation is not based solely on covariance of both X and Y with other variables. If the possible covariates of X and Y can be identified, measured, and controlled in a multivariate model, and if the relationship between X and Y persists, then a causal relationship can be inferred. (In this case, it is still necessary to establish the direction of causality, but that is a separate issue.)

Two types of potential covariates are hypothesized in the case of the relationship between Outreach variables and prevalence. One is the socio-economic status of the BSP areas. It is plausible that the degree of development of a community would influence both the quality of program inputs and the level of contraceptive practice. In relatively well-developed communities it is likely that FTOWs and BSPOs would be able to move about more easily than in less-developed communities; urban BSPs are easier for the FTOW to visit, and houses in more urbanized area tend to be clustered within a fairly short radius of the BSP. More urbanized and higher status couples are more likely to be responsive to motivational appeals. In the bivariate analysis, the measures of community SES were generally more highly correlated with prevalence than either the Outreach or other program variables.

The second type of potential covariate of both Outreach variables and prevalence is the strength of non-Outreach aspects of the family planning program. It is plausible that Outreach efforts might be more intensive in areas where other program inputs are also more intensive, and it was demonstrated empirically in the bivariate analysis that such other inputs are correlated with prevalence.

In order to determine which Outreach variables might be causally related to prevalence, a hierarchical regression model was used, where first the effects of community SES variables and then the effects of non-Outreach program variables were taken into account before any Outreach variables were entered into the equation. At all stages the analysis was performed in stepwise fashion so as to select first among interrelated independent variables those related most highly to the dependent variable. Only those variables that entered with regression slopes that were significant at or beyond the .10 level were included.

Given the large number of independent variables and the apparent similarities among many of them, there was some concern that multicollinearity among the independent variables might cause difficulties. However, upong examination of the bivariate correlation matrix, it was found that only two of the coefficients exceeded .7. In subsequent runs, the weaker correlate of prevalence in each of these pairs was deleted from the analysis without any effect on the results. Of the remaining 1033 correlation coefficients, only ten were greater than .5. It thus appears that multicollinearity was not a serious problem.

The results of the analysis with clinical prevalence as the independent variable are shown in Table 61.

TABLE 61

PERCENTAGES OF VARIANCE IN CLINICAL PREVALENCE EXPLAINED BY SELECTED VARIABLES AND CORRESPONDING MULTIPLE REGRESSION COEFFICIENTS (N = 344)

Independent Variable	Adjusted R^2 (%)[a/]		Unstandardized Regression Coefficient	t
	Cumulative	Change		
5 community SES variables	26.9	26.9		
1. Household SES index		21.6	.080	2.03*
2. Percent of household heads with high education		3.0	.068	2.27*
3. Percent farm households		1.2	.028	1.25
4. Distance from BSP to farthest MCRA		.6	-.024	1.19
5. Type of barangay (urban vs. rural)		.5	2.89	1.92*
4 non-Outreach family planning program inputs	30.7	3.8		
1. Weekly visits to BSP area by BHS midwife		1.9	1.89	1.96*
2. Number of FP clinics, hospitals and BHSs serving FTOW territory		.9	.33	2.38**
3. Travel time for ligation		.5	-.36	1.66*
4. Number of other agencies promoting FP in BSP area		.4	.58	1.61
12 Outreach variables	42.6	11.9		
1. BSPO's current use of a clinical method		3.2	1.76	1.36
2. FTOW's time allocation index		2.1	1.26	3.10**
3. BSPO's referrals to clinic (reported by BSPO)		1.7	2.79	2.70**
4. Recent completion of baseline survey		1.1	3.22	3.07**
5. Formal training of BSPO		.9	1.36	1.46
6. BSPO's experience with clinical methods		.4	1.56	2.37**
7. BSPO's experience with non-clinical methods		.9	-.77	2.30*[b/]
8. BSPO's referrals to clinic (reported by FTOW)		.4	1.84	1.84*
9. Date BSP first established		.3	-.073	1.69*
10. FTOW's stock of printed IEC materials		.2	.34	1.55
11. Completeness of BSP records		.3	.021	1.77*
12. FTOW's current use of a clinical method		.3	1.71	1.65*

Significance levels: *p < .05; **p < .01 (one-tail test except as noted)

a/Adjusted for degrees of freedom
b/Two-tail test

Of the seven community SES variables that were tested, five were found to contribute substantially to explaining variations in clinical prevalence, accounting for over one-fourth (26.9 percent) of the variance. The single most important predictor in this category, which accounted for nearly 22 precent of the variance in prevalence, was the household SES index, the mean of the percentages of households giving positive responses to seven questions:

whether the walls are made mostly of cement or stone;
whether the household uses electric lights;
whether gas, kerosene, or electricity is used for cooking;
whether the household furniture includes a dining table;
whether the household furniture includes at least one bed;
whether the household furniture includes at least one chair;
whether anyone in the household has a functioning radio.

The second most important predictor was the percentage of households headed by a person with at least some high school or college education. This variable added three percentage points to the explanation of variance in clinical prevalence. The third indicator, which added 1.2 percentage points to R^2, was the percentage of household heads who were farmers or fishermen. The fourth was the estimated number of minutes required to get from the BSP to the farthest MCRA covered. This was largely an indicator of the difficulty that the FTOW or BSPO would be expected to have in covering the BSP area and added .6 to the percentage of variance explained. The fifth SES indicator, which highly correlated with the other four and therefore explained only an additional .5 percent of the variance, was the type of barangay (urban or rural) where the BSP was located.

Although ten program variables (other than Outreach variables) were found to be correlated with one or both of the prevalence measures on the basis of bivariate cross-tabulations, only four were found to add appreciably to the variance in clinical prevalence already explained by the five community SES variables. Adding them to the analysis increased by only 3.8 the percentage of variance explained. The first of these was a dichotomy indicating whether a BHS midwife visited the BSP area at least weekly; it accounted for 1.9 percentage points of the variance after controlling for the five SES variables. The regression coefficient indicates that weekly visits by a BHS midwife are associated with an increase of nearly two percentage points in clinical prevalence (after controlling for all other variables in the final forms of the equation). The second non-Outreach program variable was the number of clinics, hospitals, and barangay health stations (BHSs) serving the FTOW's entire territory. Each such service point was associated with an increase of about one-third of a percentage point in clinical prevalence. The third variable was the number of minutes required for a trip to the nearest sterilization center offering tubal ligation. The variable could be viewed either as an SES variable, representing distance from urban centers, or as a program variable, representing accessibility of contraceptive services. It is treated here as a program variable, since it is assumed that most of the SES component has already been controlled by variables previously entered in the equation. The fourth variable

was the number of field workers of other agencies who, according to the FTOW, had been working in the BSP area during the three months preceding the survey and included promotion of family planning in their work. This variable was positively associated with clinical prevalence. All four non-Outreach program variables appear to have influenced the prevalence of clinical methods either by the effect they had on the accessibility of clinic services or by referral of potential clients to clinics.

In connection with the total amount of variance explained by non-Outreach program variables, it should be noted that the variables measured in the COS do not necessarily reflect all the aspects of such efforts that might have influenced prevalence. For instance, the range of IEC inputs other than the activities of the FTOWs and BSPOs and the IEC materials distributed by them are not fully represented. Furthermore, the information on field activities of clinic personnel and field workers of other agencies is derived solely from the reports of FTOWs and BSPOs, which might not be as accurate as more objective measures or as the reports of the field workers or clinic personnel themselves. This possibility gains support from the survey of wives, where it was found that reported discussion of family planning with a doctor, nurse, or midwife during the year preceding the survey was more highly correlated with prevalence than reported discussion with an FTOW or BSPO. It is likely, therefore, that the effect of non-Outreach program efforts might actually have been substantially greater than the figures in Table 61 seem to indicate.

The first two categories of variables accounted for nearly one-third (30.7 percent) of the variance in clinical prevalence. When 12 Outreach variables were added to the regression equation, the proportion of variance explained rose to 42.6 percent. Thus the 12 Outreach variables accounted for an increase of 11.9 percentage points in the variance explained. The proportion of residual variance explained by these Outreach variables was greater. Since 30.7 percent of the total variance had been explained, the 11.9 percentage points represent 17.2 percent of the residual variance of 69.3 (i.e., 100 minus 30.7) percentage points.

In the stepwise regression analysis, the first correlate of clinical prevalence among the Outreach variables, which added 3.2 percentage points to the variance explained, was whether the BSPO was currently using a clinical method of contraception. This variable was viewed as a program variable since the selection of the BSPO is an aspect of Outreach operations, and the example set by a BSPO who uses a clinical method is likely to make her more effective as a motivator. The partial regression coefficient for this variable, controlling for all others (including subsequent Outreach variables), was 1.8, indicating that clinical prevalence was an average of 1.8 percentage points higher in areas where the BSPO was using a clinical method.

The second Outreach variable was an index score of the FTOW's reported allocation of time for different types of activities. A score of one was assigned for each of the following activities identified by the FTOW as receiving heavy attention:

- maintaining and monitoring BSPs,
- motivating couples to become new acceptors,
- following up dropouts.

A score of one was also assigned each time one of the following activities was identified as receiving relatively little attention:

- coordinating with workers of other agencies,
- premarital counseling,
- establishing new BSPs.

The basis for selecting the variables and assigning the scores was purely empirical, based on the bivariate associations of the responses with prevalence. In the bivariate tabulations, emphasis on the first three was associated with higher prevalence, whereas emphasis on the last three was associated with lower prevalence. It is not difficult to see how the types of activities tend to promote or inhibit prevalence. The first three maximize contact with MCRA and provision of information and services in the BSPs already established. The latter three tend to take time away from such direct motivational work among the couples most likely to contribute to high prevalence. The time allocation index added 2.1 percentage points to R^2. The regression coefficient was 1.26, indicating more than one additional percentage point in clinical prevalence for each "correct" response.

The third Outreach variable was the response of the BSPO when asked whether she had referred any MCRA to a clinic during the month before the survey. A positive response was associated with a 2.8 percentage point increase in clinical prevalence. The additional variance explained by this variable was 1.7 percentage points.

One of the most time-consuming tasks of the FTOW and BSPO is to conduct periodic surveys of the BSP area to update the count of MCRA and the information on their contraceptive practice. This survey is supposed to be repeated annually, but it is often neglected, probably because it tends to be viewed as relatively unproductive and designed more for monitoring than for promoting family planning. However, the present analysis suggests that periodic surveys can affect prevalence. The fourth Outreach variable was a dichotomy in which the BSPs that had been surveyed in the past 12 months were distinguished from the others (including both those never surveyed and those last surveyed more than 12 months ago). This variable added 1.1 percentage points to R^2 and had a highly significant regression coefficient of 3.2, indicating substantially higher clinical prevalence in those places recently surveyed than elsewhere. These findings suggest that the survey serves an important motivational function apart from its value in providing information to program managers.

Each of the remaining variables added less than one percentage point to R^2, but all combined added appreciably (3.7 points) and all their regression coefficients entered the equation at the .05 level or better. The fifth Outreach variable was whether the BSPO had received formal training (as opposed to informal orientation provided by the FTOW alone). This dichotomy was positively correlated with clinical prevalence. However, its low (and statistically insignificant) regression coefficient indicates that it had little independent effect on clinical prevalence.

The sixth and seventh Outreach variables were indexes of the BSPO's experience with clinical and non-clinical methods, respectively. These indexes were constructed simply by counting the numbers of clinical and non-clinical methods the BSPO said she had tried at least once in the past (including current use if applicable). The number of clinical methods ever tried was positively associated with clinical prevalence, with a regression coefficient of 1.56 the number of non-clinical methods ever tried was negatively associated with clinical prevalence, with a regression coefficient of -.77.

The eighth Outreach variable was like the third, reflecting the BSPO's activity as a referral agent. However, whereas the third variable was based on the BSPO's own report, the eighth was based on the FTOW's response to the question, "During the past month, has (BSPO) referred new acceptors to clinics?" Interestingly, this variable was not highly correlated with the FTOW's report of whether the BSPO had referred clients to a clinic during the preceding month (R = .14), but both responses were found to be important determinants of clinical prevalence. Perhaps the low correlation between these two independent variables was due in part to differences in the wording of the two questions. The FTOW was asked whether the BSPO had "referred new acceptors to clinics," whereas the BSPO was asked whether she had referred "any couples in this BSP area for family planning to a clinic, hospital, or barangay health station." The FTOWs may have perceived that the question was only about couples who had already accepted family planning or excluded referrals to hospitals or RHSs, whereas the BSPOs may have used a more liberal interpretation. Another likely factor was that the FTOWs did not have such detailed information about the BSPO's actual behavior; as a result, the FTOWs' responses probably reflected a general assessment of the BSPO's level of performance more than the actual behavior of the BSPO during the specified period.

The date of establishment of the BSP was inversely associated with clinical prevalence. This relationship persisted even when the other independent variables were held constant. The regression coefficient of -.073 indicates that a one percentage point increase in clinical prevalence was associated with every 13 or 14 months' duration of BSP operations. Some of this relationship may reflect an increase in clinical prevalence following establishment of the BSP, but it is likely that most of the effect is caused by intrinsic differences in the BSP areas themselves -- that is the possibility that the earlier BSPs were selected precisely because they had previously been more receptive to program efforts and might therefore be expected to have higher prevalence levels even without the BSPs. This interpretation is based primarily on comparison of the 1978 and 1980 COS results, which indicates that the BSPs established before mid-1978 showed no measurable change in overall prevalence between 1978 and 1980.

The tenth Outreach variable was an index score on the FTOW's stock of printed IEC materials. It was obtained from responses to a series of questions, asked during the FTOW interviews, on whether the FTOW had multiple copies of comics, leaflets, or brochures on each of seven topics (pills, the IUD, ligation, vasectomy, rhythm, condoms, and the advantages of a small family). A score of one was assigned for each positive res-

ponse. The regression coefficient was .34, indicating that each increment in the variety of IEC materials available increased clinical prevalence by one-third of a percentage point. Possession of multiple copies of all seven types of materials would therefore be associated with a prevalence level about 2.5 points higher than possession of no multiple copies at all.

Although this variable appears to be a measure of IEC inputs, it may in fact represent something else. This conclusion is drawn from the fact that the large array of IEC variables that were tested include several that measured much more directly the stock and flow of such materials in individual BSPs. If IEC per se were making an important contribution, it is likely that such BSP-level variables, especially the ones measuring distribution, would be more highly related to prevalence than the relatively remote measure of FTOW's stock on hand. It seems likely therefore that this variable is an indicator more of the ability of project management to provide material support for the FTOW than of IEC inputs.

In most of the sample BSPs, the enumerated number of fertile MW15-49 exceeded the number of MW15-49 listed in the BSP records. The mean difference was 19. It seems reasonable to assume that failure to include a large number of the target population in the BSP records is indicative of a more general failure to make direct contact with them in order to motivate them to use contraception. On the basis of this assumption, it was hypothesized that undercounting eligible couples in BSP records would be associated with lower prevalence. To test this hypothesis, a variable indicating the completeness of BSP records, in terms of the number of couples listed, was created by subtracting the number of fertile MW15-49 according to the COS enumeration from the number listed in the BSP records. This variable proved to be the eleventh determinant of variations in clinical prevalence, with a regression coefficient of .021, indicating that prevalence tended to be about one point lower for every 50 couples missed in the BSP records.

The last Outreach variable to enter the equation under the specified conditions was whether the FTOW was currently using a clinical method. Such use was associated with an average increase in clinical prevalence of 1.7 points.

Of the 21 independent variables in Table 61, all except one had regression coefficients with the expected sign. (The only exception was the seventh Outreach variable, BSPO's experience with non-clinical methods, which was inversely correlated with clinical prevalence. While this finding was not surprising, especially controlling for other variables regarding BSPO's experience with clinical methods, it had not been anticipated in advance.) Accordingly, it is appropriate to apply the one-tail test of significance for these variables. With the number of observations (344, after exclusions for missing information), a t value of 1.645 or higher is sufficient for significance at the .05 level and a value of 2.33 or higher for significance at the .01 level. (The significance of the regression coefficient of BSPO's experience with non-clinical methods was tested by the two-tail test.)

Of the 21 regression coefficients in Table 61, 15 were significant at or beyond the .05 level; and of these 15, five were significant at the .01 level. Of the 12 coefficients for Outreach variables, nine were significant at or beyond the .05 level, four of them at the .01 level. As noted above, all independent variables were constrained to enter the equation at the .10 level, but the t statistics for most of them declined as other variables were added. In two cases (the third and fourth SES variable) the value of t declined below the .10 level (1.28) in the final form of the equation, but not by very much. All other regression coefficients shown in Table 61 are significant at or beyond the .10 level.

To test the effect of controlling first for SES variables and non-Outreach program variables, a separate regression was run in which the list of independent variables was limited to the 12 Outreach variables that appear in Table 61. In that run, the Outreach variables accounted for 19.9 percent of the variance after adjusting for degrees of freedom. As noted above, the residual variance explained by the same variables after controlling for SES and other program variables was 17.2 percent. From the similarity of these two results, it may be inferred that the Outreach variables are not highly correlated with the other two types. This is an important observation, since the two types of control variables may not have captured all the variation in SES or non-Outreach inputs, especially, as noted above, the latter. The similarity of the simple and partial effects of the Outreach variables suggests that even if the other two types of variables had been more comprehensive and accurate and therefore contributed more to R^2, the Outreach variables would probably have accounted for nearly as much residual variance as indicated by the figures in Table 61.

Multivariate Analysis: Overall Prevalence

Multivariate analysis of the determinants of overall prevalence produced relatively disappointing results. Using the same hierarchical model and exclusion criteria as in the analysis of clinical prevalence, the analysis of overall prevalence produced the results shown in Table 62. Although nearly as many variables were found to be correlated with overall prevalence at the .10 level or better (17 vs. 21), they explained only 38.5 percent of the variance (vs. 42.6 percent), despite the relative lack of skewness of the measure of overall prevalence. This difference was probably due, as noted above, to the relatively low reliability of the responses regarding use of non-clinical contraceptive methods.

Of the six SES measures, four were found to be independently correlated with overall prevalence, all of them significantly. Of the five that had been found to be independently correlated with clinical prevalence only one -- urban-rural classification of the barangay -- was not found to be independently correlated with overall prevalence. However, two of the variables that were correlated -- percent farm households and distance from BSP to farthest MCRA -- were representative of the same dimension of SES. The four SES variables explained 26.9 percent of the variance in overall prevalence -- exactly the same as the proportion of variance in clinical prevalence explained by the five SES measures in Table 61.

TABLE 62

PERCENTAGES OF VARIANCE IN OVERALL PREVALENCE EXPLAINED BY SELECTED VARIABLES AND CORRESPONDING MULTIPLE REGRESSION COEFFICIENT (N = 344)

Independent Variable	Adjusted R^2 (%)a/ Cumulative	Change	Unstandardized Regression Coefficient	t
4 community SES variables	26.9	26.9		
1. Household SES index		21.2	.111	2.21*
2. Percent farm households		4.1	-.073	2.72**
3. Distance from BSP to farthest MCRA		1.1	-.056	2.17*
4. Percent of household heads with high education		.5	.084	2.18*
2 non-Outreach program variables	29.0	2.1		
1. Number of clinics, hospitals and BHSs serving FTOW territory		1.3	.44	2.49**
2. Distance to nearest BHS		.9	1.47	1.20
11 Outreach variables	38.5	9.5		
1. Variety of BSPO training topics		2.1	.26	1.40
2. BSPO's current use of a clinical method		1.4	2.98	2.24*
3. FTOW's stock of printed IEC materials		1.3	.69	2.41**
4. FTOW time allocation index		1.0	1.30	2.50**
5. Incentive for BSPO		.8	2.48	1.61
6. Completeness of BSP records		.8	.035	2.28*
7. BSPO's referrals to clinic (reported by FTOW)		.5	2.80	2.15*
8. Recent completion of baseline survey		.3	3.15	2.31*
9. Date BSP first established		.8	-.127	2.33**
10. Membership in BSPO association		.3	2.61	1.53
11. BSPO's awareness of relative effectiveness of IUD and condoms		.2	1.74	1.51

Significance levels: *p < .05; **p < .01 (one-tail test)

a/Adjusted for degrees of freedom

Of the ten non-Outreach program variables, only two were found to be independently correlated with overall prevalence. One was the number of medical service points (clinics, hospitals, and BHSs) serving the FTOW territory, which was also a significant correlate of clinical prevalence.

The other was the distance from the BSP to the nearest BHS, measured in terms of the estimated travel time for a "typical" resident of the BSP area. This variable entered the equation at the .05 level, but after inclusion of all the other variables in the final equation, its regression coefficient failed to achieve significance at even the .10 level.

Three non-Outreach program variables that were independently associated with clinical prevalence but not with overall prevalence were the frequency of the BHS midwife's visits to the BSP area, the travel time for ligation, and the number of other agencies promoting family planning in the BSP area. The first of these was probably excluded because the influence of the BHS was already represented by the distance to the nearest BHS. The exclusion of the distance to nearest source of female sterilization is to be expected, since sterilization centers do not usually offer non-clinical methods. The exclusion of the presence of other agencies' field workers promoting family planning may indicate that such field workers tend to refer clients to clinics rather than offer family planning instruction per se.

The two non-Outreach program variables contributed only an additional 2.1 percent to the variance in overall prevalence.

Eleven Outreach variables entered the equation at or beyond the .10 level, adding another 9.5 percent to the variance in overall prevalence -- 2.4 percentage points less than the corresponding proportion of variance in clinical prevalence explained by 12 Outreach variables. Seven of the Outreach variables shown in Table 62 are also found in Table 61 (numbers 2-4 and 6-9 in Table 62). These seven are also the only variables in Table 62 whose regression coefficients are significant at the .05 level in the complete equation. However, the remaining four variables are significant at the .10 level, and the first two -- variety of BSPO training topics and incentive for BSPO -- entered the equation with significance levels of .001 and .05, respectively. It is therefore worthwhile to look at them for further insights concerning the determinants of overall prevalence.

The first (Outreach variable number 1 in Table 62) is a composite index constructed by counting the number of positive responses of BSPOs to a series of questions asking whether they had received training in ten specified subject areas. It thus reflects the comprehensiveness of BSPOs' training without differentiating between formal and informal training or assessing the quality of training. This variable entered the equation first among the Outreach variables, adding two percentage points to R^2, but it was apparently correlated with other Outreach variables that entered the equation subsequently, as indicated by the relatively low significance of its regression coefficient in the final form of the equation.

The second new variable (number 5 in Table 62) is a dichotomy, which distinguishes the BSPOs who, according to the FTOW, had received incentives (almost entirely non-monetary and usually of nominal value) from those who had not. In the final form of the regression equation, this dichotomy accounted for a difference in prevalence of 2.5 percentage

points. Despite the fact that the regression coefficient was so high, it fell short of significance by a small margin (it was significant at the .06 level), probably because of small numbers of cases; only one-sixth of all BSPs had received incentives.

The third new variable (number 10 in Table 62) is whether the BSPO was a member of a BSPO association. Again the significance of this variable may be understated, since less than one-seventh of all BSPOs were members of such associations. The regression coefficient for this dichotomous variable was 2.61, indicating that membership of the BSPO in such associations is associated with a 2.6 percent increase in overall prevalence.

The fourth new variable (number 11 in Table 62) is another dichotomy based on the BSPO's response to a question about the relative effectiveness of the IUD and the condom. It is disturbing to note that only 40 percent of the BSPOs were aware that the IUD is the more effective method, despite the fact that the IUD is the most effective of all reversible methods available in the Philippines and the condom is one of the least effective. Knowledge of this difference was associated with a 1.7 percentage point difference in overall prevalence. It is interesting that this variable, which seems to reflect awareness of the relative advantages of clinical and non-clinical methods, did not stand out as a determinant of clinical prevalence. This apparent anomaly suggests that the importance of this variable may lie in its representing the more general dimension of BSPO training rather than in its specific reference to the relative effectiveness of two methods.

Of the 12 Outreach variables listed in Table 61, five are excluded from Table 62, indicating that they are more important as determinants of clinical methods than as determinants of contraceptive practice in general. Three of them refer to the experience of the FTOW and BSPO with contraception: the numbers of clinical and non-clinical methods ever tried by the BSPO and whether the FTOW was using a clinical method at the time of the survey. It is not surprising that these variables would not be key determinants of overall prevalence, since one similar method retained in Table 62 (BSPO's current use of a clinical method) and since they seem more likely to influence types of contraception used rather than distinguish between use and non-use. Another variable omitted in Table 62 is the BSPO's referral of couples to a clinic as reported by the BSPO. Again this variable appears less likely to influence overall prevalence than to influence clinical prevalence; and, again, a similar variable (the FTOW's report of BSPO's referrals to the clinic) is retained. The fifth variable omitted from Table 62 is whether the BSPO had received formal training. It is likely that this variable is omitted because the training dimension is already represented by two of the four variables that are found in Table 62 but not in Table 61: the variety of topics in which the BSPO had already been trained and the BSPO's knowledge of the relative effectiveness of the IUD and the condom.

On balance, it appears that the two sets of Outreach variables in Tables 61 and 62 represent much the same underlying dimensions, the main differences between them being that clinical prevalence tends to be determined more by the experience of BSPOs and FTOWs with clinical methods

and that overall prevalence may be influenced more by greater professional support for the BSPO, as reflected in the effects of incentives and membership in BSPO associations.

In the absence of controls for SES and non-Outreach program variables, the 11 Outreach variables in Table 62 explained 15.7 percent of the variance in overall prevalence. With such controls, they explained 13.4 percent of the residual variance. Thus, as with the Outreach variables associated with clinical prevalence, much of their effect was independent of the effect of the other types of variables.

Potential Effects of Outreach Project Improvements

Of the 12 Outreach variables found to play a measurable role in explaining variations in clinical prevalence, eight could probably be affected by program management. These eight variables are shown in Table 63. Such variables are sometimes referred to as "mutable," since they are subject to some degree of program control. Specific program efforts could probably be launched to improve the time allocation of the FTOWs, to increase referral activities of BSPOs, to ensure more complete and frequent enumeration of the BSP area, to increase the proportion of BSPOs receiving formal training, to ensure the selection of BSPOs who have tried

TABLE 63

POTENTIAL EFFECTS OF MAXIMAL IMPROVEMENTS IN "MUTABLE" OUTREACH PROJECT DETERMINANTS OF CLINICAL PREVALENCE

Determinant	Observed Mean	Potential Increase	Regression Coefficient	Effect of Increase
FTOW's time allocation index	2.29	2.15[a]	1.261	2.7
BSPO's referrals to clinic (reported by BSPO)	.235	.765[b]	2.791	2.1
Recent completion of baseline survey	.249	.751[b]	3.225	2.4
Formal training	.474	.526[b]	1.356	.7
BSPO's experience with clinical methods	.794	.206[b]	1.555	.3
BSPO's referrals to clinic (reported by FTOW)	.270	.730[b]	1.844	1.3
FTOW's stock of printed IEC materials	1.63	3.92[a]	.343	1.3
Completeness of BSP records	-19.1	19.1[a]	.0212	.4
Total potential effect				11.2

a/Twice the standard deviation
b/Maximum minus mean, since adding two standard deviations would exceed the maximum

clinical methods, and to provide better IEC support to FTOWs. The remaining four variables are relatively immutable. It would be difficult to insist on continued use of contraception by BSPOs or FTOWs and unrealistic to try to limit the selection of BSPOs to those who have not tried less effective methods. Date of establishment of the BSP, likewise, could not be manipulated in any useful way.

The multiple regression equation reflected in Table 61 provides an opportunity to estimate the clinical prevalence rate under varying degrees of improvement in the Outreach program, controlling for community SES and other program variables. If the observed mean values of the various independent variables are substituted in the equation with the understandardized partial regression coefficients shown in Table 61 and the corresponding intercept (10.18), the result of 12.4 -- the mean of the BSP clinical prevalence rates actually obtained from the COS enumeration data. If the means of the mutable Outreach variables are allowed to rise to reflect maximal improvements, the same exercise will generate a rough estimate of the mean clinical prevalence rate that could be expected to result from these improvements if other factors remained constant. The difference between the observed and improved clinical prevalence rates can be calculated more simply by multiplying the difference between the improved and observed means on each of the mutable variables by the regression coefficients and summing the products. Table 63 illustrates this procedure.

Before discussing the findings in Table 63, it must be stressed that this type of analysis is highly speculative. While the regression equation can be used with some justification for predicting the clinical prevalence level in individual BSPs on the basis of variations in the independent variables, it does not necessarily follow that the same effect would be obtained if BSPs as a whole changed as indicated. However, it does give some idea of the approximate magnitude of the maximal change that might be expected. It is probably very unrealistic to assume that the program could achieve maximal improvements in all the independent variables. If the program were to accomplish a given proportion of the indicated changes, the projected effect of those changes would be correspondingly lower.

In Table 63, the amount of potential increase in the independent variables is calculated in one of two ways. It is assumed that in the case of normally distributed variables the maximum level of performance is close to the observed mean plus twice the standard deviation -- that is, close to the upper end of the distribution of that variable. In some cases, increasing the mean by twice the standard deviation would yield a result greater than the actual maximum possible. The procedure employed in Table 63 is to use twice the standard deviation if the result does not exceed the absolute maximum and to use the difference between the absolute maximum and the observed mean in the remaining cases.

According to the calculations shown in Table 63, maximal improvement in the eight Outreach determinants would be likely to increase the mean clinical prevalence rate by amounts ranging from .4 to 2.7 percentage points. Maximal increases on all eight variables might raise the mean clinical prevalence rate by 11.2 points -- that is, from 12.4 percent to 23.6 percent.

It should be noted that the changes to be introduced need not be as specific as the variables themselves might seem to suggest. For instance, as observed above, the significance of the FTOW's stock of IEC materials may not relate so much to the number or variety of IEC materials the FTOW has for distribution as to the quality of management associated with the production and distribution of such materials to the FTOWs. If this interpretation is correct, it may be more important to improve the quality of supervisory and logistical support for the FTOWs than merely to provide them with increased quantities and variety of printed IEC materials. Efforts to change the latter without changing the former may not have as much effect as efforts to change the former.

Table 64 attempts to estimate maximum potential effects of improvements in the Outreach Project on overall prevalence. Of the 11 Outreach determinants of overall prevalence shown in Table 62, nine are viewed as mutable and are estimated to be capable of increasing overall prevalence by amounts ranging from .7 to 2.8 percentage points. The maximal effect of changes in all nine variables is estimated to increase mean overall prevalence by 16.1 points -- from the observed mean of 32.5 percent of 48.6 percent.

As with the results of Table 63, it is necessary to use great caution in generalizing from the specific results of Table 64 to recommendations for program management. The program may not be able to achieve changes of the magnitude specified. The estimated effects must be viewed as only rough approximation of the upper limit of potential effects.

TABLE 64

POTENTIAL EFFECTS OF MAXIMAL IMPROVEMENTS IN "MUTABLE" OUTREACH PROJECT DETERMINANTS OF OVERALL PREVALENCE

Determinant	Observed Mean	Potential Increase	Regression Coefficient	Effect of Increase
Variety of BSPO training topics	6.78	3.22[b]	.259	.8
FTOW's stock of IEC materials	1.63	3.92[a]	.691	2.7
FTOW's time allocation index	2.29	2.15[a]	1.303	2.8
Incentive for BSPO	.178	.76[a]	2.478	1.9
Completeness of BSPO records	-19.1	19.1 [b]	.035	.7
BSPO's referrals to clinic (reported by FTOW)	.270	.730[b]	2.799	2.0
Recent completion of BSP survey	.249	.751[b]	3.151	2.4
Membership in BSPO association	.136	.687[a]	2.612	1.3
BSPO's awareness of relative effectiveness of IUD and condoms	.402	.598	1.742	1.0
Total potential effect				16.1

a/Twice the standard deviation
b/Maximum minus mean, since adding two standard deviations would exceed maximum

Conclusions

Multivariate analysis has been employed in an attempt to demonstrate a causal relationship between a variety of variables reflecting Outreach Project operations on two measures of contraceptive prevalence. The multivariate model has served two important functions: (1) it has controlled for two types of variables that might be expected to covary with both Outreach variables and prevalence and therefore lead to a false conclusion that they are causally related; and (2) it has permitted simultaneous inclusion of a large number of Outreach variables to assess the relationship with prevalence of each one controlling for all other independent variables and of all taken together. The analysis has revealed that several Outreach variables are significantly and independently correlated with prevalence and that all together "explain" a substantial proportion of the variance in prevalence. The analysis, therefore, strongly suggests the existence of a causal relationship.

As noted earlier, the regression results alone say nothing about the direction of causality. However, it is difficult to see how most of the Outreach variables in Tables 61 and 62 could have been determined by prevalence levels. Of all the Outreach variables listed in Tables 61 and 62, only the variables relating to the BSPO's current and past experience with contraceptive methods and possibly her perception of the relative effectiveness of the IUD and condoms seem likely to be even partly determined by the level of prevalence. Even with these variables, it appears most likely that the causality is bidirectional. As a result, it seems reasonable to conclude that the analysis presented here has demonstrated that the Outreach Project has affected contraceptive prevalence.

Moreover, the analysis has indicated that certain aspects of the Outreach Project have had a greater influence on prevalence than others. The most important single dimension that seems to underlie Outreach determinants of clinical prevalence is the example set by the FTOW or the BSPO in using clinical methods, although it is not clear to what extent the measures of BSPO's use of such methods are determinants of and to what extent determined by clinical prevalence in the BSP area. A second important dimension appears to be the emphasis on personal contact in motivational activities, as represented by the inclusion in both Tables 61 and 62 of the FTOW's time allocation index and the completeness and recency of the survey of the BSP area. A third important dimension is the referral of clients to clinics, as represented by both the FTOW's and the BSPO's responses concerning the BSPO's referral activities. A fourth dimension, although apparently of only limited influence, is the BSPO's training, as reflected in the question of whether the BSPO was formally trained and in the date of establishment of the BSP. Finally, a fifth dimension reflected in Table 61, though non-significantly when controlling for all others, is the FTOW's stock of IEC materials, which, as noted above, may actually be a proxy for a more general concept of high-level managerial support for the FTOW.

These same dimensions are all represented among the determinants of overall prevalence as well. The only differences are in degree of priority. For instance, the effect of the FTOW's stock of IEC materials on

overall prevalence is statistically significant, whereas its effect on clinical prevalence is not. Not surprisingly, the FTOW's and BSPO's experience with clinical methods and referrals to clinics takes on less importance in relation to overall prevalence than in relation to clinical prevalence. However, emphasis on personal contact still appears to be as important in relation to overall prevalence as in relation to clinical prevalence. BSPO training is a relatively weak determinant of overall prevalence, but if training is combined with the provision of incentives for the BSPOs and membership in a BSPO association under a more general heading of professional support for the BSPO, the combined effect of these variables appears to be of somewhat more importance for overall prevalence than for clinical prevalence.

In addition to noting the types of Outreach variables that influenced the level of prevalence, it is worthwhile to consider the types of Outreach variables that did not seem to have any appreciable independent effect. The most important of these are the mass media inputs (with the dubious exception of the FTOW's stock of printed materials), the background characteristics of the FTOWs and BSPOs (including attitudes about family planning but excluding past and present use of contraceptive methods), and measures relating to job satisfaction. Measures of service delivery also failed to emerge as determinants of prevalence, but this was due primarily to a fundamental shortcoming of the COS design: since the unit of analysis was the BSP, which by definition offered contraceptive supplies, there was no variation in this fundamental aspect of service delivery and therefore no way of assessing its effects on contraceptive prevalence. Actual numbers of pills and condoms distributed were measured and were correlated with prevalence. However, they were not included in the multivariate analysis since they are not inputs at the same level as the other Outreach variables but rather outputs determined in part by the other Outreach variables. The interpretation of the findings would have been greatly complicated if these variables had been included.

The reasons for the failure of mass media inputs, background characteristics, and job satisfaction to explain variations in prevalence are not so clear. In the case of mass media inputs, the problem may lie in a general lack of relevance of such materials for affecting actual contraceptive behavior; on the other hand, it may be that such materials can affect behavior if designed in certain ways but that the particular materials used in the Outreach program were not effectively designed for this purpose. In the case of background characteristics, the absence of independent effects may indicate that such variables are relatively unimportant and, therefore, that there is no need for great care in selecting FTOWs and BSPOs. An alternative explanation is that FTOWs and BSPOs have already been so well screened and trained that they do not vary enough on the important variables (e.g., education, attitudes toward family planning, willingness to do motivational work) to yield significant relationships with prevalence. However, some of the measures, such as age, sex, marital status, and number of children, where there is a good deal of variation, clearly did not have any direct effect on prevalence. The failure of indicators of job satisfaction to affect prevalence probably lies in part with the difficulty of getting reliable measures of such concepts as satisfaction. In addition, the FTOWs and BSPOs

may be relatively homogeneous with regard to satisfaction, in which case the failure of such measures to affect prevalence may be misleading.

In short, the failure of particular types of variables to emerge as determinants of prevalence in the present analysis does not necessarily mean that they have no effect but simply that no effect has been demonstrated given the data presently available. What the findings presented here to indicate that is important for program managers, donors, and policymakers is that the Outreach Project has had a pronounced effect on prevalence and that such effects can probably be intensified by specific and manageable program interventions.

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