IUD ANNUAL EVALUATION 1990

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ACPR Publication # 32
January 16, 1992

ACKNOWLEDGMENTS

The 1990 IUD Annual Evaluation is the third in a series of three evaluations. These evaluations are jointly sponsored by the Government of Bangladesh (GOB) and the United States Agency for International Development (USAID). We are grateful to the GOB and the USAID for selecting us to conduct the study.

We owe an enormous debt to Dr. John Cleland of the University of London for his invaluable guidance in analysing the data and in writing the report.

We are grateful to Ms. Sheryl Keller for her guidance and support in conducting the study and to Ms. Linda Andrews of USAID for an excellent review of the draft report. Mr. Sk. Ali Noor deserves special thanks for maintaining an excellent liaison between USAID and ACPR. We are highly thankful to Ms. Elma Chowdhury for an appropriate monitoring of the field work, her frequent visits to the field and feedback to us helped improve the quality of the field work.

We appreciate very much the help and assistance received from the Ministry of Health and Family Welfare (MOHFW) and the Directorate of Family Planning in conducting the evaluation. We are very grateful to the field-level officials of the MOHFW without whose support it would not have been possible for the field teams to function smoothly in locating clients and collecting data from the IUD acceptors and service providers.

The thousands of IUD acceptors, though anonymous here, deserve our special appreciation: without their cooperation, the evaluation would not have been possible.

We gratefully acknowledge the sincere and hard work of the field staff in carrying out the hardest possible task of locating and interviewing IUD clients.

We are deeply indebted to our core staff for their commendable performance at every stage of the evaluation.

G. M. Kamal
Executive Director

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GLOSSARY

ACPR	Associates for Community and Population Research
BBS	Bangladesh Bureau of Statistics
BDG	Bangladesh Government
BIRPERHT	Bangladesh Institute of Research for Promotion of Essential & Reproductive Health and Technologies
BFRP	Bangladesh Fertility Research Programme
BFS	Bangladesh Fertility Survey
CPS	Contraceptive Prevalence Survey
CT	Copper-T
DD	Deputy Director
DG	Director General
DFP	Directorate of Family Planning
FDA	Food and Drug Administration
FGD	Focus Group Discussion
FHI	Family Health International
FP	Family Planning
FWA	Family Welfare Assistant
FWC	Family Welfare Center
FWV	Family Welfare Visitor
FWVTI	Family Welfare Visitor Training Institute
GOB	Government of Bangladesh
HLD	High Level Disinfectant
ICDDR,B	International Center for Diarrhoeal Disease Research, Bangladesh
IEM	Information Education and Motivation
IPPF	International Planned Parenthood Federation
IUD	Intra-Uterine Device
LFPV	Lady Family Planning Visitor
LHV	Lady Health Visitor
MCH	Maternal and Child Health

MCHTI	Maternal and Child Health Training Institute
MCWC	Maternal and Child Welfare Center
MFSTC	Mohammadpur Fertility Services and Training Center
MIS	Management Information System
MLCu	Multiload (Copper IUD)
MOHFW	Ministry of Health and Family Welfare
MR	Menstrual Regulation
MRTSP	Menstrual Regulation Training and Services Program
MWRA	Married Women of Reproductive Age
NGO	Non-Government Organization
NIPORT	National Institute of Population Research and Training
OB/GYN	Obstetrics and Gynecology
PPS	Probability Proportionate to Size
PID	Pelvic Inflammatory Disease
PV	Per Vaginal
QC	Quality Control
QCO	Quality Control Officer
RFP	Request for Proposal
TBA	Traditional Birth Attendant
TCRI	Training-cum-Research Institute
UFPO	Upazila Family Planning Officer
UHC	Upazila Health Complex
UHFWC	Upazila Health and Family Welfare Center
UP	Union Parisad
USAID	United States Agency for International Development
UZ	Upazila
WHO	World Health Organization

EXECUTIVE SUMMARY

Intrauterine device (IUD) is the most widely used reversible contraceptive worldwide. Currently, an estimated 85 million women use an IUD. The contraceptive reliability of IUD is surpassed only by sterilization, injectables, and implants.

Purpose

The findings presented in this report is the last of a series of three IUD Annual Evaluations. The first evaluation was conducted for the calendar year 1988, the second for 1989, and this one for 1990. The major objectives of the evaluation were to estimate the number of IUD insertions actually performed; to estimate the average amount of money actually paid to IUD clients and service providers; to collect information on counselling and follow-up services; and to estimate the retention rate for the IUD.

Methodology

Sampling considerations were based on three strata--the urban Government of Bangladesh (BDG) stratum, the rural BDG stratum, and the Non-government Organization (NGO) stratum. A stratified two-stage nationally representative probability sample was drawn. At the first stage, a total of 74 upazilas were selected--17 from BDG urban, 43 from BDG rural, and 14 from the NGO stratum. Lists of all clients recorded as having IUD insertions in 1990 in the selected upazilas were prepared. At the second stage, a sample of clients was drawn from these lists following a systematic sampling procedure. In order to have a self-weighted sample, the selection probability at the second stage was inversely proportional to that of the first stage. Data were collected from IUD clients, service providers, and clinic records. A total of 4,684 reported IUD clients were selected, out of which 3,995 were located and 3,981 were successfully interviewed. Attempts were was made to interview all the 810 service providers who worked in the selected clinics during 1990; of these a total of 573 were successfully interviewed.

In addition to these quantitative sources, data were also collected applying qualitative methods. Clinical services were observed in 54 clinics, indepth interviews were conducted with 42 IUD acceptors, and focus group discussions with FWVs and FWAs were separately conducted is 10 upazilas.

Verification of performance figures

Performance verification was based on examining the consistency of clinic records with upazila IUD figures in MIS reports, as well as verification of reported IUD clients.

The IUD performance figure was higher in the MIS reports by 6.3 percent in 1990 compared to only 1.0 percent in 1989. In 1990, the MIS reported performance figure was 20 percent higher than the estimates based on clinic records for the BDG urban stratum, but 15 percent lower for the NGO stratum.

Verification of reported IUD clients

Clinic records were verified by tracing and interviewing all selected women recorded as IUD clients in 1990. Clients hailing from outside selected upazilas or who had migrated were followed up at their current address. Fifteen percent of the sample clients could not be located primarily because their address either did not exist or no such person ever lived there. Migration to unknown address and incomplete address were the other reasons for non-location of clients. Among those who were located, only 0.3 percent could not be interviewed because they were not available. About four-fifths (78.5 percent) of the selected clients or 92 percent of the located clients had the reference IUD, 3.3 percent had a non-reference IUD, and the remaining 4.2 percent had never had one.

The genuine IUD performance (when considered as percentage of acceptors as per clinic records) was 61.1 percent in 1988 and 74.2 percent in 1989, but much higher at 86.2 percent in 1990. However, this large improvement in the proportion of genuine cases between 1989 and 1990 is reduced when the discrepancy between clinic records and MIS reports is taken into account. When based on MIS reports rather than clinic records, the proportion of verifiable cases declined slightly in 1989 from 74.2 percent to 73.5 percent, while it dropped substantially in 1990 from 86.2 percent to 80.8 percent. Thus, the estimated verifiable IUD performance in 1990 is 282, 091 or 19.2 percent lower than the MIS reported performance of 349,255.

The difference in the verifiable performance between 1989 and 1990 without adjustment of the variations in reporting was 12 percentage points; after adjustment for variations in reporting, the difference was 7.3 percentage points. The actual number of genuine IUD insertions increased from 1988 by 2.6 percent in 1989 and by 19.7 percent in 1990; between 1989 and 1990 the increases was of 16.7 percent.

Estimation of genuine IUD cases

Following a reasonable procedure for estimation, 83.6 percent of the reported IUD cases were estimated as genuine. At the 95% level of confidence, the upper limit of this estimation is 86.2 percent and the lower limit 81.0 percent of the performance recorded in the clinic records. The comparable figures for the 1988 evaluation were 61.1 percent and 56.9 percent respectively, and for the 1989 evaluation were 72.4 percent and 65.8 percent respectively.

Falsification of IUD returns though reduced between the evaluation years, still remains, particularly in Dhaka city. As was observed in 1988 and also in 1989, the non-bonafide NGOs (NGOs having only clinics and are not funded by bonafide funding agencies) in Dhaka city still accounts for the large proportion of false cases. However, 16 out of 42 of these non-bonafide NGOs in Dhaka city appeared to have seized functioning during 1990.

It is very important to note that the number of upazilas having less than 60 percent genuine cases was 39 in 1988, but dramatically reduced to 16 in 1989 and to only 7 in 1990. This finding clearly indicates that the proportion of false cases was largely due to the performances of a few upazilas. **Recommendation: Further rigorous checking on non-bonafide NGOs and Dhaka division should be done.**

Payment of Clients' transportation cost

The USAID supports the BDG in strengthening the IUD program in order to increase access to the IUD by reimbursing clients for their transport cost @ Tk. 15.00 and providers as insertion fee @ Tk. 5.00. Referrers also used to get Tk. 15.00 as referral fee which was withdrawn since November, 1988.

Nearly two-thirds of the acceptors were reimbursed for their transportation costs. At the 95 percent level of confidence, the upper limit of this estimate was 66.9 percent and the lower limit 59.1 percent. The comparable figures for the 1988 evaluation were 68.0 percent and 62.6 percent respectively, and for 1989 it was 59.3 percent and 50.5 percent respectively. Timely flow of reimbursement is still defective. Focus group discussions with FWVs and FWAs revealed most clients who came to the FWC or UHC for an IUD are unwilling to receive an IUD, if they are not reimbursed for their transportation costs. **Recommendation: Better financial controls and reporting by upazila offices should be ensured and the proposed discontinuation of the IUD payments should be reviewed.**

Service providers' fee

Ninety three percent of the service providers reported that they receive fee @ Tk. 5.00 for each IUD insertion. Of those who stated that they receive an insertion fee, 72 percent had received full payment for the insertions performed in 1990. The comparable figure for the 1988 and 1989 evaluations were 62 percent and 69 percent respectively.

Profile of IUD acceptors

Similar to the findings of 1988 and 1989 evaluation, the results of 1990 evaluation showed that IUD acceptors are generally younger in age, more educated, and have lower parity, compared to the current users of family planning (1989 BFS and 1989 CPS). A comparison of characteristics of acceptors of IUDs, NORPLANT, and tubectomy showed that IUD acceptors are drawn from more educated, younger, and lower parity women, while NORPLANT acceptors from a relatively less educated, middle age group, and of average parity women. Tubectomy acceptors in Bangladesh are drawn mostly from illiterate, older, and high parity women. Thus, it appears that these three methods taken together can cater the needs of the majority of Bangladeshi couples.

Knowledge of any contraceptive method, apart from the IUD, and its source of supply/service is universal among IUD acceptors. Nearly three-fourths (71 percent) of the IUD acceptors had previously used contraceptives --mostly oral pill, condom, and injectables. The results of the CPSs show that knowledge of the IUD is relatively lower among married women of reproductive age compared to knowledge of the oral pill and tubectomy. Proportion of married women using IUDs is as high as 13 percent in Indonesia, 11 percent in Mexico, and 8 percent in Egypt. The current use rate of IUD is less than 2 percent in Bangladesh. It may be likely that if the method is properly promoted, much higher proportion of Bangladeshi women would use an IUD. **Recommendation: A special IEC promotional campaign may be organised to take appropriate measures to promote the IUD as is done by SMC for pills and condoms and by AVSC for sterilization.**

Profile of service providers

About 93 percent of the service providers are FWVs and 4 percent are different types of paramedics. On an average, providers are 33 years of age, have been serving in family planning for about 10 years, and have been posted in their current clinic for a little over 3 years. A significant minority of providers (10 percent) did no insertion during their basic training. Two-thirds of the providers received a refresher training, most of

it during the recent years, however, it was not asked whether IUD insertions were practiced during the refresher training. Most of the providers have appropriate knowledge of contraindications and side-effects. Very few of the providers are aware that TCu 380A can be used for 6 years. **Recommendation: Training procedures should be reinforced to ensure at least 10 practice insertions per trainee during training. Practice insertions should be done during refresher training. A directive should be issued to all FWVs and FWAs informing them about the modified effective duration of the TCu 380A.**

Decision making process

As found in 1988 and 1989, FP workers (field workers e.g. FWAs), husbands, and other IUD users were the most frequently mentioned persons with whom the acceptors discussed acceptance of the IUD prior to insertion. The 1990 evaluation obtained invaluable data regarding the information exchange prior to insertion. In most cases someone informs the prospective clients about the IUD. The informers are generally past users of IUD among relations in the neighborhood or an FP worker. A wide range of contents are discussed with the informer. These findings are important in guiding the FWAs to motivate women to accept the IUD.

Many prospective clients lack detailed knowledge of IUDs and have unwanted fears about it. Correct information about privacy, sex of provider, and degree of pain or discomfort during insertion is particularly lacking. Prospective clients do not always fully trust information given by FWAs. Dissemination of information and encouragement from relatives and neighbors is very important in the adoption process. **Recommendation: FWAs should be encouraged to make good use of satisfied users to assist in motivation. Prospective clients should be asked whether they know any users of IUD. If not, FWAs may be able to suggest satisfied users with whom they can talk.**

Counselling

All but 1-6 percent of the acceptors were counselled on the length of effectiveness of the IUD and what the acceptor should do should she experience any problem or side-effect. Eighty four percent were counselled on the need for a follow-up visit, and the need to feel for the thread. However, information on side-effects was provided to no more than 72 percent. About 14 percent of the acceptors use no method after removal of IUD, despite the desire for no pregnancy. This indicates that appropriate counselling is needed during removal services. A minority of clients choose

the IUD because its use can be concealed from husband/ other relatives. **Recommendation: Counselling on contraceptive use during removal services should be emphasised and FWAs should be instructed to carefully identify the women who want to conceal the IUD use and to ensure confidentiality.**

Distance of providers' residence from clinic

Thirty percent of the providers live within the UHFWCs and another 26 percent live within less than a mile. A quarter live within a distance of 1-3 miles, while the remaining one-fifth attend the clinic from a distance of 4 miles or more. A significant minority of FWVs (13%) do not live in the UHFWC despite the availability of family accommodation. Due to the distance they must travel to the clinic these FWVs are irregular and unpunctual in their attendances and as such the performance is adversely affected. **Recommendation: Each individual case of FWVs not residing within UHFWC should be examined and disciplinary action where appropriate should be taken.**

Availability of equipment

Compared to findings of the 1988 and 1989 evaluations, the availability of essential equipment in the clinics have increased. However, 5 percent of the clinics do not have any sterilizer or stove to sterilize their instruments and 32 percent had neither an IUD insertion table nor a general table for use as an IUD insertion table. Even with these short-comings most of them have been performing IUD insertions. The supply of consumable items like Savlon/Dettol and cotton wool has gradually been improving. **Recommendation: Clinics having no IUD insertion table and sterilizer/stove should be supplied with these items on a top priority basis. A small amount of money may be given to each clinic as an adjustable advance to pay for petty expenses.**

Aseptic precautions

Though the situation has improved in the last three years, a significant minority of clinics (13%) still have no means to sterilize equipment effectively. Even when appropriate sterilizing equipment is available, a large number of service providers either use anti-septic solution (Savlon) only or place equipment in anti-septic solution (Savlon) after boiling. Six percent of the providers put the C-T into Dettol/Savlon solution prior to insertion which destroys the sterility and also may cause irritation and introduce infection into the uterus. An appreciable minority of (14%) providers unnecessarily remove the device from its sterile plastic

cover in order to insert the IUD into the inserter. Four percent of the providers push the C-T into the inserter after removing it from the package without using gloves. No more than 85 percent of the providers used hand gloves and one-third of the gloves were found dirty. **Recommendation: Detailed instructions should be issued to all FWVs about correct sterilization of equipment and handling of the C-T.**

Performance in satellite clinics

An increasing proportion of insertions are performed at home or in satellite clinics (13%) while this trend is welcomed in terms of client access/ convenience, it raises problems of maintaining sterile conditions. **Recommendation: Appropriateness of insertions of IUDs in satellite clinics should be reviewed by medical experts and necessary guideline should be issued.**

Follow-up

Eighteen percent of the acceptors neither returned to the clinic nor were visited by any FP worker following insertion of the IUD. Sixty-two percent of the acceptors were visited at home, 43 percent returned to the clinic, and nearly a quarter had returned to the clinic and were followed-up at home. The proportion of acceptors receiving a follow-up at their household has gradually been increasing from 53 percent in 1988 to 58 percent in 1989, and to 62 percent in 1990.

Six percent of the acceptors did not visit the same center from where the IUD was inserted. For those that did return to the same center, the level of satisfaction is higher with insertion services than with subsequent services. **Recommendation: A clear-cut official policy on follow-up procedures should be developed and side-effect management should be strengthened.**

Side-effects

Seventy-one percent of the acceptors reported having experienced problems or side-effects. A quarter of those having problems/side-effects had not had the problem resolved at the time of interview. A large number of clients have the IUD removal because of side-effects. Therefore, despite its effectiveness and low-cost, IUD-use remains low. Nearly half the clients complain of heavy menstrual bleeding and pain in the lower abdomen. A significant minority (6 percent) complain of foul smelling vaginal discharge. **Recommendation: A detailed medical study of reproduc-**

tive tract infections (RTIs) might be useful in order to provide better training to FWVs in diagnosis and treatment of RTIs.

Retention rate for the IUD

The cumulative retention rate at the end of the first year was 65 percent and at the end of 20 months, 57 percent. The retention rates for the IUD are almost identical for 1988, 1989, and 1990. The rate of retention was found to be higher at 82 percent at the end of one year in special project areas such as the ICDDR,B MCH-FP project in Matlab.

The retention rates are much higher for those who had never used any method than those who had used any other method prior to use of the IUD. There was only a limited variation in the retention rates by individual service-related factors. It might be worthwhile to identify interactions between the service-related indicators, because these indicators may not operate independently of each other. **Recommendation: In order to understand the influence of service-related factors on the retention rates a multivariate analysis may be undertaken with data from a prospective study.**

Access to removal

Similar to the findings of the 1989 evaluation, slightly over two-fifths of the acceptors did not remove the IUD from the same center from where it was inserted. The corresponding proportion for the 1989 evaluation was also similar (47 percent). Of those who did not have the device removed from the same center, one-third mentioned the reason that the center staff were away or communication was difficult or expensive, and another one-third perceived that the clinic staff would be unwilling to remove it. Fourteen percent mentioned that the IUDs can be removed by themselves. It is important to note that five percent of the acceptors mentioned that their request for removal was turned down by the clinic staff and another two percent mentioned that they did not go to the same center because of the poor treatment by the clinic staff. **Recommendation: FWVs should be instructed to remain sympathetic to those seeking removal of the IUDs so that hazards of possible removal by untrained persons or clients themselves are avoided.**

Chapter 1

INTRODUCTION

1.1. Introduction:

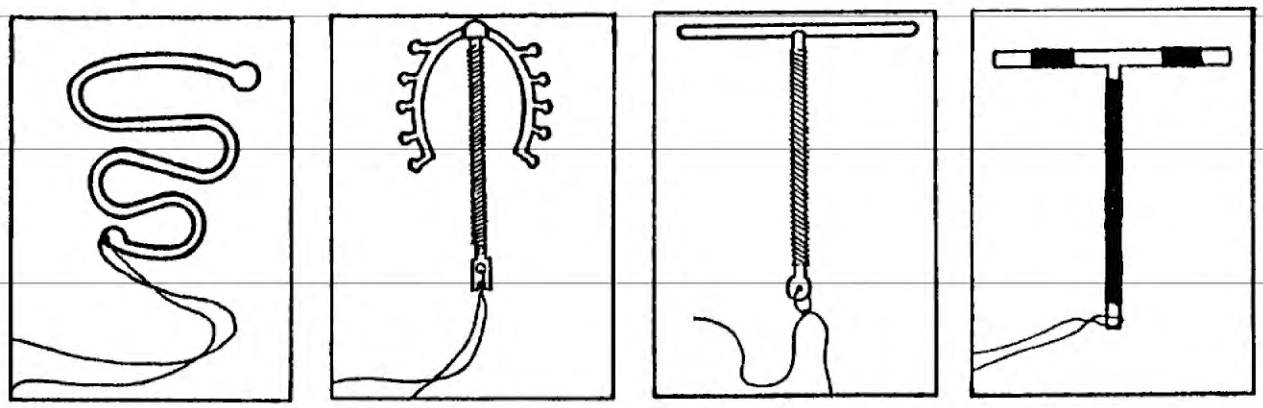
The contraceptive reliability of the intrauterine device (IUD) is surpassed only by sterilization, injectables, and implants. IUD is the most widely used reversible contraceptive worldwide. Currently, an estimated 85 million women use an IUD; 60 million are in China and 11 million are in developed nations, particularly in Europe. The remaining 14 million users are in the developing countries. However, the proportions of women of reproductive age using IUDs are usually modest, the main exceptions (apart from China) being Indonesia (13 percent), Mexico (11 percent), and Egypt (8 percent) (Network 12(2)/ September, 1991). In Bangladesh, only about 2 percent of the married women of reproductive age are currently using an IUD (CPS, 1991).

Starting from 1960s two generations of IUDs have been used. In 1960s, the dominant first generation IUDs had no copper or hormones and hence became known as "non-medicated" IUDs. Some of the best known devices introduced then were the Lippes Loop and two no longer in use, the Saf-T-Coil; and the Dalkon Shield.

In the 1970s and 1980s, the major innovations involved adding copper (Cu) and varying the "T" shape, leading to acronyms for IUDs such as "TCu". The most popular of these second generation IUDs are the TCu 200 (first marketed in 1972), the Multiload 250 or MLCu 250 (marketed in 1974), and the TCu 380A (marketed in 1982). Currently the following four IUDs (Figure 1.1) are the most widely used in the developing world, except in China where stainless steel rings and uterine cavity-shaped devices are more common (Figure 1.2).

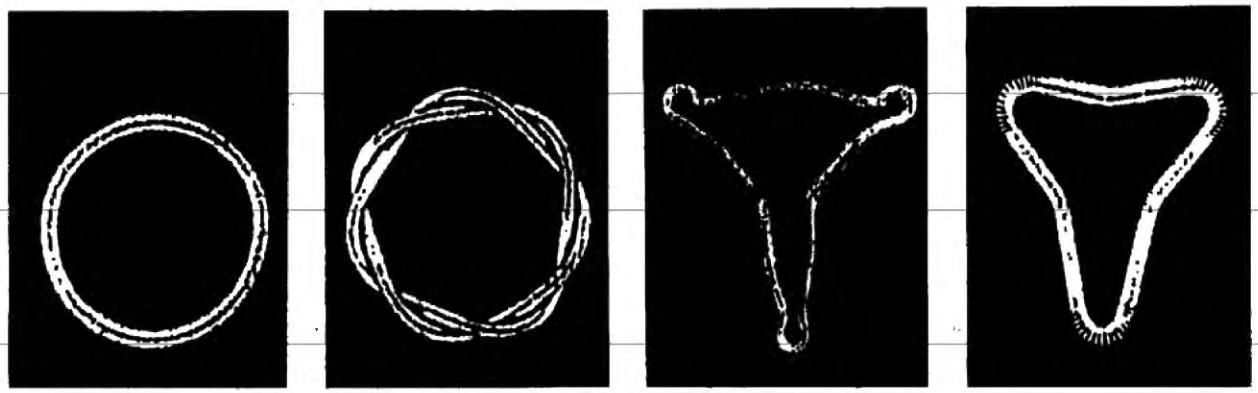
New generation IUDs are safer and more effective than ever before. The risks associated with IUDs are not of sufficient magnitude to overshadow the benefits. The findings that pelvic inflammatory disease (PID) is no more frequent among IUD users than among the general population, if proper subject selection and proper insertion and monitoring techniques are used, has further reduced concerns about safety of IUD use. However, IUD is not recommended for any woman with multiple sexual partners, or any woman whose husband has multiple partners, primarily because she is at risk of becoming infected with a sexually transmitted disease and would not be protected by an IUD. IUD is most suitable for women who want a reversible contraceptive to space births or limit family size; women who have had at least one child; and women who are breastfeeding. Thus, this method has a great potential to become as popular among women in Bangladesh as for instance in Indonesia, provided that proper subject selection, insertion, and monitoring techniques are used.

Figure 1.1: Intrauterine devices currently in use in developing countries.



Lippes Loop | MLCu 250 | TCu 200 | TCu 380A

Figure 1.2: Intrauterine devices currently in use in China.



Single Ring | Mahua Ring | Shanghai V-200 | Cavity Shaped Ring

Family Health International (FHI) conducted a clinical trial from 1985 to 1989 in 23 developing countries involving 10,000 women. The FHI study found that with the copper-bearing IUDs, removals due to bleeding and pain are low and continuation rates are high: 80 to 89 per 100 women were still using copper-bearing IUDs after 12 months compared to 71 to 79 per 100 women for first generation IUDs.

The high continuation rates and the recognized period of efficacy of up to eight years for the TCu 380A make IUDs highly cost effective compared to other reversible methods, despite the initial costs of insertion and follow-up visits. IUDs do not require user compliance, as do condoms and oral contraceptives. Based on the findings presented at Table 1.1, the FHI study concluded that among the current generation of IUDs, the TCu 380A is the best IUD to use in most circumstances, after taking account of the lifespan, accidental pregnancies, and continuation rates.

Table 1.1: A comparison of four IUDs.
(Per 100 women after one year of use)

	Effectiveness & Acceptability			Complications and Safety		
	Accidental Pregnancy Rate	Continu-ation Rate	Approved Lifespan	Removal due to Bleeding/ Pain	Expulsion Rate	PID Rate
TCu 380A	0.3	86.4	8 years	4.6	3.1	2.9
TCu 200	2.3	80.2	4 years	7.6	4.1	2.9
Lippes Loop	2.3	83.9	10 years	2.9	6.4	3.8
MLCu 250	1.2	88.6	3 years	2.8	3.8	1.7

Note: The rates are based on gross-cumulative lifetable rates from approximately 10,000 women in clinical trials which FHI conducted 23 countries from 1985 to 1989.

Source: Network 12(2)/September 1991.

In view of its advantages over other IUDs, the TCu 380A has been the only IUD promoted in the national program in Bangladesh, though very recently a trail of MLCu 250 has been undertaken in one center in Dhaka city. Despite the long period of efficacy and low failure rate, two problems occur with the IUDs currently in use: spontaneous expulsion and patient requests for early removal due to bleeding and pain. Both of these problems have contributed to lower than desired continuation rates. Therefore, the search continues for even better devices.

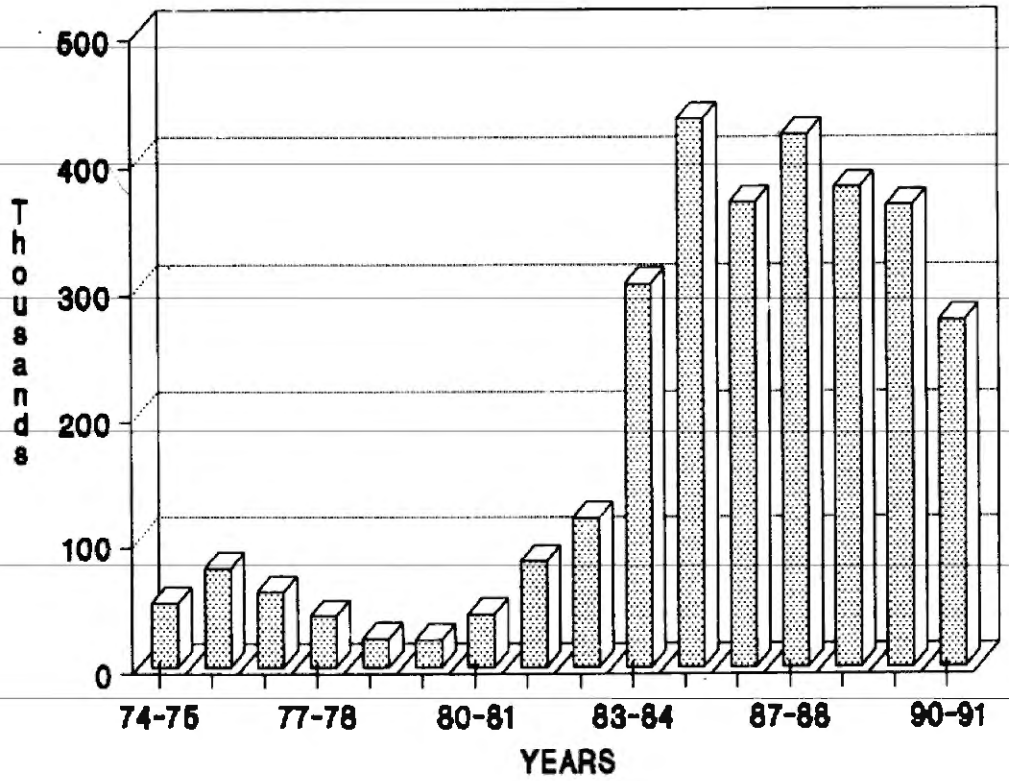
Three newly developed IUDs may help reduce some common side-effects related to IUD use while maintaining high contraceptive efficacy. These are the Copper Safe 300 or Cu-SAFE 300, the FlexiGard 330 or Copper-Fix 330, and the levonorgestrel releasing IUD. Each of these devices has design modifications expected to reduce the incidence of expulsion or bleeding and pain complications. None is currently being used in the open market (Network 12(2)/September 1991). Descriptions of the three newly developed IUDs are provided at Appendix-A.

1.2. Background:

The popularity of the IUD in Bangladesh has fluctuated considerably. The number of insertions peaked at 78,000 in fiscal year 1975-76, but gradually declined to 22,000 in 1979-80 and did not exceed a level of 84,000 until the Government of Bangladesh (BDG) attempted to strengthen the IUD program. Under

the strengthening scheme, the Lippes Loop was replaced by the Copper T-200 (TCu-200) and compensation payments were introduced in July 1982. These compensation payments were set at Tk.15.00 for client's transportation cost, Tk.5.00 for field worker (helper) compensation for non-routine services, and Tk.5.00 for physicians and FWVs (paramedics) as an insertion fee. In late October 1983, the field worker compensation was raised to Tk.15.00, and for Dais to Tk.45.00. With the introduction of TCu-200 and the compensation payments, reported performance increased sharply, and reached 432,465 insertions in 1984-85. Although there have been fluctuations in subsequent years, annual performance figures have remained high, between 367,668 and 420,388 insertions. However, a gradual decline in reported performance may be observed since 1987-88 (Figure 1.3). The field worker (including Dais) compensation was withdrawn from November 1988. There has been a sharp decline between the fiscal year 1989-90 and 1990-91. Whether or not, this decline is genuine or merely reflects greater honesty in reporting will be discussed later.

Figure 1.3: Reported IUD insertions during 1974-75 to 1990-91.



Despite the large improvement in the number of reported insertions, periodic surveys indicate that the IUD prevalence rate among married women of reproductive age has never exceeded 2.0 percent (CPSs). Among the possible explanations for this discrepancy are: overreporting of insertions; under reporting by survey respondents; and low retention rates. Assuming the

discontinuation rates observed in the 1988 evaluation (Kamal et al., 1990), the IUD performances as reported by the MIS should have resulted in an IUD prevalence rate of about 3.6 percent among married women of reproductive age in 1989. However, the IUD prevalence rate was estimated at 1.4 percent in 1989 BFS and 1.7 percent in the 1989 CPS. This calculation suggests that overreporting of insertions or underreporting by survey respondents, or both, must be the major cause of the discrepancy.

There exists also a discrepancy between the supply of IUDs to the field and the reported number of IUD insertions. The reported number of IUD insertions exceeded the number of IUDs supplied to the field level by 21 percent in 1985, 19 percent in 1986, and 18 percent in 1987 (Olson, 1989). Moreover, with the assumption that 1.4 IUDs are required per IUD insertion (to allow for wastage, breakage, etc.), the supply falls short by 40 percent for each of the years 1985-87.

Research and evaluation studies conducted in the past have also identified specific problems fundamental to the IUD program. (Quasem 1985, 1986, Rob 1987). These include weaknesses in the provision of services and record keeping which are manifest in the following areas of major concern:

a) The number of IUD insertions actually performed is lower than reported by MIS service statistics. For example, the 1984-85 evaluation found the MIS figures higher than the estimated actual performance figures by 7.5 percent, while the 1983-84 evaluation found them higher by 14.3 percent (Quasem, 1985 and 1986).

b) There are inconsistencies in IUD performance figures reported by different levels of administrative units (such as, Union level UHFWCs, Upazila level, District level, and MIS service statistics) as well as between the BDG and the NGO.

c) The continuation rate of IUD acceptors estimated for the national program is much lower than that observed for acceptors in special program areas. For example, a representative sample found that 67 percent women were still using the IUD at the end of twelve months, while the corresponding figure in a special program area was 82 percent. Attrition is higher in the first three months than in the following months (Rob, 1987).

These problems have implications for the quality of IUD services as well as for the cost reimbursement scheme which makes small cash payments to IUD clients and service providers.

A review of the 1988 evaluation results revealed that there were variations in reporting between MIS figures and the upazila reports. But the actual extent of the variation could not be estimated owing to anomalies in reporting. About two-fifths of IUD cases recorded in the clinic records could not be traced and

verified in the field. The proportion of unverified cases was much higher for city-based NGOs--apart from those funded by bonafide agencies--and for those upazilas having high reported IUD performances. About one-third of the IUD acceptors were not reimbursed for their transportation costs. Although counselling was found to be positively associated with IUD continuation, one-third of the IUD acceptors were not counselled about the need for a followup visit and possible side-effects. A quarter of the acceptors neither returned to the clinic nor were visited by any FP worker following insertion of the IUD. One-third of the service providers stated that they use only antiseptic solutions to sterilize their instruments. The cumulative retention rate at the end of the first year was 63 percent and at 18 months 50 percent (Kamal, et al., 1990).

The results of the 1989 evaluation revealed that the IUD performance figures were only one percent lower than the MIS reported figures. The proportion of genuine IUD acceptors was much higher at 72.4 percent compared to 61.1 percent estimated in the 1988 evaluation. However, the proportion of IUD acceptors who were re-imbursed for their transportation cost was lower at 55 percent in 1989 than in 1988 (68 percent). Counselling practices showed some improvements in 1989 over 1988, although no more than 60 percent of the acceptors were counselled on possible side-effects. Some improvements in aseptic precautions were observed in 1989 over 1988: one-fifth of the service providers stated that they use only antiseptic solutions to sterilize their instruments in the 1989 evaluation compared to one-third observed in the 1988 evaluation. The cumulative retention rates remained almost the same between the two evaluation years: 63 percent in 1988 Vs. 65 percent in 1989 at the end of 12 months and 58 percent Vs 60 percent at the end of 14 months (Kamal, et al. 1991).

1.3. Cost reimbursement:

The United States Agency for International Development (USAID) supports the Bangladesh Government's (BDG) "Strengthening of the IUD Program". The purpose of USAID support is to increase access to the IUD by reimbursing clients and providers for reasonable costs incurred in using services or in providing services. Under this program, USAID reimburses the Ministry of Health and Family Welfare (MOHFW) for each insertion according to the following schedule:

a. Client transportation (initial visit)	Tk. 15.00
b. Service provider (Physician or paramedic) fee	Tk. 5.00
Total	Tk. 20.00

The approved costs of the IUD program are reimbursed on the basis of IUD performance statistics provided by the Management Information System (MIS) Unit of the MOHFW. These statistics are contained in the "MIS Monthly Performance Report".

1.4. Objectives:

This report presents the findings of the last of a series of three IUD Annual Evaluations. The specific objectives of these evaluations are:

A. to estimate the number of IUD insertions actually performed in a given evaluation period;

B. to estimate the average sum actually paid to IUD clients for transport costs; to assess whether there is any consistent and significant pattern of under or overpayment;

C. to estimate the average sum paid to service providers (physicians and Family Welfare Visitors-FWVs) as compensation for services; to assess whether there is any consistent and significant pattern of under or over payment; and to estimate the proportion of service providers who received the specified payment;

D. to ascertain whether clients are being promised or actually given anything other than the approved IUD payment;

E. to collect selected information on client's knowledge of the IUD and other methods of contraception;

F. to collect selected information on the IUD decision-making process and the extent of client satisfaction with the IUD procedure and with the follow-up services;

G. to collect selected socio-economic information on IUD clients (e.g. age, marital status, children ever born, education, and employment status);

H. to estimate the percentage of IUD acceptors who received a follow-up visit (either at their home or at the clinic) for each evaluation period and how side effects and complications as reported by clients were handled;

I. to assess knowledge of service providers regarding contra-indications, side effects, and efficiency of the method.

J. to estimate the percentage of acceptors who have retained their reference IUD;

K. to estimate the percentage of acceptors that have had their reference IUD replaced with another IUD (including the total number of IUD reinsertions), with another method of contraception, or with no method (discontinued users);

L. to estimate inconsistencies in reported IUD performance by comparing district-level Deputy Director/Family Planning (DD/FP) and MOHFW/MIS service statistics with field survey verification of clinic records from the IUD evaluation; and

M. to assess the quality of the registers and information maintained at the clinic regarding follow-up, rejection of IUD, removal of IUD, and expenditures.

Chapter 2

METHODOLOGY AND IMPLEMENTATION

Unlike the 1988 and 1989 evaluations where only quantitative methods of data collection were used, the 1990 evaluation used a combination of quantitative and qualitative research methods. The mixture of different methods, or triangulation, involved collection of similar information from different sources, and thus permitted some assessment of the validity of the data.

2.1. Research methods:

The following research methods were used to collect data for the evaluation:

A. Quantitative methods:

- survey of IUD acceptors;
- survey of service providers; and
- verification of clinic records.

B. Qualitative methods:

- observation of IUD clinical services;
- indepth interview of selected IUD acceptors; and
- focus group discussions with IUD service providers.

2.2. Sample size (client survey):

As for any sample survey with multiple objectives, the decision regarding sample size is a complex matter of judgment, in which considerations of desired precision of estimates for the whole sample and important sub-groups have to be balanced against considerations of logistical feasibility, cost and possible deterioration in the quality of data as size increases. To meet the objectives of the study, estimates were required separately for BDG urban, BDG rural, and NGO strata. Since NGO performances are mostly in urban areas, the NGO stratum was not bifurcated by rural and urban areas. The strata were defined as follows:

Urban BDG stratum:

Clients reportedly having IUD insertions from urban BDG clinics and hospitals during the calendar year 1990.

Rural BDG stratum:

Clients reportedly having IUD insertions from rural BDG clinics and hospitals during the calendar year 1990.

NGO stratum:

Clients reportedly having IUD insertions from the NGO clinics and hospitals of both rural and urban areas during the calendar year 1990.

A target sample size was set at 4,000 BDG cases--split approximately into 3,000 cases from rural upazilas, 1,000 from urban upazilas--plus an additional 1,000 NGO cases. This sample size was chosen because it was adequate to provide key estimates at the national level--and for the BDG and NGO sectors--with reasonable precision, yet at the same time was not so large as to jeopardize high standards of field work and supervision.

2.3. Sample design (client survey):

A stratified two-stage nationally representative probability sample was drawn. At the first stage, a sample of upazilas was drawn with probability proportionate to the number of IUD insertions performed as recorded by the MIS. For each selected upazila, a listing team prepared a complete list of the names and addresses of all IUD acceptors in 1990 from all clinic registers in the upazila.

At the second stage, clients were selected with probability inversely proportional to the first stage probability, so as to yield a self-weighting sample within and across strata. Interviewing teams were then dispatched to the field to locate and interview all selected clients.

First stage sampling: selection of upazilas: The sampling frame for the first stage selection was the MIS printout of the number of insertions performed in 1990 by upazila and by BDG or NGO clinic. The first step was to prepare separate lists of upazila performance for each of the three strata: urban BDG; rural BDG; and NGO. The upazilas (or clinics) in municipalities, metropolitan cities, and district headquarters were defined as belonging to the urban stratum. All others were classified as rural.

Lists for each stratum were ordered by division which, in turn, were organised by district and upazila, and a systematic sample (random start and fixed interval) was drawn with probability proportionate to the number of insertions reported in 1990. The main purpose of using probability proportionate to size (PPS) sampling was to reduce the number of very low performing upazilas in the sample, which would have decreased field work efficiency and raised costs.

The number of first stage selections was determined on pragmatic grounds. A very dispersed sample (i.e., a large number of upazilas and a small number of selected individuals per upazila) is desirable from the point of view of high precision of estimates. A highly clustered sample (i.e., a small number of upazila and a large number of selected individuals per upazila) is desirable from the point of view of field work costs and logistics. The decision to select 17 BDG urban upazilas, 43 BDG rural upazilas and 15 NGO upazilas represents a compromise between these competing considerations.

The selection probability of an upazila from a stratum is defined as:

$$P_{hi} = \frac{A_{hi}}{\left(\sum_{i} A_{hi} / a_h\right)}$$

Where, P_{hi} = the selection probability of ith upazila of hth stratum

A_{hi} = the total number of IUD acceptors of ith upazila in hth stratum

a_h = the number of PSUs to be selected from upazilas stratum

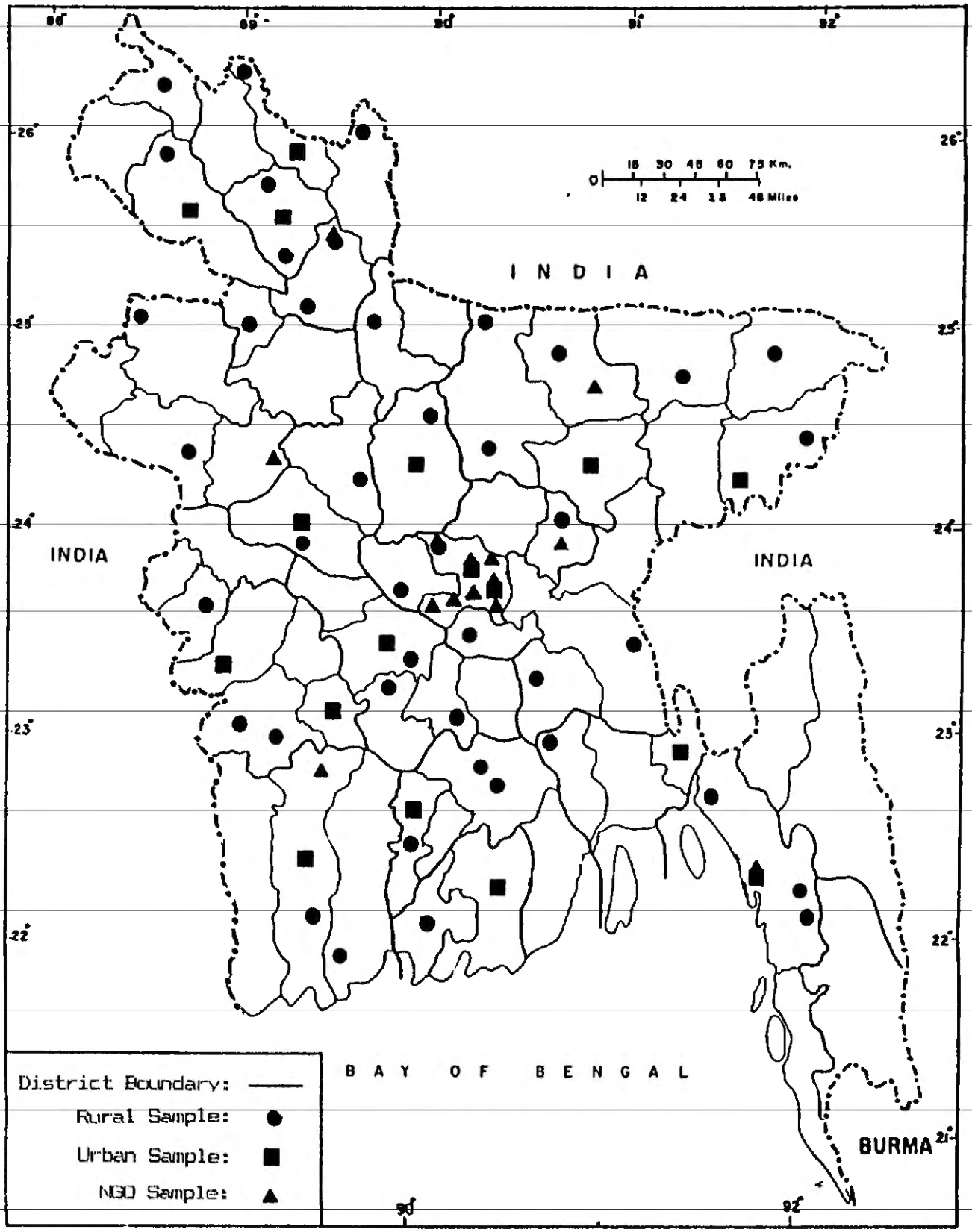
The average number of clients who were to be selected from each upazila was 77 for BDG rural stratum, 74 for BDG urban stratum, and 31 for NGO stratum. However, these numbers differed in the actual selection because of discrepancies between the reported performance and the clinic records. Thus, the mean number of clients actually selected per upazila was 73 for BDG rural, with a range of 32 to 89; for BDG urban 59, with a range of 29 to 88; and for NGO 35, with a range of 16 to 64.

A map of Bangladesh showing the locations of selected upazilas is presented in Figure 2.1.

Sampling frame of IUD clients: The sampling frame for selection of clients was prepared by listing all clients who had an IUD insertion in 1990 at the clinics falling within the selected upazilas. If the selected upazila was in the BDG stratum, all clients of BDG clinics were listed; if it was from the NGO stratum, all clients for NGO clinics were listed. In addition to listing, the total clinic performance figures were collected from all clinics within the upazila. The procedure followed for listing is described below.

A set of five forms was used for the listing operation. Upon arrival at the selected upazila the lister collected the names of all BDG and NGO clinics from the UFPO and his/her staff and recorded the names and addresses of all clinics in Form 1. When the list of clinics had been prepared, the lister went to each and every clinic and listed in Form 2 the names and addresses of

Figure 2.1: Map of Bangladesh showing selected upazilas.



all IUD clients recorded in the clinic register for the calendar year 1990. The total 1990 performance of each clinic was noted by the lister in Form 3 and the total 1990 IUD performance for the upazila was compiled in Form 4. In Form 5, the figures obtained from clinic records were matched with those that appeared in the MIS computer printout.

Owing to a number of problems, listing of IUD clients was not possible in a few clinics in different strata. In the BDG rural stratum, listing could not be completed in two clinics--one each in two upazilas. In one clinic the FWV was on long leave and in another the IUD register was missing. In the BDG urban stratum, listing could not be completed in two clinics of an upazila. In one clinic the FWV left the clinic without handing over responsibility to any one and registers were not available; and in another clinic three month's performance could not be listed because the FWV had died and the relevant registers were not available. A total of 134 cases from these 4 clinics was included in drawing the sample, using records kept at the upazila level. When any of these non-listed clients was drawn in the sample, a substitute client was drawn from within the same upazila. This occurred in 4 cases. This small number is unlikely to affect the main results.

In the NGO stratum listing was completed in all the upazilas. However in one upazila 72 cases were recorded in the MIS report, but in fact there was no IUD insertion recorded in any clinic register. In another upazila two NGO clinics could not be located although 676 IUD clients were recorded against them in the MIS report. Also in another upazila, one clinic could not be located where a total of 309 cases were recorded in MIS report and for another clinic 299 cases were recorded in MIS report but in fact there was no IUD performance.

Second stage: selection of clients: All clients listed in selected upazilas were serially numbered and the sample of IUD clients was drawn from the list following a systematic selection procedure (i.e. random start and fixed interval).

In order to have a self-weighted sample, the selection probability at the second stage was inversely proportional to that of the first stage.

2.4. Selection of service provider sample:

In this study, a service provider refers to a doctor or FWV or paramedic performing IUD insertions in any clinic. All the service providers of the respective stratum of the selected upazila were included in the service provider sample. A total of 810 service providers were identified; of those 573 were successfully interviewed--353 from BDG rural, 171 from BDG urban, and 49 from NGO stratum. The reason for this low number of successful interviews was that many of the providers were transferred, on leave, or not available.

2.5. Qualitative data sources:

Qualitative data collection was directed towards further exploration of the perspective and experiences of IUD acceptors as well as service providers in terms of the dynamics of use of IUD, flow of communication, counselling procedures, quality of clinical services, and management of side-effects and complications.

Observation of clinical services: IUD clinical services were observed in 54 clinics--15 BDG urban, 34 BDG rural, and 5 NGO clinics. The observers stayed in the clinic from the beginning to the end of the observation day and were trained how to minimize the inevitable danger that the presence of an observer may change the behaviour of the subject.

Indepth interview with acceptors: A total of 42 IUD acceptors, 10 in BDG urban, 29 in BDG rural, and 3 in NGO stratum was interviewed using a semi-structured indepth interview guideline. The purpose was to generate information about the nature and flow of communication between the user and the informer in order to have insights into the dynamics of use of the IUD.

Focus group discussions with service providers: Focus group discussions were conducted separately with FWVs and FWAs in 4 urban and 6 rural upazilas in order to have clearer understanding about the roles played by FWVs and FWAs as counsellors and motivators. Respective responsibilities for followup were also investigated. In most cases the IUD clients do not return to the clinic and the FWVs get little chance to visit them at home. Thus, the FWAs have a potentially crucial role in maintaining a link between the acceptor and the clinical service provider.

2.6. Data collection instruments:

The following data collection instruments were used for the evaluation:

1. Questionnaire for IUD clients (Appendix B).
2. Questionnaire for service providers.
3. List of IUD clinics and service providers.
4. List of IUD acceptors.
5. IUD performance figures from clinic records.
6. Summary of performance for the upazila.
7. Verification of IUD performance between clinic records and MIS reports.
8. Guideline for observation of clinical services.
9. Guideline for indepth interview of IUD acceptors.
10. Guideline for focus group discussions with service providers.

2.7. Implementation:

The evaluation was conducted by the Associates for Community and Population Research (ACPR). Mr. G. M. Kamal, Executive Director, ACPR worked as the Project Director, while Dr. A. U. Ahmed, Project Expert, ACPR worked as the Deputy Project Director. Dr. John Cleland and Dr. Gillian Hwei-Chuan Foo worked as consultants and provided professional guidance at every phase of the study. The organizational arrangements for the evaluation is shown in Appendix C, while the list of evaluation staff is given in Appendix D.

2.7.1. Field work procedure:

Field interviewing entailed locating the sample IUD clients and conducting the interviews. Field work was conducted by eight field interviewing teams each consisting of four female interviewers, four male field assistants, one female supervisor and one team leader. Since it was difficult for females to locate scattered IUD clients in unknown rural areas, a male companion (field assistant) was provided for each one of them.

Supervision: Strict supervision of field interviewing was made to ensure collection of high quality data. The team leader remained responsible for administrative and management aspects, while the female supervisor edited all completed questionnaires at the end of each day, conducted spot-checks, re-interviews, briefed the interviewers, and maintained all field control records. The female supervisor also dealt with difficult cases, particularly to minimize non-responses due to refusals or deferrals. She re-interviewed every client who denied ever having had an IUD as well as a sub-sample of those having a non-reference IUD in order to ensure that the proportion having IUDs is genuinely assessed.

Quality control: Quality control (QC) procedures were implemented to ensure that the field teams were appropriately carrying out their responsibilities. There were four QC teams each consisting of one male Quality Control Officer (QCO) and one female QCO. The QC teams visited each field interviewing team in almost every sample upazila during the field work. The male QCO checked the accuracy of attempts to locate cases and the quality of interviewing, while the female QCO was responsible for spot-checks and re-interviews of a selected sub-sample of interviewed IUD clients as well as cross-checking the questionnaires completed by the interviewer. The questionnaires edited by the female supervisor were checked by the QCOs and the interviewing team was briefed on specific shortcomings. The QC teams intensively searched for non-located cases in order to ensure that the interviewing team had attempted vigorously to locate every client.

2.7.2. Procedure followed to locate and interview clients:

The following steps were followed:

Step 1: The field interviewer attempted to locate the client by asking the villagers, ward members, or UP Chairman.

Step 2: If the interviewer failed, she sought the help of local FP workers or any other informed person.

Step 3: In the case of a change of address, the interviewer tried to obtain the new address and contact the client.

Step 4: The interviewer checked the selected name and address with that in the couple registration book maintained by the FWA, voter's list and household list, or any other document maintained in the UP office. If the name appeared in any of these documents, a re-attempt was made. If the name did not appear in any document the interviewer probed thoroughly and took a statement from the FWA or a responsible person concerning the authenticity of the case. The interviewer documented all her attempts to locate selected clients.

Step 5: The clinic record was re-checked to ensure that no mistake was made in copying the name and address. If any mistake was identified, the sample list was corrected and a re-attempt was made to locate the client.

Step 6: When an interviewer failed, after all the above attempts, to locate a client, the team leader made attempts similar to those made by the interviewer.

Step 7: In case of the team leader's failure, the QCOs made similar attempts on a sample basis.

Step 8: Special arrangements were made to locate and interview clients who resided outside the selected upazila (or who had migrated out since the 1990 insertion). Names and addresses of such cases were clustered geographically and special interviewing teams were dispatched to locate and interview them, following the same procedures as used in the main phase of field work.

Step 9: A minimum of four attempts were made to locate clients who were temporarily away or not at home.

2.7.3. Procedures followed in the case of denial of insertion by selected clients:

In all instances when a selected respondent denied having ever had an IUD insertion, the female supervisor re-interviewed

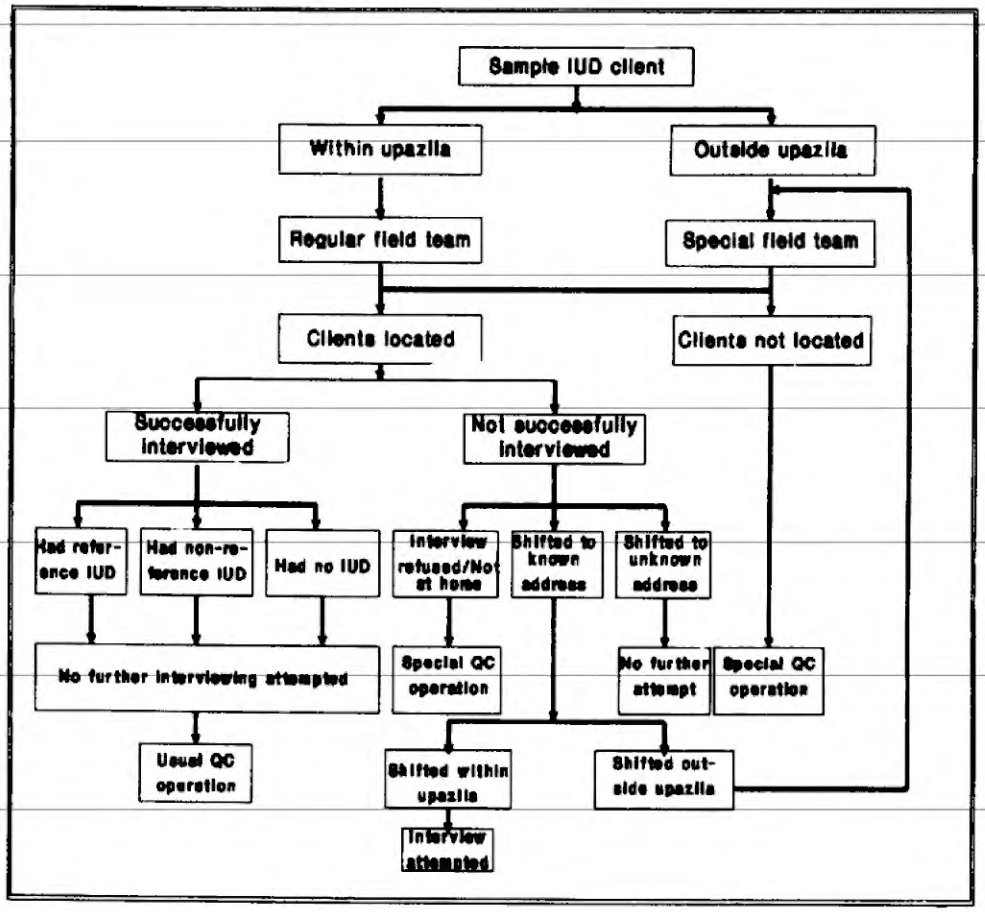
the respondent. A second re-interview was conducted, on a sub-sample basis, by the QCOs.

The procedure that was followed to reduce non-responses is shown in Figure 2.2.

2.7.4. Time schedule:

The activities for the 1990 evaluation started on January 01, 1991. The field work for listing continued from January 10, 1991 to February 1, 1991. Owing to the Gulf-War the data collection work was deferred from February 01, 1991 to April 23, 1991. The field work for data collection was completed on August 31, 1991. The draft report was submitted to the USAID on January 16, 1992, and the final report on April 19, 1992.

Figure 2.2: Procedure followed to reduce non-responses.



Chapter 3

VERIFICATION OF IUD PERFORMANCE

Actual IUD performance during calendar year 1990 and the proportion receiving the payments related to IUD insertions were estimated through performance verification and payment verification.

3.1. Performance verification:

Verification of performance was based on verification of upazila figures in MIS reports and verification of reported IUD clients.

3.1.1. Verification of MIS performance figures:

Verification of MIS performance figures was conducted by examining the consistency of clinic records for IUD insertions with upazila IUD performance figures as they appeared in the MIS reports.

There are variations in reporting between different levels--clinic, upazila, and MIS. Except for six upazilas in BDG rural stratum, the reports did not match across the different levels. The major reasons for the differences in the reporting are as follows:

a. Reports are not regularly submitted by all clinics. UFPOs do not maintain any work-sheet for compilation of reports. As a result, the UFPOs fail to include reports that are not submitted on time. In some cases, clinic performances are often assumed and those assumptions do not later tally with the actual performance.

b. Clinics having more than one provider may submit reports for one but not for all the providers.

c. Rejected and re-insertion cases are counted by some clinics as performed cases.

d. During to insufficient knowledge on how to fill-out the reporting forms, referred cases are sometimes shown as performed cases.

e. Owing to unsystematic and poor compilation procedures mistakes occur at various levels.

f. In case of unavailability of IUD money, records of payments are not made and, in some cases, clients of one

month are shown in a later month when payments are made; thus the figures in the register do not match with those in the report.

g. Not all NGOs and other programs submit reports to their relevant UFPO. The UFPO does not disburse funds to all NGOs within his area of responsibility. The existence of some NGOs may not be known to the UFPO.

Differences in the performance figures between the MIS reports and the clinic records are shown in Table 3.1.1. The IUD performance figures as per clinic records were 6.3 percent lower than the MIS reported figures. Thus, for the year 1990 the IUD performance according to clinic records is estimated at 327,252 instead of 349,255 as given in the MIS reports. This net difference is the result of larger self-canceling differences at the stratum level. The MIS reported performance figure was 4.2 percent higher for the BDG rural stratum and 19.7 percent higher for the BDG urban stratum than estimates based on clinic records, but 15.0 percent lower for the NGO stratum. Despite the fact that at the national level the overall difference in reporting was small, there were wide variations among individual upazilas. These variations were highest for the NGO stratum, intermediate for the BDG urban, and lowest for the BDG rural. For example, in the NGO stratum the performance figures contained in the MIS report were 100 percent higher for one upazila and 137 percent lower for another upazila. In the BDG urban stratum, the MIS figures were 65 percent higher in one upazila and 16 percent lower in another. In the BDG rural stratum, the MIS report was 62 percent higher in one upazila and 23 percent lower in another. Upazila-wise differences are presented in Appendix E.

Table 3.1.1: Differences in performance figures between the MIS reports and clinic records.

Stratum	IUD Performance in 1990 as per MIS reports	Proportion of sample to be selected on the basis of MIS reports	Proportion of sample obtained on the basis of clinic records	Difference (+) / (-)
BDG-Rural	65.8 (229,806)	65.8 (3,290)	67.3 (3,151)	(+) 4.2 (+) (139)
BDG-Urban	25.0 (87,479)	25.0 (1,250)	21.4 (1,004)	(+) 19.7 (+) (246)
NGO	9.2 (31,970)	9.2 (460)	11.3 (529)	(-) 15.0 (-) (69)
Total	100.0 349,255	100.0 5000	100.0 4684	(+) 6.3 (+) (316)

The reasons for variations in reporting between the MIS reports and clinic records were discussed earlier. However, the large discrepancies in some upazilas are caused by counting of "referred" cases as "performed" cases for some NGOs. In upazilas where NGOs do not maintain clinics, they usually refer IUD clients to BDG clinics. Since these cases are performed by BDG clinics they are reported as performed by the BDG; on the other hand since these cases are motivated and referred by the NGO workers, NGOs report these cases to the UFPO as NGO performances. Thus, in the absence of appropriate classification as referred or performed, these cases are counted twice. Another probable reason reflects different financial disbursement procedures for the IUD money. As also mentioned in the 1988 and 1989 evaluation reports, some Deputy Directors make advances directly to NGOs, while in others the NGOs receive the IUD money from the UFPOs. NGOs who received the IUD money directly from the District Deputy Directors do not usually submit their monthly performance reports to the UFPOs. Thus, the performance of these NGOs is not included in the upazila report. This omission causes underreporting of the NGO performance, since MIS compiles its reports from upazila monthly returns. In addition, some NGO clinics located within the Medical College Hospitals (for example, MRTSP clinics) are considered as government clinics, despite their NGO status. However, the general conclusion is that the figures submitted to the MIS are probably not falsified deliberately, though they are subject to error.

The IUD money is not disbursed on the basis of the performance figures in the MIS reports; instead, allocations are made by the Director (Finance) to the District Deputy Directors who in turn make allocations to the UFPOs on demand. The demands are made on the basis of performances in the clinic records regardless of whether or not they match the MIS reports. Neither the Director (Finance) nor the District Deputy Director has the opportunity to verify whether the demand for IUD money tallies with the performance in the MIS report. As long as this separation between financial and programme reporting continues, discrepancies of the type outlined above are likely to continue.

3.1.2. Verification of reported IUD clients:

Clinic records were verified by tracing and interviewing all selected women recorded as IUD clients in 1990. Clients hailing from outside selected upazilas or who had migrated were followed-up at their current address.

Results of survey verification: A total of 4684 IUD clients were sampled--3151 from BDG-rural, 1004 from BDG urban, and 529 from the NGO stratum. At the overall level, 85.3 percent of the clients were located and 85.0 percent successfully interviewed. Thus, only 0.3 percent of the cases located could not be successfully interviewed because they were not available for interview during the period of stay of the interviewing team in the area.

The proportion of all clients verified as having the reference IUD was 78.5 percent. Among the remaining 6.5 percent, 2.3 percent had a non-reference IUD (i.e. a device that was not inserted on the date recorded in the register) and 4.2 percent had never had one. There are variations among the different strata. For example, the proportion of clients verified as having the reference IUD was 84.7 percent for BDG rural and 73.7 percent for BDG urban, while the corresponding proportion for the NGO stratum was only 51.2 percent (Table 3.1.2a).

About one-seventh (14.7 percent) of the sample clients could not be located, primarily because the address did not exist or no such person ever lived there (8.2 percent). A small proportion of 3.5 percent of the clients could not be located because they migrated to unknown addresses, and another 2.6 percent could not be located due to incomplete address. Among the different strata, there are variations in the reasons for non-location of clients. The proportion that could not be located due to `address does not exist/no such person ever lived there' is much higher in NGO stratum (24.2 percent) compared to BDG urban (8.1 percent) and BDG rural (5.6 percent) strata. A similar pattern is also true for the proportion that could not be located due to `incomplete address'.

Table 3.1.2a: Details of non-responses.

	BDG		NGO	All
	Rural	Urban		
			(Percent)	
A. Client located:	91.4	82.3	55.0	85.3
Successfully interviewed:				
- Had reference IUD	84.7	73.7	51.2	78.5
- Had non-reference IUD	2.3	2.5	1.1	2.3
- Never had IUD	4.1	5.8	2.1	4.2
Not successfully interviewed:				
- Client not available	0.3	0.3	0.6	0.3
B. Client not located:	8.6	17.7	45.0	14.7
Address does not exist/ no such person ever lived there	5.6	8.1	24.2	8.2
Incomplete address	0.2	4.1	14.0	2.6
Migrated to unknown address	2.4	5.2	6.2	3.5
Other	0.4	0.3	0.6	0.4
Total	100	100	100	100
N	3151	1004	529	4684

Comparison of results of survey verification: A comparison of the contact and verification rates between the 1988, 1989, and 1990 evaluations shows that the proportion of verifiable clients has been increasing steadily from 51.4 percent in 1988 to 63.7 percent in 1989 to 78.5 percent in 1990 (Table 3.1.2b).

Table 3.1.2b: Comparison of contact and verification rates by 1988, 1989, and 1990 evaluations.

Contact and verification	1988	1989	1991
		(Percent)	
Clients located	67.6	73.4	85.3
Clients successfully interviewed	65.4	72.9	85.0
Clients having the reference IUD	51.4	63.7	78.5

Possible reasons for the difference between 1988 and 1989 have been discussed at length in the 1989 evaluation report. The 1989 evaluation observed that the difference was primarily because of higher rates of verification for the clients having insertions in the second half of 1989. The field work for the 1988 evaluation started from May 22, 1989 and the listing work was completed in all the 75 selected upazilas by July 07, 1989. During the field work for the 1988 evaluation, some of the upazila and union level family planning officials remarked to the evaluation field staff that larger numbers of clients would be verifiable in the next evaluation. It is possible that the onset of the 1988 evaluation alerted the family planning field officials to be more careful about their performances. Moreover, during the middle of 1989 the Directorate of Family Planning issued a directive to all the field officials not to allow any research organisation to examine or verify their records unless so directed by the authority. It was widely understood that the memorandum related to the IUD evaluation though no explicit mention of this evaluation was contained in the memorandum. Furthermore, it was approximately during the same time that there were several publications in the national press about abuse of foreign-aid, specially in connection with sterilization and IUD. All these factors may have made the family planning field officials more careful in record keeping and more vigilant against falsification or fraud. Table 3.1.2c shows that the proportion of verifiable clients sharply increased starting from June 1989.

Further analysis of the 1989 data showed that a decline in reported IUD performance from the first half to the second half of 1989 was more common in the upazilas selected in both 1988 and 1989 evaluations than in those selected only in 1989. Although the results should be interpreted with caution, they do suggest that the listing operation of the 1988 evaluation had an

influence on the quality of reporting in most (but not all) upazilas where the listing took place. The general improvement that occurred in most upazilas (54 out of 72 upazilas) may be attributed to the memorandum of mid-1989 and/or to diffusion of information about the 1988 evaluation from selected to non-selected upazilas.

Detailed analysis revealed that such factors as seasonality, time lag between insertion and interview, and withdrawal of the IUD referral fee had no influence on the rate of verification.

Table 3.1.2c: IUD performance as per MIS report and contact and verification rates by calendar month for 1988, 1989, and 1990.

	1988			1989			1990		
	Located	Successfully interviewed	Had reference IUD	Located	Successfully interviewed	Had reference IUD	Located	Successfully interviewed	Had reference IUD
January	73.7	72.2	56.8	69.0	68.8	58.7	81.7	81.2	74.4
February	70.5	67.7	55.4	66.9	66.7	56.9	85.8	85.8	82.4
March	72.6	69.1	53.6	66.7	66.5	56.5	86.5	85.8	80.0
April	66.0	62.9	49.4	63.4	63.1	54.1	86.0	85.9	76.8
May	57.7	54.7	38.3	67.8	66.1	56.6	82.5	82.0	74.1
June	62.3	60.1	45.1	73.4	73.2	64.0	86.2	85.7	77.4
July	57.3	55.9	43.8	75.7	75.1	67.0	84.8	84.8	77.2
August	64.1	62.6	50.5	77.5	76.7	68.1	86.4	86.1	80.3
September	72.3	70.3	53.8	76.7	76.5	68.7	86.3	86.0	81.1
October	71.0	68.4	54.4	79.8	79.6	70.3	88.4	88.1	81.8
November	67.8	66.3	55.8	80.4	79.5	69.5	82.0	82.0	78.1
December	71.8	70.5	56.7	80.3	79.8	70.8	87.6	87.0	80.3
All	67.6	65.4	51.4	3.4	72.9	63.7	85.3	85.0	78.5

3.1.3. Contact and verification rates by selected characteristics:

In order to ascertain the reasons why reported IUD clients could not be verified, contact and verification rates are more closely examined in this section by such selected characteristics as bonafide and non-bonafide NGO, division, type of location, and number of insertions reported in 1990 (Table 3.1.3a and 3.1.3b).

Bonafide and non-bonafide NGOs:

There are two types of NGOs in Dhaka city--NGOs having funds from bonafide funding agencies and NGOs having no bonafide funding source. The latter type NGOs in Dhaka city do not have any contraceptive distribution program; rather, they are maintaining clinics ostensibly to perform IUD insertions. The

NGOs having no recognized funding source are arbitrarily named as non-bonafide NGO and the remainders bonafide NGO.

Table 3.1.3a shows that the proportion of clients located and the proportion having the reference IUD are 75.0 percent and 71.0 percent respectively for the bonafide NGOs, while the corresponding figures for the non-bonafide NGOs are only 6.4 percent and 4.5 percent respectively. Similar findings for the non-bonafide NGOs in Dhaka city were apparent in the 1988 and 1989 evaluations too. The proportion of clients located and the proportion having the reference IUD estimated in 1988 evaluation for the non-bonafide NGOs in Dhaka city were only 11.1 percent and 6.5 percent respectively, while, in the 1989 evaluation, they were 7.8 percent and 2.9 percent respectively. This finding clearly indicates that the non-bonafide NGOs in Dhaka city are a very different type of organisations from other NGOs. However, the names of 16 out of 42 such NGOs identified in 1988 has disappeared from the MIS list, indicating that they have either ceased functioning or inserting IUDs.

Table 3.1.3a: Contact and verification rates by stratum and by bonafide and non-bonafide NGOs.

Stratum	Number of clients selected	Located	Successfully interviewed	Had reference IUD
		(Percent)		
BDG Rural	3151	91.4	91.1	84.7
BDG Urban	1004	82.3	82.0	73.7
NGO (All)	529	55.0	54.4	51.2
NGO (bonafide)	372	75.5	75.0	71.0
NGO (non-bonafide)	157	6.4	5.8	4.5

Divisions/administrative regions: Contact and verification rates are relatively low in Dhaka and also in Chittagong division compared to Khulna and Rajshahi divisions. For example, the proportion of clients that could be verified as having the reference IUD is as low as 65.8 percent in Dhaka division and also not very high in Chittagong division (77.8 percent), while it is as high as 87.3 percent in Khulna and 85.6 percent in Rajshahi division. The low rate in Dhaka division was particularly pronounced for the BDG-urban and the NGO strata. As mentioned earlier, the strikingly low rate in the NGO stratum is attributable to the non-bonafide NGOs in Dhaka city.

Type of location: Similar to the findings of the 1988 and 1989 evaluations, Dhaka city had the lowest rates of contact and verification. This was true for both BDG urban and NGO strata. For example, the proportion of clients having the reference IUD was 79.1 percent for the other urban areas, while it was only

22.5 percent for the Dhaka city area. Although there have been substantial improvements in the rate of verification between the years 1988 and 1990, these findings clearly indicate that the BDG urban and non-bonafide NGO performers in Dhaka city continue to be primarily responsible for overall levels of falsification and fraud in the program in 1990.

Number of insertions reported in 1990:

There is an inverse relationship between reported performance and proportion verified; in other words, the higher the reported performance, the lower the proportion verified (Table 3.1.3b). For example, the proportion having the reference IUD was 83.8 percent for upazilas having performance of less than 1000 and 79.9 percent for those having a performance of between 1000 and 2000, while it was much lower at 50.5 percent for those having a performance of more than 2000 IUDs. It is important to note that, unlike the 1988 and 1989 evaluation findings, this inverse relationship was not true for the BDG rural stratum in the 1990 evaluation. For example, in 1988 the proportion verified in the BDG rural was 59 percent for upazilas having a performance of less than 1000 IUDs and only 29 percent having a performance of more than 2000 IUDs; the corresponding figures for 1989 was 75 percent and 47 percent, while in 1990 it was 85 percent and 86 percent. Thus, in 1990 there was no difference in the proportion verified between the high and the low performing upazilas in the BDG rural stratum. These findings indicate that some upazilas may have high performance and still have a high proportion of verifiable clients (Figure 3.1).

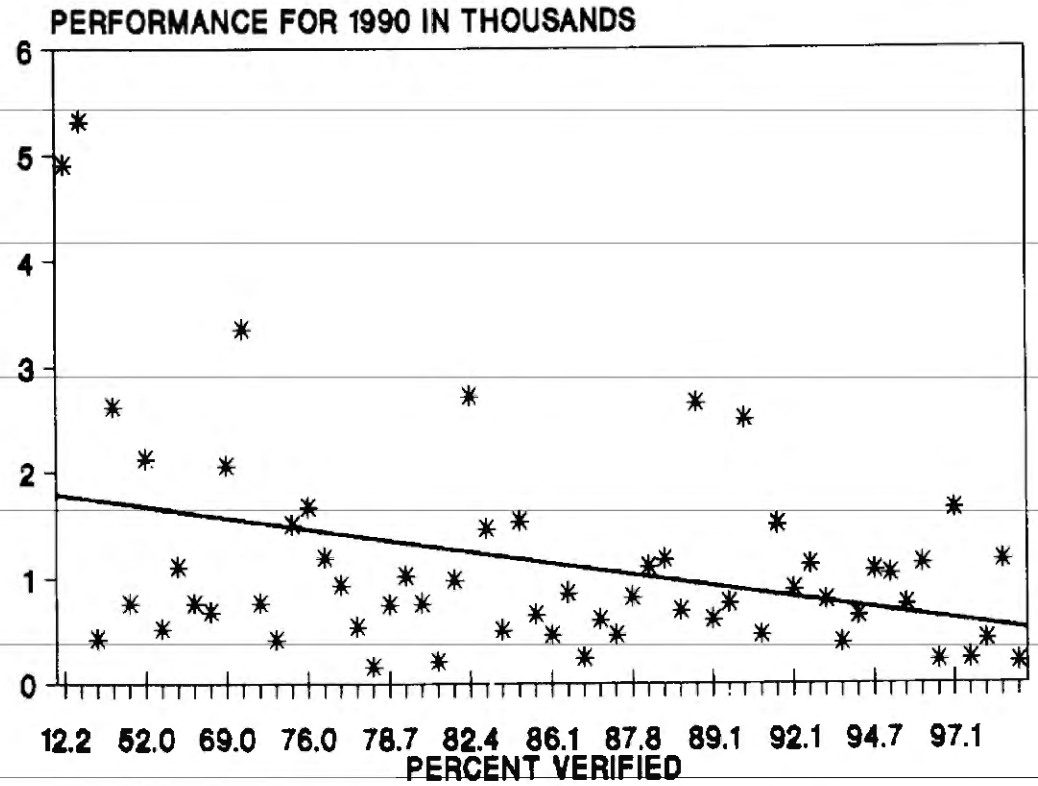
Table 3.1.3b: Contact and response rates of clients by selected characteristics.

	BDG						NGO			All		
	Rural			Urban								
	Located	Successfully interviewed	Had reference IUD	Located	Successfully interviewed	Had reference IUD	Located	Successfully interviewed	Had reference IUD	Located	Successfully interviewed	Had reference IUD
	(Percent)											
Division:												
Chittagong	86.5	85.7	80.7	85.8	85.8	76.7	89.1	55.9	50.8	84.3	83.8	77.8
Dhaka	90.8	90.8	82.7	62.2	61.8	55.6	39.0	38.2	34.4	72.8	72.5	65.8
Khulna	93.4	93.0	87.8	93.7	93.4	85.1	96.6	96.6	96.6	93.5	93.2	87.3
Rajshahi	93.4	93.1	86.4	86.6	86.1	76.3	100	100	98.9	92.7	92.5	85.6

	BDG						NGO			All		
	Rural			Urban								
	Located	Successfully interviewed	Had reference IUD	Located	Successfully interviewed	Had reference IUD	Located	Successfully interviewed	Had reference IUD	Located	Successfully interviewed	Had reference IUD
	(Percent)											
Type of location:												
Dhaka City	-	-	-	27.1	27.1	17.8	28.1	27.4	24.3	27.8	27.3	22.5
Other urban	-	-	-	88.9	88.5	80.4	74.8	74.8	68.7	87.3	87.0	79.1
Rural	91.4	91.1	84.7	-	-	-	98.4	97.6	96.8	91.6	91.3	85.1
Number of insertions reported in 1990 by sample upazilas:												
< 1000 (45)*	90.5	90.1	84.8	88.5	88.1	79.4	88.6	88.6	85.6	90.0	89.6	83.8
1000-1999(18)	92.9	92.8	84.0	92.7	92.2	83.9	53.9	51.9	49.3	88.3	87.9	79.9
2000 + (11)	94.1	94.1	86.2	57.1	57.1	50.0	29.0	29.0	25.2	56.6	56.6	50.5

* Number of upazilas.

Figure 3.1: Relationship between IUD performance and proportion of cases verified.



One extremly high performing upazila is excluded

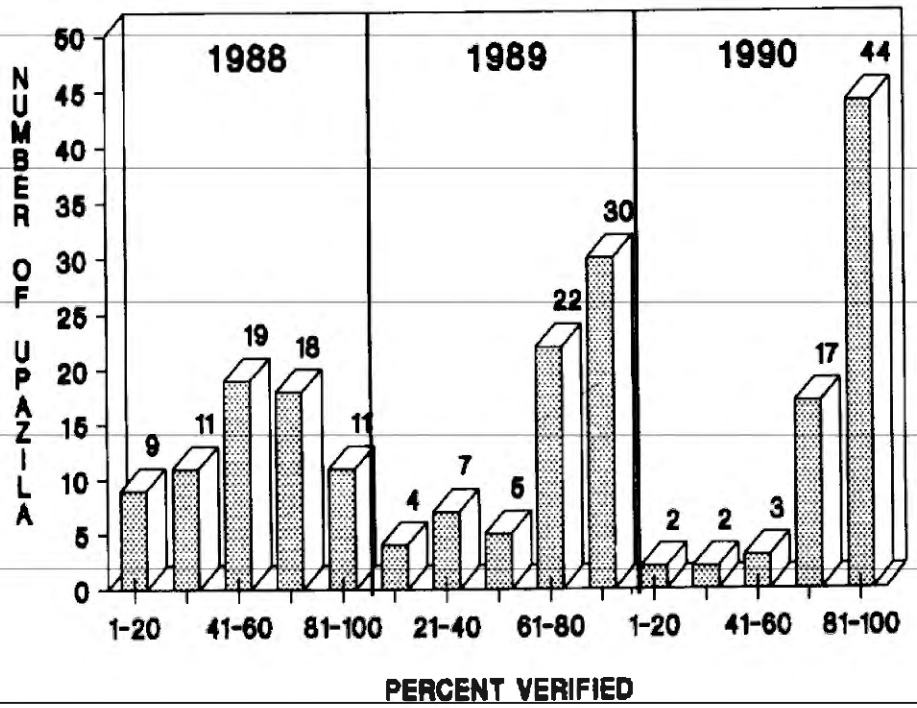
It is important to note that the number of upazilas having a low proportion of verified cases decreased substantially in 1990 compared to that in 1988 and 1989 (Figure 3.2). A total of 68 upazilas were selected in each of the evaluation years. The number of upazilas having less than 60 percent of the cases verified was 39 upazilas (57.4 percent) in 1988, 16 upazilas (23.5 percent) in 1989, and only 7 upazilas (10.3 percent) in 1990. This finding clearly indicates that the number of upazilas having a large proportion of unverified cases has been gradually declining since 1988.

3.2. Procedure followed for estimation of genuine/false cases:

The purpose of this section is to estimate the proportion of genuine and falsified IUD cases in 1990. In order to arrive at the most reasonable estimation of genuine/false cases the following method was adopted:

Types of responses	Method of verification
A. Client located:	
Successfully interviewed:	
- Had reference IUD	Genuine
- Had Non-reference IUD	False
- Never had IUD	False
Not successfully interviewed:	Proportionate to successfully interviewed clients
B. Client not located:	
- Address does not exist/no such person ever lived there	False
- Incomplete address	50% presumed genuine 50% presumed false
- Migrated to unknown address	Proportionate to successfully interviewed clients
C. Not attempted:	Proportionate to successfully interviewed clients

Figure 3.2: Percent verified by number of upazila.



Interpretation of outcome categories: Contact and verification results are categorised into 12 outcome categories. Interpretation of each of these outcome categories is presented below:

(1) Located, interviewed, had reference IUD:

The interpretation is straightforward. All these cases are classified as genuine. Although the possibility exists that some respondents falsely claimed an IUD insertion for financial gain, there is no objective way to establish this and the number is likely to be small.

(2) Located, interviewed, had non-reference IUD:

This outcome category contains all respondents who had an IUD but not in the year 1990 or not at the correct clinic. As explained earlier, interviewing staff probed exhaustively to reach an unambiguous conclusion. Wherever there was any doubt, the case was classified as a reference IUD. Therefore, all these cases can be counted as false.

(3) Located, interviewed, never had IUD:

These respondents denied ever having had an IUD insertion. As described earlier, female supervisors re-interviewed all cases. There remains the possibility that a small fraction of these respondents actually had a 1990 insertion but consistently denied it to preserve confidentiality, or for

some other reason. However there is no objective way of making any allowance for false denial and, therefore, all cases are counted as false.

(4) and (5) Client located but not successfully interviewed:

This small number of selected individuals were located but could not be interviewed, mostly because these individuals were temporarily away during the interviewing team's stay in the area. Their status as IUD acceptors is unknown and it is therefore assumed that the proportion genuine would be the same as for successfully interviewed clients.

(6) Address non-existent/no such person ever lived there:

This large category is classified as false. In Bangladesh, it is highly unlikely that any genuine name/ address cannot be traced. However a very small proportion of genuine clients may have deliberately given false names or addresses to preserve their anonymity. As there is no objective way of making any allowance for this possibility, all cases in this category were counted as false.

(7) and (8) Incomplete address:

Incomplete addresses (i.e. addresses that are so vague that they do not permit location of the individual--such as Dhanmondi, Dhaka) may arise through incompetence/carelessness of staff or through a deliberate effort to disguise fictitious entries in the register. The concentration of such cases in certain selected clinics (particularly arising from the small NGOs in Dhaka) strongly suggests that the large majority of these cases are false. However, fifty percent of this group are considered as genuine. The 50:50 allocation of this group to genuine and false outcomes is somewhat arbitrary and gives a conservative or minimum estimate of falsification. Strictly speaking, all clients having incomplete address should be treated as false, since the field officers have clearly been instructed to maintain complete addresses of all clients.

(9) and (10) Transferred to unknown address/died:

These cases were located, in the sense that their names were known in the locality of their recorded residence. Thus they are not fictitious persons but they could not be physically located because of death, overseas migration or transfer to an unknown new address within Bangladesh. These cases were assumed to have the same likelihood of verification as successfully interviewed clients.

(11) and (12) Not attempted:

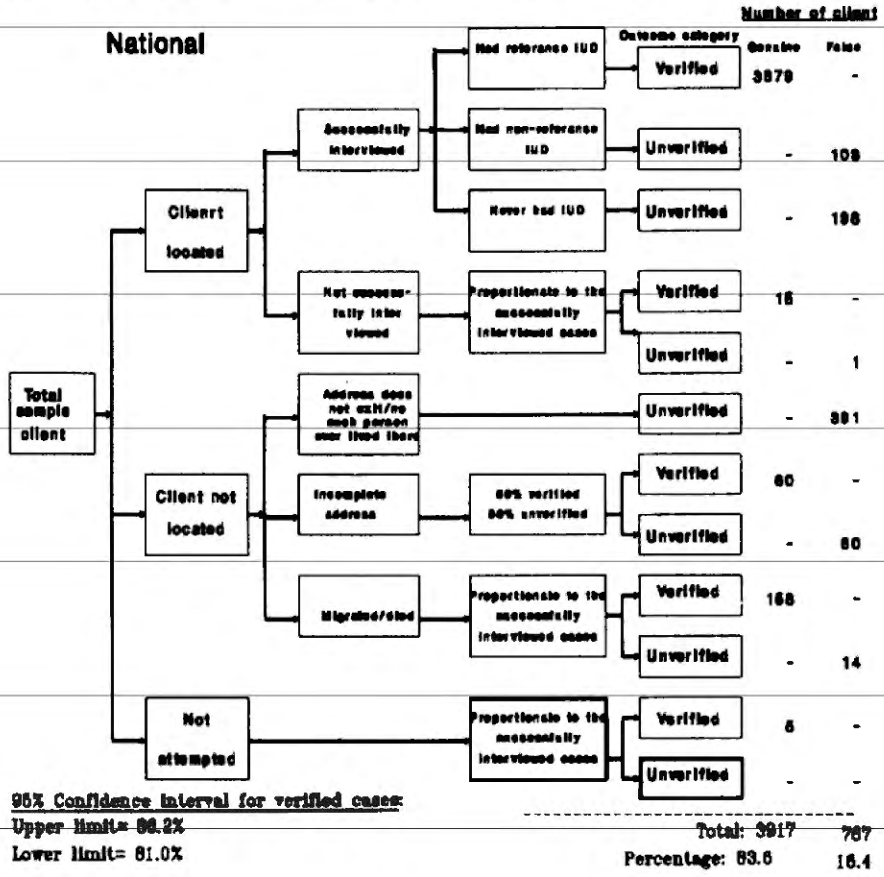
For miscellaneous reasons, no attempt was made to locate only two cases. The outcome of these is unknown and therefore it is assumed that the proportion genuine would have been the same as was found in the successfully interviewed cases.

This description of the survey outcomes and their interpretation shows that there is a small degree of uncertainty and judgment involved in the estimation. However, the final estimated level of genuine cases would not be greatly affected by any other reasonable judgment. Only extreme and unrealistic assumptions could make much difference to the main conclusion about the level.

3.2.1. Estimation of genuine and false cases:

Figure 3.3 shows that the national estimation of the proportion of genuine IUD cases is 83.6 percent. This proportion is highest for BDG rural (87.7 percent), intermediate for BDG urban (81.0 percent), and lowest for NGO stratum (64.8 percent) (not shown in the figure). As mentioned earlier, the rate estimated for NGO stratum has been heavily affected by the strikingly lower rate estimated for the non-bonafide NGOs in Dhaka city areas (4.5 percent). The rate estimated for bonafide NGOs is as high as 71.0 percent (not shown in the Figure).

Figure 3.3: Estimation of genuine and false IUD cases.



3.2.2. Standard errors and confidence limits:

The standard error (s.e) of the estimate has been calculated adopting the following procedure:

a. s.e. of proportion genuine $= \sqrt{\frac{p(1-p)}{n}}$ Deff.

Where,

P = Proportion genuine = 0.836
n = Sample size = 4684
Deff.= Design Effect of 2.5 to make allowance for the loss of sampling precision because of the clustered sample design.

$$s.e. = \sqrt{\left(\frac{0.836 \times 0.164}{4684}\right) 2.5} = 0.0135092$$

b. 95% confidence interval

$= p \pm Z_a \times s.e.$

$= 0.836 \pm 1.96 \times 0.0135092$

$= 0.836 \pm 0.026478$

Upper limit = 86.2% and lower limit = 81.0%

Thus, at the 95 percent level of confidence the upper limit for the number of IUD cases performed during 1990 in Bangladesh is 86.2 percent, while the lower limit is 81.0 percent of the clients recorded in the clinic. The comparable figures for the 1989 evaluation were 72.4 percent and 65.8 percent respectively, while for the 1988 evaluation they were 61.1 percent and 56.9 percent respectively.

3.2.3. Estimation of verifiable IUD performance:

Since the sample of IUD clients was drawn from the clinic records, the estimated proportion of verifiable cases represents the percentage of genuine IUD acceptors as per clinic records, not as per MIS report. Table 3.2.3 shows that there are variations in reporting between the clinic records and MIS reports. The IUD performance figure was higher in MIS reports than in clinic records by only 1.0 percent in 1989, but by 6.3 percent in 1990. The verifiable IUD performance (when considered as percentage of acceptors as per clinic records) was 74.2 percent in 1989, and higher at 86.2 percent in 1990. But this large improvement in the proportion of verifiable cases between 1989 and 1990 is reduced when the discrepancy between clinic

records and MIS reports is taken into account. When based on MIS reports rather than clinic records, the proportion of verifiable cases declined slightly in 1989 from 74.2 percent to 73.5 percent, while it dropped substantially in 1990 from 86.2 percent to 80.8 percent. Thus, the estimated verifiable IUD performance in 1990 is 282,091 or 19.2 percent lower than the MIS reported performance of 349,255.

Difference in genuine performance: The difference in the verifiable performance between 1989 and 1990 without adjustment of the variations in reporting was 12 percentage points; after adjustment for variations in reporting, the difference was 7.3 percentage points. The presentation in the table also shows that the actual number of genuine IUD insertions increased from 1988 by 2.6 percent in 1989 and by 19.7 percent in 1990; between 1989 and 1990 the increase was of 16.7 percent.

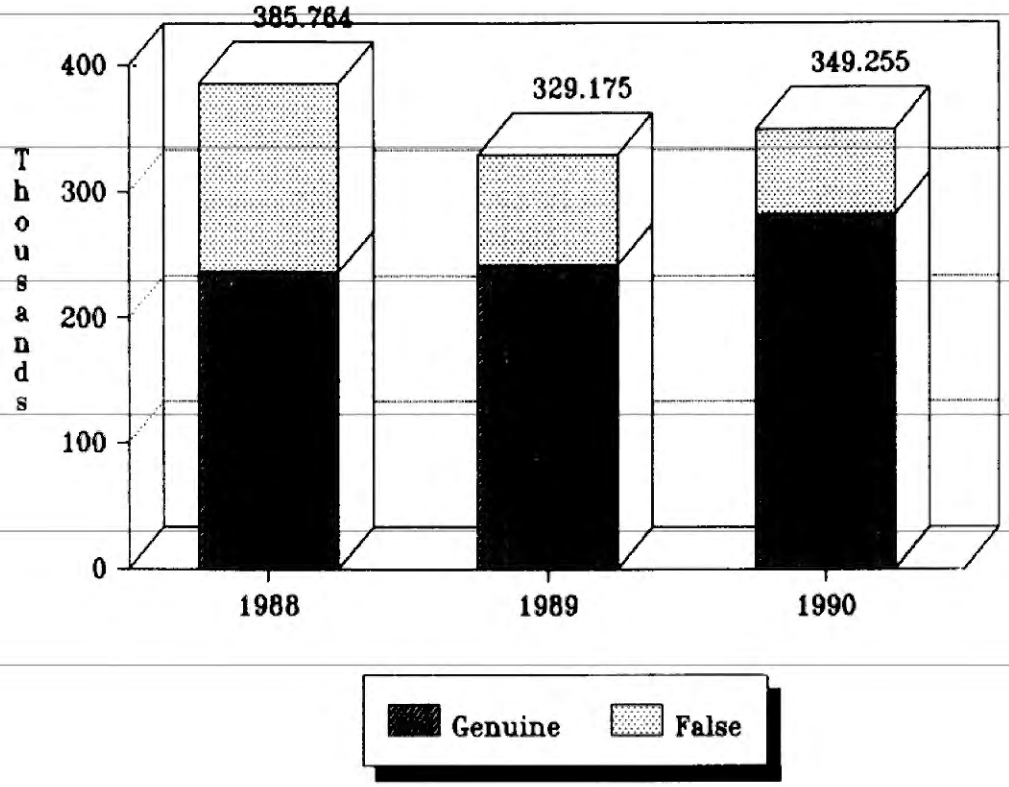
Table 3.2.3: Difference in verifiable IUD performance between the calendar years 1988, 1989, and 1990.

	Evaluation years		
	1988	1989	1990
MIS performance figures	385,764	329,175	349,255
Clinic records	*	325,883	327,252
% Difference between MIS and clinics	*	1.0 (3,292)	6.3 (22,003)
Genuine IUD performance (as % of clinic records)	61.1 (235,702)	74.2 (244,248)	86.2 (301,058)
Verifiable IUD performance (as % of MIS reports)	*	73.5 (241,805)	80.8 (282,091)
Increase in verifiable IUD performance (Considering 1988 as the base year)	-	2.6 (6,103)	19.7 (46,389)
Increase in verifiable IUD performance between 1989 and 1990	-	-	16.7 (40,286)
Increase in IUD performance between 1989 and 1990 as per MIS performance figures	-	-	6.1 (20,080)

* Could not be ascertained because of problem in segregating the MIS performances by strata.

Trends in IUD performance: Figure 3.4 shows that while the MIS performance figures indicate a decline of the IUD performance from 1988 to 1989 and then a slight rise in 1990, the estimated number of genuine IUD insertions shows a steady rise between the years 1988 and 1990.

Figure 3.4: Difference in verifiable IUD performance between calender years 1988, 1989, and 1990.



3.3. Payment verification:

Information was obtained on the receipt of client's transportation cost and service provider's fee in order to assess whether there is any consistent or significant pattern of under or over payment.

3.3.1. Receipt of client's transportation costs:

Nearly two-thirds of the acceptors (63 percent) were reimbursed for their transportation costs; 57 percent received the prescribed amount of Tk. 15.00, while six percent received less than Tk. 15.00. The remaining 37 percent of the acceptors did not receive any money (Table 3.3.1).

At the 95 percent level of confidence the upper limit for the proportion having received the transportation cost is 66.9 percent and the lower limit 59.1 percent. The comparable figures for the 1989 evaluation were 59.3 percent and 50.5 percent respectively, while for the 1988 evaluation were 68.2 percent and 62.6 percent respectively.

Table 3.3.1: Status of receipt of client's transportation costs.

	BDG		NGO	All
	Rural	Urban		
			(Percent)	
None	36	39	45	37
< 15 Taka	6	5	7	6
15	58	56	48	57
> 15	0	0	0	0
Total	100	100	100	100
Mean: overall	9.4	8.9	8.1	9.2
Mean for those receiving any money	14.6	14.6	14.5	14.6
N	2027	688	437	3152

Confidence interval for money received:
Upper limit: 66.9%
Lower limit: 59.1%

3.3.2. Receipt of service provider's fee:

Ninety three percent of the service providers reported that they receive fees @ Tk.5.00 for each IUD insertion. The rest do not receive any IUD insertion fee. The proportion who do not receive any insertion fee is higher for NGO stratum (18 percent) than for BDG rural (7 percent) and BDG urban (4 percent) (Table 3.3.2a).

These service providers who said that they receive provider's fee were asked whether they received full payments for the insertions they performed in 1990. Table 3.3.2b shows that 72 percent of the service providers received full payments. The comparable figure for 1989 was 69 percent and for 1988 was 62 percent. The service providers who mentioned that provider's fee is not paid are unlikely to receive any fee, but those who received partial payment are likely to receive the remaining amount of their claim.

Table 3.3.2: Status of receipt of service provider's fee.

	BDG		NGO	All
	Rural	Urban		
a. Amount received as provider's fee:	(Percent)			
None	7	4	18	7
< 5	0	-	-	0
5	93	97	82	93
> 5	-	-	-	-
Total	100	100	100	100
Mean taka	5.0	5.0	5.0	5.0
N	353	171	49	573
b. Whether received full payment:				
Yes	76	60	90	72
No	24	40	10	28
Total	100	100	100	100
N	330	165	40	535

Proportion of service provider's fee not yet received: Estimation of the proportion of insertion fee not yet received by service providers was difficult for the following reasons:

a. some service providers could not provide the actual number of IUD insertions performed by them in 1990 and the amount of money not yet received;

b. some service providers who were working in the selected clinics in 1990 were transferred and the newly joined service providers could only give partial information; and

c. some service providers had not yet submitted their claims for the insertion fee.

Therefore, estimation of the proportion of service providers fee not yet received is not attempted.

Chapter 4

PROFILE OF IUD ACCEPTORS

The profile of the IUD acceptors is presented in terms of their socio-economic characteristics, demographic characteristics, and knowledge and use of other family planning methods. Also, a comparison of selected characteristics of the IUD users is made with those of users of other methods.

4.1. Socio-economic characteristics of IUD acceptors:

Education: Nearly one-half of the IUD acceptors (48 percent) have attended school. The proportion of IUD acceptors having attended school was 49 percent in 1988 and 54 percent in 1989 evaluation. Compared to the current users of all methods, IUD acceptors are more educated. For example, among all current users in national surveys, the proportion having ever attended school was 45 percent (1989 CPS/Mitra et al., 1990) or 40 percent (1989 BFS/Huq et al. 1990). Husbands of IUD acceptors are relatively more educated than their wives. This is expected because the literacy rate is lower for females than for males. The proportion of husbands of IUD acceptors who have attended school is 62 percent.

Religion: Of the IUD acceptors surveyed, 85 percent were Muslim and 15 percent Hindu. This religious composition is almost similar to that for all MWRA as reported in the 1989 BFS (Muslim, 86 percent; Hindu, 13 percent) and in the 1989 CPS (Muslim, 89 percent; Hindu, 10 percent). The proportion of IUD users who were Muslims were 84 percent in 1988 and 85 percent in 1989 evaluation.

Employment: About a quarter of the IUD acceptors (23 percent) were gainfully employed at the time of interview. The level of employment is much higher among IUD acceptors than among current users in general (18 percent) (1989 CPS) or among all ever married women (14 percent) (1989 BFS). This difference partly reflects the higher educational background of IUD acceptors.

The proportion of IUD users who were employed was 24 percent in 1988 and 28 percent in 1989 evaluations.

Table 4.1: Socio-economic characteristics of IUD acceptors.

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
Education:				
No Education	55	44	40	52
Primary	29	31	26	29
Secondary	15	20	27	17
Higher Secondary and above	1	5	7	2
Total	100	100	100	100
Husband's education:				
No Education	41	31	26	38
Primary	24	23	21	24
Secondary	25	30	29	26
Higher Secondary and above	10	16	25	12
Don't know	0	-	0	0
Total	100	100	100	100
Religion:				
Islam	85	82	91	85
Hinduism	14	19	7	15
Christianity	0	-	0	0
Buddhism	0	-	2	0
Total	100	100	100	100
Employment:				
Never employed	72	78	83	74
Previously employed	3	5	3	3
Currently employed	25	17	14	23
N	2668	740	271	3679

4.2. Demographic characteristics of IUD acceptors:

Marital status: All but 23 out of 3679 IUD acceptors were currently married at the time of interview. The 23 acceptors who were not currently married included those who were separated or divorced at the time of the survey or had lost their husbands between the time they accepted the reference IUD and the date of interview. A majority (18) of these 23 women had had the IUD

removed, however. There was no difference in the proportion of IUD users who were currently married between 1988 and 1989 evaluations.

Age: The mean age of the acceptors at the time of interview was 26.9 years. About 88 percent of the acceptors were below the age of 35 years; 59 percent were between 20 and 29 years of age. In terms of biological effectiveness, the age profile of IUD acceptors is favourable to fertility reduction. Fecundity is highest at ages 20 to 29 and it is within this age span that the majority of acceptors fall. The mean age of the IUD acceptors at the time of interview was three years lower than that of the current users surveyed in the 1989 CPS and 4 years lower than those surveyed in 1989 BFS. The mean age of IUD users was lower at 26.1 in 1988 and 26.2 in 1989 evaluation.

Number of living children: The mean number of living children at the time of interview was 2.9. This is exactly the same as the mean total desired family size as reported by all MWRAs in the 1989 BFS. The mean number of living children among the current users of any method was 3.1 according to 1989 CPS and 3.4 according to 1989 BFS, indicating that the IUD acceptors are drawn from amongst the lower parity women compared to all users, though this difference reflects the relatively high age of sterilized cases who comprise an appreciable proportion of all users. The mean number of living children was found to be 2.8 in both 1988 and 1989 evaluations.

Interval between last pregnancy termination and reference insertion: About one-third (34 percent) of the acceptors had their IUD insertions within one year of termination of their last pregnancy and a quarter (26 percent) between 12-23 months. The mean interval between the last pregnancy termination and reference insertion was 26.1 months. This interval was lower at 21.4 months in 1988 and 22.4 months in 1989 evaluation. However, these results suggest that there may be some overlap between post-partum amenorrhoea and IUD use. On average, women are protected from conception for a twelve-month period following the birth of a child because of post-partum amenorrhoea (1989 BFS/Huq et al., 1990). Early post-partum insertion may thus result in a double protection.

Desire for more children: Two-thirds of the acceptors (66 percent) did not want any more children or were undecided, while nearly a quarter (22 percent) wanted to have a child after a long gap. This suggests that, although the IUD is largely regarded as a terminal method, it nevertheless constitutes a spacing method for many women. The proportion who desired no more children was slightly lower in 1988 (63 percent) and also in 1989 (60 percent).

Table 4.2: Demographic characteristics of IUD acceptors.

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
Marital status:				
Currently married	99	99	99	99
Other	1	1	1	1
Total	100	100	100	100
Age:				
< 20	11	9	12	11
20-24	30	30	29	30
25-29	28	30	31	29
30-34	18	19	19	18
35-39	9	8	6	8
40-44	3	3	3	3
45+	1	1	-	1
Total	100	100	100	100
Mean age	26.9	26.9	26.4	26.9
Number of living children:				
0	1	1	1	1
1	19	21	21	20
2	27	29	32	28
3	22	24	21	22
4	14	13	17	14
5+	17	12	7	16
Total	100	100	100	100
Mean	2.9	2.7	2.6	2.9
N	2668	740	271	3679
Interval between last pregnancy termination and reference insertion:				
0-6 months	20	20	30	21
7-11 "	13	14	12	13
12-23 "	27	25	20	26
24-35 "	15	13	12	14
36-47 "	9	10	6	9
48-59 "	5	5	8	5
60+ "	11	13	12	12
D.K.	0	0	0	0
Total	100	100	100	100
N	2664	737	271	3672
Mean months	25.8	27.6	25.4	26.1
Desire for more children:				
Within one year	3	4	2	3
One or two year's time	6	6	4	6
After long gap	22	22	27	22
Uncertain	2	3	4	3
No more or undecided	67	66	63	66
Total	100	100	100	100
N	2668	740	271	3679

4.3. Knowledge and use of other family planning methods:

Knowledge of methods and sources: Knowledge of at least one modern method and of one reversible method, apart from the IUD is universal among the IUD acceptors (100 percent). Similarly, knowledge of at least one source of any modern method or any reversible method is also universal. Clearly, all IUD clients are aware of the main alternatives.

Similarly, knowledge of at least one source for specific methods among IUD acceptors is high. Knowledge of sources for the pill and female sterilization is practically universal (99 percent and 98 percent respectively). There is virtually no difference in these findings between the three evaluations. This high level of knowledge of specific methods as well as of their sources suggest that IUD acceptors base their acceptance of this method on choice rather than on ignorance of alternative methods.

While IUD acceptors are aware of alternative methods and supply sources, knowledge of the IUD among married women in general is far from satisfactory. The 1985/6 CPS, for instance, found that only 58 percent of women with no schooling had heard of the IUD. Thus, there may be a latent demand for IUD services among this large sector of the population.

Ever use of methods other than IUD: Of the IUD acceptors, 71 percent have used at least one method besides the IUD. Three-fifths (60 percent) had used the pill and over a quarter (29 percent) the condom.

Thus, about a quarter of the IUD users had never used any contraceptive prior to use of the IUD. This finding is almost constant across the three evaluations. Further analysis of the data revealed that IUD acceptors who had never tried any other method were relatively less educated and younger in age compared to those who had ever used a method prior to the IUD.

FP method used during one month prior to IUD acceptance: Nearly one-half (44 percent) of the IUD acceptors surveyed said that they had used a contraceptive method in the month prior to insertion of the reference IUD. The methods most commonly mentioned as having been used were the pill (21 percent) and MR (9 percent), followed by condom (5 percent) and the IUD (3 percent). This means that prior to using the reference IUD, 3 percent of the acceptors were using another IUD.

4.4. Comparison of characteristics:

Despite the scope for reversibility, IUD is regarded as a terminal method by the vast majority of users. For women who fear surgical procedure but do not want any more children the IUD and NORPLANT serve as a substitute for female sterilization. Although NORPLANT is under a clinical trial in Bangladesh, a recently conducted study revealed important findings on the

characteristics of women accepting NORPLANT as well as on its continuation rates. Thus, an attempt has been made to draw a comparison of the characteristics of acceptors of IUD with those of the acceptors of NORPLANT and tubectomy in terms of age at time of acceptance, number of living children, and education (Table 4.4)

The IUD users surveyed in the three annual evaluations had had the insertions during the years 1988-90. Similarly the NORPLANT study also sampled the acceptors who had started the device during the years 1988-90. Available data for the tubectomy clients refer to women sterilized during the months of August through October, 1987. Thus, the IUD and NORPLANT users are truly comparable in terms of the time period of acceptance. The characteristics of tubectomy clients in Bangladesh are relatively stable over time and thus the slight difference in period of acceptance will not effect the validity of the comparison.

Age: The mean ages of acceptors of IUD, NORPLANT, and tubectomy at the time of acceptance are almost similar, 25.9, 26.4, and 26.6 respectively. The proportion of acceptors below the age of 30 years was almost similar for IUD acceptors (79 percent) and NORPLANT acceptors (78 percent), but slightly lower for tubectomy acceptors (76 percent).

Living children: The mean number of children was highest for tubectomy acceptors (3.6), intermediate for NORPLANT acceptors (3.1), and lowest for IUD acceptors (2.9). Again, the proportion having more than 2 children was highest for tubectomy acceptors (82 percent), intermediate for NORPLANT acceptors (58 percent), and lowest for IUD acceptors (52 percent). The proportion of acceptors having only one child was highest for IUD acceptors (21 percent) compared to NORPLANT acceptors (12 percent).

The proportion desiring no more children or were undecided was much higher among NORPLANT acceptors (81 percent) than for the IUD (66 percent). Clearly, the IUD is more likely to be regarded as a spacing method.

Education: Only 16 percent of the females above five years of age are literate in Bangladesh (BBS, 1991). The proportion who had no education was highest for tubectomy acceptors (83 percent), intermediate for NORPLANT acceptors (59 percent), and lowest for IUD acceptors (52 percent).

The findings show that the IUD acceptors are drawn from more educated, younger, and lower parity women, while NORPLANT acceptors from a relatively less educated, middle age group, and of average parity women. Tubectomy acceptors in Bangladesh are drawn mostly from illiterate, older, and high parity women. In conclusion, it appears that these three methods cater to different types of women. Taken together, they could meet the needs of the majority of Bangladeshi couples.

Table 4.3: Knowledge and use of other family planning methods.

	BDG		NGO	All
	Rural	Urban		
Knowledge of specific methods:		(percent)		
Pill	100	100	100	100
Condom	93	96	98	94
Foam	31	38	48	34
Injection	97	99	96	98
Female sterilization	99	100	99	99
Male sterilization	92	93	91	92
Knowledge of any source for specific methods:				
Pill	99	99	99	99
Condom	91	94	96	92
Foam	28	34	41	30
Injection	95	97	91	95
Female sterilization	98	99	95	98
Male sterilization	88	90	86	89
Ever use of specified methods:				
Pill	58	63	71	60
Condom	26	33	44	29
Foam	4	7	10	5
Injection	12	14	13	13
Female sterilization	1	1	1	1
Male sterilization	0	0	-	0
Ever used at least one method, apart from IUD:				
Yes	69	73	79	71
No	31	27	21	29
Total	100	100	100	100

	BDG		NGO	All
	Rural	Urban		
	(percent)			
FP method used during one month prior to IUD acceptance:				
Pill	20	24	22	21
Condom	5	6	9	5
Foam etc.	0	0	-	0
Injection	2	2	3	2
IUD	3	4	3	3
MR	8	10	11	9
Other	4	3	4	4
No method	58	51	48	56
Total	100	100	100	100
N	2668	740	271	3679

Table 4.4: Comparison of selected characteristics of IUD acceptors with acceptors of NORPLANT and Tubectomy.

Characteristics	Tubectomy SCPFP/1987	NORPLANT 1988-90	IUD 1988-90
	(Percent)		
Education:			
No education	83	59	52
Primary	14	28	29
Secondary and above	3	13	19
Age (years):			
< 20	4	9	19
20-24	34	32	31
25-29	38	37	29
30-34	17	16	15
35+	7	6	6
Mean age	26.6	26.4	25.9
Living children:			
< 2	1	12	21
2	17	30	28
3	41	25	22
4 +	41	33	30
Mean	3.6	3.1	2.9
Percentage desiring no more child:	100	81	66
N	674	1151	9446

Source: a. Compensation payment.
b. Assessment of Quality

Chapter 5

PROFILE OF SERVICE PROVIDERS

The profile of the service providers includes selected characteristics, training and refresher training obtained, and their level of knowledge of the IUD.

5.1. Selected characteristics of service providers:

Age: The average age of the service providers is 32.5 years. Two-thirds (67 percent) of the providers were below 30 years of age and a quarter (25 percent) between 30 and 34 years of age (Table 5.1a).

Marital status: Ninety percent of the service providers are currently married. Six percent are divorced/separated/widowed. And the remaining four percent are never married (Table 5.1b).

Status of pregnancy: Only four percent of the IUD service providers were currently pregnant (Table 5.1c).

Contraceptive use status: Three-fourths (73 percent) of the IUD service providers were currently using any contraceptives at the time of interview. Most frequently mentioned methods of current use were oral pill (23 percent), condom (17 percent) and IUD (15 percent) (Table 5.1d). This profile of use is very different from the national profile. Both condom and IUD use are much higher, while the proportion sterilized is much lower.

Designation: At the overall level about 97 percent of the providers are paramedics, mostly FWVs and one percent were doctors. However, in the NGO clinics one-tenth are doctors, one-fourth are FWVs, and nearly one-half (45 percent) are paramedics other than FWVs such as Senior Staff Nurse/Staff Nurse/Paramedics (Table 5.1e).

Length of service: On an average, the service providers have worked in family planning for about 10 years. The length of service is lower by about 3 years for providers in NGO clinics compared to those in government clinics (Table 5.1f).

The providers have been posted, on average, for slightly over three years in the current clinic. About one-third (36 percent) are working in the current clinic for less than two years and a quarter for 2 to 3 years. About a quarter of the providers (24 percent) have been working in the current clinic for more than 6 years (Table 5.1g).

Table 5.1: Socio-demographic characteristics of service providers.

Characteristics	BDG		NGO	All
	Rural	Urban		
a. **Age:**		(Percent)		
< 20	5	1	19	5
20-24	21	18	41	21
25-29	42	46	12	41
30-34	26	25	20	25
35-39	5	7	8	6
40-44	1	1	-	1
45-49	0	2	-	1
Total	100	100	100	100
Mean	32.3	33.7	30.1	32.5
b. **Marital status:**				
Currently married	90	91	86	90
Never married	4	2	10	4
Divorced/separated/widow	6	7	4	6
Total	100	100	100	100
c. **Status of pregnancy status:**				
Currently pregnant	4	3	-	4
Not currently pregnant	96	97	100	96
Total	100	100	100	100
d. **Contraceptive use status:**				
Oral pill	21	25	24	23
Condom	17	16	21	17
Injection	6	6	2	6
IUD	15	13	17	15
Female sterilization	3	4	5	3
Male sterilization	0	1	-	0
Other	8	12	5	9
Currently pregnancy	4	3	-	4
No method	26	20	26	23
Total	100	100	100	100
N	319	156	42	517
e. **Designation:**				
Medical Officer/Doctor	-	1	10	1
FWV/LHV/LFPV	100	99	25	93
Senior Staff Nurse/Staff Nurse/Paramedics	-	-	45	4
Clinical staff/Aya/Midwife	-	-	2	0
Other	0	-	18	2
Total	100	100	100	100

Characteristics	BDG Rural	BDG Urban	NGO	All
			(Percent)	
f. Length of service (years):				
0	-	-	-	-
1	4	4	21	5
2-3	8	9	14	9
4-5	6	5	12	6
6-7	16	10	14	14
8-9	13	12	10	13
10+	53	60	29	53
Total	100	100	100	100
N	353	171	49	573
Mean years	9.6	10.6	6.5	9.6
g. Length of service in the current clinic (years):				
0	14	14	12	14
1	21	23	29	22
2-3	21	28	16	23
4-5	17	19	18	17
6+	27	16	25	24
Total	100	100	100	100
N	353	171	49	573
Mean years	3.5	3.0	3.2	3.3

5.2: Training and refresher training obtained by the providers:

Training: The service providers were asked about the institutions from which they received their training, number of IUD insertions performed during the training, reasons for not performing any insertion during training, and whether they received any refresher training. At the overall level, 92 percent of the providers received the training from the Family Welfare Visitor Training Institutes (FWVTIs). The places of training for the providers of NGO clinics varied widely. About one-third (35 percent) of the service providers in NGO clinics obtained training from the FWVTIs and 29 percent from NGO clinics, while about one-seventh were trained at the Medical Colleges (Table 5.2a).

Eighty-nine percent of the service providers performed IUD insertions during the training (Table 5.2b). The average number of IUD insertions performed during the training period was 18 (Table 5.2c). Over one-third (35 percent) of the providers performed less than 10 IUD insertions during the training, while one-fifth performed more than 20 insertions. These findings are very similar to those of the previous IUD evaluations.

One-tenth of the providers reported that they had not performed any IUD insertion during the training period. Nearly a quarter (22 percent) of the providers who had not performed any IUD insertions during training mentioned that the reason was the shortage of IUD clients during training (Table 5.2d). The next important reason was that those FWVs who were formerly Lady Health Visitors (LHVs) had not been required as part of their LHV training to perform IUD insertions; this was cited by nearly one-third of the providers who had not performed any IUD insertions during training. Surprisingly nearly two-fifths of the providers who did not perform any IUD insertions during their training, mentioned that they only observed IUD insertions. This indicates that training centers may not rigidly follow the requirement of practice insertions during training even though clients are available. According to the existing training curriculum it is necessary that each trainee perform at least 10 IUD insertions during their training. Clearly this requirement is not enforced strictly.

Refresher training: The service providers were asked whether they had received any refresher training on the delivery of IUD services. Two-thirds (66 percent) of the providers stated that they had received refresher training (Table 5.2e). The corresponding proportion in 1989 evaluation was much lower at 39 percent. Table 5.2f shows that 43 percent received the training within the last 2 years. This result reflects the substantial efforts of NIPORT to upgrade the skills of FWVs through refresher training. However, it was not asked whether IUD insertions were practiced during the refresher training.

Table 5.2: Training and refreshers training obtained by service providers.

	BDG		NGO	All
	Rural	Urban		
a. Institution/centers from where training received:		(Percent)		
FWVTI/TCRI/LHVT/MCHTI	96	99	35	92
Medical college	-	1	14	2
MCWC	2	-	2	1
Model FP Clinics/MFSTC	1	-	8	1
NGO clinics	-	-	29	2
Other	1	-	12	2
Total	100	100	100	100
N	353	171	49	573
b. Percentages who inserted IUD during training:	91	86	80	89
N	353	171	49	573

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
c. **Number of IUDs inserted:**				
< 10	38	29	28	35
10-20	45	43	39	44
21 +	16	26	33	20
Don't remember	1	2	-	1
Total	100	100	100	100
N	322	147	39	508
Mean	16.7	20.8	19.6	18.1
d. **Reasons for not inserting:**				
Shortage of IUD clients	29	8	30	22
Lack of confidence in inserting IUD	7	13	-	8
IUD insertions were not practiced during LHV training	36	29	20	31
IUD insertion observed only	29	50	30	37
Other	-	-	20	3
Total	100	100	100	100
N	31	24	10	65
e. **Whether refresher training was received**				
Yes	64	75	49	66
No	36	25	51	34
Total	100	100	100	100
N	353	171	49	573
f. **Years ago when refresher training received**				
0	23	20	42	23
1	20	20	8	20
2-3	35	23	29	31
4-5	9	16	21	12
6+	12	19	-	12
Don't remember	1	2	-	1
Total	100	100	100	100
N	226	129	24	379
Mean years	4.6	4.4	5.1	4.6

5.3. Profile of service providers in terms of their level of knowledge on the IUD:

Service providers was assessed for their understanding of the contra-indications, side-effects, and effective duration of the IUD.

Contra-indications: The service providers were asked to state the conditions in which an IUD cannot be inserted. Only unprompted responses were recorded. The most frequently mentioned contra-indications are `tender cervix', `heavy menstrual bleeding', `white discharge', `fibroid/tumor in uterus', `pregnancy', `pain in lower abdomen', `severe anemia', and `pelvic inflammatory diseases' (Table 5.3a). These findings are quite similar to those obtained in the previous years. It is important to note that 38 percent of the providers mentioned `high blood pressure' which is not a contra-indication.

Side-effects: The most frequently mentioned side-effects were `pain in lower abdomen' and `excessive menstrual bleeding', followed by `foul smelling white discharge', `irregular menstrual bleeding'/`spotting', `displacement of the IUD/missing thread', and `expulsion of the IUD'. Among other stated side-effects were `perforation of the uterus', `ectopic pregnancy/pregnancy', and `infection in uterus', and `husband's discomfort during intercourse' (Table 5.3b). These findings are quite similar to those obtained in the previous evaluations.

Effective duration of the IUD: The IUD currently being used in the Bangladesh national program is the CT-380A. When the CT-380A was first introduced, its recommended effective duration was 3 years. Later, the recommended duration was changed to 4 years. However, the Food and Drug Administration (FDA) has recently approved the CT-380A for continuous use by a woman for up to 6 years.

Most of the service providers (89 percent) stated that the effective duration of the IUD is four years (Table 5.3c). Six percent still considers that it is effective for three years, while only 2 percent considered it effective for 5 years and another 2 percent for 6 years. These findings indicate that the decision on the effective duration of the TCu 380A has not been disseminated to the IUD providers in Bangladesh. It would be beneficial if all IUD users can be informed by FWAs that the effective duration of the TCu is now six years. This will avoid confusion and perhaps suspicion when users return to clinics for removal after four years.

The providers were also asked whether they knew any one who had an IUD in-situ after the effective duration; one-seventh (14 percent) of the providers answered in the affirmative. This finding is similar to those observed in the previous evaluations. With the recent introduction of the FWA Register, the FWAs are better able to identify the users of expired IUDs and may be guided to bring these clients to clinics for removal and reinsertion.

Table 5.3: Level of knowledge of service providers concerning contra-indications, side-effects, and effective duration of the IUD.

Topics	BDG		NGO	All
	Rural	Urban		
	(Percent)			
a. **Contra-indications:**				
Tender cervix	91	92	90	91
Heavy menstrual bleeding	75	77	80	76
White discharge	71	68	61	69
Fibroid/tumor in uterus	70	59	59	66
Pregnancy	66	63	65	65
Pain in lower abdomen	55	39	76	52
No previous birth	54	47	63	53
Severe anemia	55	49	49	52
High blood pressure	36	38	53	38
Diabetic	20	21	29	21
Inter menstrual/post coital bleeding	18	20	20	19
History of recent septic abortion	10	7	18	10
Severe dysmenorrhea	9	14	25	12
Pelvic inflammatory diseases	20	22	31	21
History of ectopic pregnancy	9	12	25	11
Other	31	37	43	34
b. **Side-effects:**				
Excessive menstrual bleeding	85	88	94	87
Pain in lower abdomen	89	92	92	90
Foul smelling/white discharge/ Infection in uterus	68	82	80	73
Irregular menstrual bleeding/spotting	70	66	84	70
Displacement of the IUD/ missing thread	52	53	41	51
Ectopic pregnancy/pregnancy	27	33	16	28
Perforation of uterus	35	37	29	35
Expulsion of the IUD	44	37	18	40
Husband's discomfort during intercourse	14	13	29	15
Other	12	5	20	11
c. **Effective duration of the IUD:**				
3 years	5	7	10	6
4 years	91	89	78	89
5 years	2	2	4	2
6 years	2	2	8	2
Total	100	100	100	100
Mean	4.0	4.0	4.1	4.0
d. **Whether know any client having IUD in-situ after the effective duration:**				
Yes	11	21	16	14
No	89	79	84	86
Total	100	100	100	100
N	353	171	49	573

Chapter 6

PRE-INSTERTION SERVICES

The decision making process related to the acceptance of the IUD has been fully discussed in the 1988 evaluation report which revealed that the decision to accept an IUD is taken in full knowledge of alternative family planning methods and of their sources. On average the IUD acceptors had thought about the IUD for six months. For the majority of acceptors, the actual time taken between the final decision to accept an IUD and the actual insertion was a week. In the 1990 evaluation, the methodology of the study was expanded in order to generate information on the flow of communication between the user and the informer/service provider.

6.1. Decision making process:

Persons with whom discussed: All but one percent of acceptors reported having discussed the IUD with someone prior to the insertion. Most frequently mentioned discussants are FP workers (89 percent), husbands (76 percent) and other IUD users (45 percent) (Table 6.1a). In addition to the 76 percent who had discussed with their husbands before the insertion, 18 percent mentioned that their husbands knew after the insertions. Most of the remainder mentioned that their husbands did not know that they had accepted an IUD (Table 6.1b). The reasons for failure to disclose IUD use to husbands were that their husbands dislike family planning (52 percent), or disapprove IUD use (29 percent) or desire more children (8 percent) (Table 6.1c). Among those who did discuss with their husbands prior to use, 77 percent mentioned that they themselves suggested this method to their husband, while for only 23 percent their husbands suggested the method to them (Table 6.1d). This pattern lends support to findings of similar other studies that women are gradually becoming more capable of taking decisions by themselves on issues such as family planning acceptance, immunization for themselves and their children (EPI, 1991). The proportion of acceptors who spontaneously mentioned that they discussed the IUD with another IUD user was 51 percent. This proportion increased to 63 percent when acceptors were explicitly asked whether, in making the decision, they had discussed the IUD with any IUD user (Table 6.1e). This finding and also those from in-depth interviews reflects the importance of satisfied users as potential source of information and encouragement for acceptance of the method. Thirty-seven percent of the acceptors did not know any other IUD users. The proportion of IUD users knowing any past user has been gradually declining from 80 percent in 1988 to 75 percent in 1989, and to 63 percent in 1990. The reason for this decline in the percent knowing a past user is not clear, but it may reflect the higher proportion of women who are contacted by workers and served at their household level.

Accompaniment and distance to clinic: Nearly three-fourths (72 percent) of the acceptors went with someone to the clinic at the time they had an IUD insertion (Table 6.1f). The remainder either went alone (15 percent) or the insertion was done at their home (13 percent). About two-fifths (42 percent) were accompanied by a relative or neighbor, while 27 percent travelled to the clinic with an FP worker. Accompaniment to the clinic by FP workers and Dais/TBAs has been gradually declining, perhaps because of the withdrawal of the referral fee in November 1988.

The mean distance between the clinic and the IUD acceptor's home is 2.2 miles and the median distance is 1 mile (Table 6.1g). Two-fifths of the acceptors are within a radius of less than a mile, while another one-fifth travel a distance between one and two miles. However, one-tenth of the acceptors reported having travelled five or more miles. The distance of the clinic from the user's house has been gradually declining from 1988 to 1990, indicating that many more IUDs are now inserted at UHFWCs and satellite clinics rather than at upazila health complexes.

Reasons for choosing the IUD: The most frequently mentioned reasons for choosing the IUD are `effectiveness/ advantages of the IUD ' (87 percent),`disadvantages of other methods' (68 percent) and `motivation by FP worker/clinic staff' (75 percent) and `motivation by friend/relative/neighbour' (47 percent) (Table 6.1h). Motivation by "others" was mentioned by a lower proportion of users in 1988 (41 percent) than in 1989 (79 percent). In 1990 study the identify of "others" was specified and it was observed that they are primarily FP workers (75 percent).

The findings that advantages of the IUD and disadvantages of other methods are the most commonly stated reasons for IUD acceptance are consistent with data presented earlier on ever-use of other methods as well as those observed in the previous evaluations.

Reasons for having the IUD immediately after having MR: Eight percent of the IUD acceptors had the IUD insertion immediately after having an MR; over half of them (5 percent) had the insertion as per advice of the service provider, while the remainder (3 percent) had it at their own decision (Table 6.1i).

Type of referrer: Table 5.1h shows the distribution of acceptors according to the type of referrer as recorded in the clinic register. FP field workers were the referrers for three-fourths (76 percent) of the acceptors, while another 11 percent were referred by `clinic staff'. It is notable that referral of IUD clients to GOB clinics by NGO workers has been declining gradually from 16 percent in 1988 to 7 percent in 1990. It is important to note that compared to the findings of the 1988 evaluation, the role of Dais has been very nominal in 1989 and in 1990; only 1 percent of the clients were reportedly referred by Dais in 1990 compared to 13 percent in 1988. This may reflect

the decreasing interest of the Dais in referring IUD clients owing to withdrawal of referral fees. This drop in the referral of IUD clients by non-FP workers is likely to harm overall IUD performance. In the sterilization program, the number of cases referred by Dais also apparently fell when preferential referral fees for Dais were standardized (NIPORT, 1989).

Table 6.1: Decision making process about IUD.

	BDG		NGO	All
	Rural	Urban		
			(Percent)	
a. **Persons with whom discussed:**				
No one	1	1	0	1
Husband	75	74	80	76
Relative	9	8	10	9
Friend/neighbour	5	4	6	5
FP worker	90	87	90	89
Dai/TBA	4	2	0	3
IUD user	43	47	57	45
Other	2	3	3	2
b. **Whether husband knows that his wife had the IUD:**				
Knew before insertion	75	74	80	76
Knew after insertion	18	20	15	18
Husband does not know	6	6	4	6
N	2668	740	271	3679
c. **Reasons for not telling to husband about acceptance of IUD:**				
Husband dislikes FP	57	46	8	52
Disapproves IUD use	26	29	67	29
Husband desire a child	7	7	17	8
Other	10	18	8	11
N	171	44	12	227
d. **Whether husband suggested or client suggested to accept an IUD:**				
Client suggested	76	79	75	77
Husband suggested	24	21	25	23
N	2011	545	218	2774

	BDG		NGO	All
	Rural	Urban		
			(Percent)	
e. Discussion with IUD users:				
No IUD users known	39	36	29	37
IUD user known, but not discussed	12	13	9	12
Discussed with IUD users	49	51	62	51
Total	100	100	100	100
f. Accompaniment to clinic:				
Insertion done at home	12	12	28	13
No one	15	15	17	15
FP worker	27	27	20	27
TBA/Dai	3	1	1	2
Relative/neighbour	43	43	34	42
Child	30	30	23	29
Other	1	1	2	1
g. Distance to clinic in miles:				
0	38	38	55	40
1	22	22	16	21
2	13	12	11	13
3	11	10	7	11
4	5	6	2	4
5+	11	12	9	11
Total	100	100	100	100
Mean	2.2	2.3	1.6	2.2
Median	1	1	0	1
h. Reasons for choosing IUD:				
Effectiveness/ advantages of IUD	86	88	92	87
Disadvantages of other methods	67	68	77	68
Motivation by FP worker/ clinic staff	76	72	76	75
Friends/relative/neighbor	47	46	53	47
Lack of prior knowledge on other FP methods	6	3	3	5
Advised by service providers after MR	5	6	7	5
Other	2	1	2	1

	BDG		NGO	All
	Rural	Urban		
			(Percent)	
i. Reasons for having the IUD immediately after having MR:				
Only IUD insertion	93	90	90	92
IUD followed by MR:				
Own decision	2	5	4	3
Service Provider's advise	4	5	6	5
Other	1	1	0	1
Total	100	100	100	100
j. Type of referrer:				
BDG FP field worker	76	69	2	69
NGO FP field worker	2	2	73	7
FP worker (unspecified)	1	-	0	1
Registered Dai	1	0	-	1
Self/relative/neighbour	4	12	12	6
Clinic staff	12	12	0	11
Others	4	5	13	5
Total	100	100	100	100
N	2668	740	271	3679

6.2. Further insights from in-depth interviews about information exchange prior to insertion:

In-depth interviews were conducted with a sub-sample 42 IUD acceptors randomly selected from amongst the sample IUD acceptors of 1990. One of the purposes of the in-depth interviews was to elicit information on the diffusion of knowledge before acceptance of the IUD. Open ended questions were asked to the IUD acceptors about the following aspects:

a. initiation of discussion;
b. contents of discussion;
c. setting for the interactions;
d. proximity of acceptor's residence from that of informer;

Initiation of discussion: In most cases someone informs the prospective clients about the IUD. The informers are generally past users of IUD among the relations in the neighborhood or an FP worker. Several aspects as to how a prospective client is likely to be influenced to accept an IUD are revealing. Firstly, a prospective client is most likely to be influenced by a relation preferably a past user of IUD, such as, husband's brother's wife, husband's sister, brother's wife, auntie, aunt-

in-law, husband's cousin's wife, cousin, cousin's wife, etc. Secondly, young women prefer discussing family planning with their friends or relatives whom they have known since childhood. In rural areas most young women go to their paternal house to deliver a baby. It is very common that, during this period, family planning is discussed with these young mothers by those who already had IUDs or are well versed about family planning methods. Thirdly, after being first approached, informed, or advised by someone, the prospective clients obtain further details from FP workers preferably hailing from the area of their paternal house. And finally, they discuss with their husbands and mother-in-laws primarily for sharing views and gaining consent or permission from them. Husbands and mother-in-laws may also initiate discussion.

A numerical analysis of the relationship of discussants to the prospective acceptor is shown below. While most exchange of information takes place between persons of the same generation, there is also considerable vertical transmission from the older generation. As indicated above, women talk about the IUD to a surprising extent with their parental relations. One possible implication is that women who reside far from their parental home may be at a disadvantage compared to those living close by. Young wives are often regarded as outsiders by their husband's family and free exchange of intimate information and advice may be limited.

Generation of discussions:	**Number of persons**
Same	32
Parents'	12
Children's	2
Not ascertained/non-relative	23
Relationship of discussants:	
Husband's side	27
Respondent's side	19
Not ascertained/non-relative	23

Contents of discussions: During the interactions between the informer and the prospective client a wide range of topics are discussed. The informer, if a past IUD user, knows already from her own experience what a prospective user may need to know; so she informs on her own about the aspects that are considered important. On the other hand, the prospective client raises many queries with the informer. Some of these issues are later checked with the FP worker. If a worker is the informer, the prospective client seeks to confirm with a friendly past user what the worker had already told her. It is revealing to note that the prospective clients tend to trust a worker when she is a relation, friend, or is known from childhood. This implies that to become an effective motivator, worker may need to be known to the client previously, or to become a friend, or to seek help

from a satisfied user, preferably a friendly relation in the neighbourhood whom the client trusts.

The type of information that is given to the prospective client by past users or that is requested by the prospective client is summarized below. These should form the basis of counselling provided to the IUD service providers. These topics of counselling should be built into the training curriculum and the counselling check-list should contain all these aspects since these are the items of information that a prospective client aspires to know. It was mentioned by several acceptors that, had they been told all that they needed to know, they would have remained happy with the device even with problems; some said they would not have had the device removed.

Contents of discussion:

		Number	Percent
1.	Effective duration of the IUD	17	40.5
2.	Is there any pain during insertion	17	40.5
3.	How does the IUD look like	11	26.2
4.	Will there be any problem	10	23.8
5.	Disadvantages of the IUD	9	21.4
6.	Possible side-effects/complications	8	19.0
7.	Whether it can create any problem in household work	8	19.0
8.	Will there be any problem in meeting with husband	6	14.3
9.	Who inserts it, is it a male or a female	6	14.3
10.	Is it inserted in presence of others	4	9.5
11.	Where is it inserted	2	6.8
12.	Advantages of IUD over other methods	2	4.8
13.	Does it cause excessive bleeding	2	4.8
14.	Can it be removed if there is any problem	2	4.8
15.	Will it go inside the abdomen	1	2.4
16.	Will it cause any infection	1	2.4
17.	Whether free treatment and medicine will be given in case of any problem	1	2.4

		Number	Percent
18.	How much money will be given	1	2.4
19.	How is it inserted	1	2.4
20.	Will there be any surgery	1	2.4
21.	Is it necessary to use everyday	1	2.4
22.	Where can it be inserted safely	1	2.4
23.	Is there any restriction for food	1	2.4
24.	Will the thread go inside the uterus	1	2.4
25.	Whom to consult in case of any problem	1	2.4
26.	Whether it will make the client skinny	1	2.4
27.	Whether it will cause infertility	1	2.4
28.	If husband is not informed, can he feel	1	2.4
29.	Will there be any problem to lift heavy things	1	2.4
30.	How much the thread will come during menstruation	1	2.4
31.	How much time does it take	1	2.4
32.	Is there any fear when it is inserted	1	2.4
33.	What are the follow-up requirements	1	2.4

These queries comprise a long list of topics. However, it may be useful to provide much of this information to a prospective user in order to ensure greater client's satisfaction and thereby higher rate of retention. Some information may be provided by the FWAs during motivation, while other topics can be covered by the FWVs in the clinic.

Setting for the interactions: Discussions between the acceptor and the informer usually occur during their leisure, especially when their husbands are out for work and they don't have a pressure of household work, such as cooking. The peak periods for these discussions are: the morning (when their husbands go to work after having their breakfast and their children go to school or to play) and the afternoon (when they finish their mid-day meal). There is no occasion when they specifically like to discuss family planning; it comes up in relation to other such topics as rearing of children, health problem, and economic problem. Usually, discussion about family

planning is held between two persons maintaining confidentiality. However, in some cases more than two persons also share these discussions, but they are mostly of similar age group and have friendly relations and also can trust each other to maintain confidentiality. Sometimes neighbours meet in common utility places (for example, a pond where they bath or wash dishes) and discuss about family planning. Before taking a final decision a prospective acceptor needs to be assured by an user about the advantages of the method and also that it is not harmful and will not create any health problem. Therefore, a satisfied user is likely to be the most suitable person to help in the decision making process. FP workers should be trained to enlist the help of satisfied users in motivating her peer group. The evidence suggests that motivation by a relation/neighbour may be more effective than by an FP worker.

Proximity of acceptor's residence to that of informer: Acceptors and informers are in most cases neighbours or living within the same `bari'. However, a substantial proportion receive the information from relations and FP workers in the area of their paternal houses which would be typically within a mile or two from the acceptor's house. In some cases, relations living in towns also carry the message for the rural women. Colleagues in working places also discuss among themselves during breaks.

6.3. Nature of counselling:

Counselling of IUD clients is done primarily by the provider herself in almost all clinics, except in a few large clinics where separate counsellors are engaged. Ideally, counselling should precede the insertion. The same consellor should provide support before, during, and after the insertion. This is feasible in almost all clinics providing IUD services in Bangladesh, since most clinics providing IUDs do not have separate counsellors. The issue is the extent to which the providers, particularly the FWVs, are trained in counselling. While a professional background in counselling is not essential, appropriate training should be provided to any staff responsible for counselling.

The IUD acceptors were asked whether anyone had counselled them on:

a) the length of effectiveness of the IUD;
b) the need for a follow-up visit;
c) possible side-effects;
d) response to problems; and
e) need to feel the thread of the IUD.

Save for one percent of the acceptors, all were counselled on the length of effectiveness of the IUD and 94 percent were advised to report in case of problem. Eighty-four percent of the acceptors were counselled on need for a follow up visit and the need to feel the thread. A lower proportion (72 percent) of the

clients recalled advice about possible side-effects (Table 6.2a). It is important to note that the extent of counselling has increased between 1989 and 1990 evaluations.

Source of counselling: The main sources of counselling were the FP workers (65 percent) and doctor/FWV/counsellor (19 percent). IUD users were also a source of such information for 31 percent of the acceptors (Table 6.2b).

Perceived length of effectiveness of the IUD: The mean perceived length of effectiveness of the IUD was 3.7 years. For 53 percent of acceptors, the perceived length of effectiveness was 4 years, and for 38 percent, 3 years (Table 6.2c). The proportion mentioning the length of effectiveness as 4 years has increased substantially from 23 percent in 1988 to 53 percent in 1990. It is evident that the IUD service providers have not yet started disseminating information that TCu 380A is effective for eight years.

Need for follow-up visit: The ideal practice for followup of IUD clients may be summarized as: "whenever possible, women who have had devices fitted should be examined one or two months after fitting, at six months, and again after 12 months; thereafter an annual check is desirable" (IPPF, 1980). Different types of followup procedures are recommended in different manuals supplied to IUD service providers in Bangladesh. Relevant information in these manuals is as follows: (a) IUD clients should be followed within one or two months of insertions; if there is no problem no more followup is necessary within a year; the acceptor should be informed that if there is any problem she should report to clinic, (GOB/DFP, 1986); (b) IUD clients should have a check-up after three months of insertion; the acceptor should be informed that if there is any problem she should immediately report to the clinic (IEM Unit, 1987); (c) Once the IUD client is checked up within three months of insertion and if there is no problem she does not have to report to clinic within four years when the IUD should be replaced by a fresh IUD (IEM Unit, 1987).

One-sixth (16 percent) of the acceptors were not advised to report to the clinic for a follow-up visit (Table 6.2d). Three-fifths (61 percent) were asked to visit the clinic in case of a problem, while 18 percent were advised to return within 15 days and 10 percent within 16-30 days. The proportion of clients counselled on the need for a follow-up visit has increased substantially from 67 percent in 1988 to 84 percent in 1990.

Counselling about side-effects: The proportion of acceptors who were counselled on possible side-effects increased slightly from 60 percent in 1988 to 71 percent in 1990. The possible side-effects that were mentioned during counselling were: heavier bleeding (57 percent); abdominal pain (54 percent); and spotting (9 percent) (Table 6.2e). Slightly over a quarter (29 percent) of the acceptors were not informed of any probable side-effects due to insertion of the IUD.

Counselling about response to problems: With the exception of only 6 percent, all the acceptors were counselled on what to do in case of any problem. Four-fifths (79 percent) were advised to report to the clinic, while a quarter (26 percent) were advised to contact the field worker (Table 6.2f).

Need to feel the thread: One-sixth (16 percent) of the acceptors were not counselled on the need to feel the thread (Table 6.2g). However, 85 percent of the acceptors reported having checked the thread. The proportion who were counselled on the need to feel the thread was higher in 1990 (85 percent) than in 1989 (72 percent).

Score of counselling: In order to assess the level of counselling a scoring plan was developed giving a score of `1' for each of the five topics covered in counselling. By totaling the score for each individual acceptor, the level of counselling was ascertained. It appears from Table 6.2h that over one-half of the acceptors (57 percent) had been counselled on all the five issues. The mean score on counselling was 4.3, compared to 3.2 in 1988. This improvement is no doubt related to large number of staff who have received refresher training in the recent past.

As shown in the row of figures below, the mean counselling score is not influenced by the interval between insertion and interview. This finding is reassuring because it suggests that memory lapse is not affecting the ability of respondents to report the amount of counselling received.

	Interval in months															
	<4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18+
Mean score	4.5	4.1	4.0	4.0	4.4	4.4	4.3	4.3	4.3	4.2	4.4	4.4	4.3	4.4	4.4	4.5

Table 6.2: Nature of counselling.

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
a. Major topics on which counselled:				
Length of effectiveness	99	99	99	99
Need for follow-up visit	84	87	73	84
Information on side-effects	71	72	78	72
Response to problems	94	94	95	94
Need to feel the thread	83	88	86	84

	BDG		NGO	All
	Rural	Urban		
			(Percent)	
b. **Source of counselling on effective duration of IUD:**				
Doctor/FWV/counsellor	19	22	14	19
FP worker	66	61	66	65
TBA/Dai	1	0	-	1
Agent	-	-	-	-
IUD user	12	15	17	13
Mass media	0	1	-	0
Other	2	1	3	2
N	2668	740	271	3679
c. **Perceived length of effectiveness (in years):**				
1	0	-	-	0
2	1	1	0	1
3	39	36	35	38
4	52	53	58	53
5+	8	9	6	8
D.K.	1	1	2	1
Total	100	100	100	100
N	2668	740	271	3679
Mean	3.7	3.7	3.7	3.7
d. **Counselling about need for follow-up visit:**				
No counselling	16	13	27	16
Within 15 days	16	20	27	18
16-30 days	8	11	21	10
For problem	64	61	34	61
At expiry of term	3	2	1	3
Other	1	2	2	1
e. **Counselling about side-effects:**				
No counselling	29	28	22	29
%mentioning:				
Pain in lower abdomen	52	56	64	54
Heavier menstruation	57	54	65	57
Spotting	9	9	14	9
Expulsion	4	5	8	4
Perforation	1	1	1	1
Ectopic pregnancy	0	-	-	0
Other	3	3	2	3

	BDG		NGO	All
	Rural	Urban		
		(Percent)		
f. Counselling about response to problems:				
No counselling	6	6	5	6
%mentioning:				
Report to clinic	80	80	69	79
Contact field worker	25	23	36	26
Contact doctor	2	3	5	3
Other	1	2	1	1
g. Counselling about need to feel the thread:				
No counselling	17	12	14	16
% mentioning:				
Checked the thread	85	88	84	85
h. Amount of counselling: Summary score**				
0	0	-	-	0
1	3	2	1	3
2	4	4	1	4
3	9	8	13	9
4	26	27	36	27
5	57	60	49	57
Total	100	100	100	100
Mean score	4.3	4.4	4.3	4.3
N	2668	740	271	3679

** A score of `1' was given for each of the five topics (length of effectiveness of IUD, need for followup visits, information on side-effects, response to problems, and need to feel the thread) covered in counselling.

Chapter 7

INSERTION SERVICES

This chapter discusses possession of functional equipment, steps followed in performing an IUD insertion, record keeping, availability of IUD money, and problems in rendering IUD services.

7.1. Types of clinic and distance of service providers residence from the clinic:

Types of clinic: One-half of the clinics from where the service providers were interviewed were UHFWCs---44 percent government constructed UHFWCs and 7 percent rented UHFWCs. Thirteen percent of the clinics were the MCH unit of the UHCs and 9 percent were UZ Headquarters clinics. Other types of clinics were FP FWCs temporarily accommodated in Union Parishads, Rural Dispensaries/Sub-centers (4 percent), clinics attached to various health facilities in urban areas (3 percent), and NGO clinics (9 percent) (Table 7.1a).

Distance of service provider's residence from the clinic: Among many aspects that may influence quality of clinical services is the distance from which the service provider has to travel to the clinic. UHFWCs are being constructed in every union with residential quarters for the FWVs in order to facilitate service provision in rural areas. Concern is expressed by some FWVs regarding the suitability of staying within the UHFWCs in view of the insecurity in isolated rural locations, lack of appropriate facilities, poor quality of maintenance, etc. Therefore, an assessment was made of the proportion of FWVs residing within the UHFWCs and the reasons for residing elsewhere.

The quality of clinical services are is likely to be affected when the service providers travel a long distance to attend the clinic. Instances were found where service providers, travelling from long distances, were prone to be irregular and unpunctual. Delays in their attendance and the urge to leave the center before the end of the clinic hour are likely to cause deprivation for the clients. Therefore, an assessment was made of the distance from which the service provider attends the clinic.

Table 7.1b shows that 30 percent of the providers live within the UHFWCs and another 26 percent live within less than a mile. Among the remainder, 23 percent live within a distance of 1-3 miles. The remaining one-fifth (21 percent) of the service providers attend the clinic from a distance of four miles or more; among this latter group, 13 percent attend from a distance

of 6 miles or more. This finding underscores the need for the program to ensure a closer proximity of residence of the service providers.

Thirteen percent of the FWVs were found to have been residing outside the UHFWC despite the fact that they have a residential accommodation within the UHFWC that comprises a separate compound where they can live with their entire family. One-third (35 percent) of these FWVs live within less than 2 miles away from the UHFWC, while nearly one-third (29 percent) live five or more miles away from the UHFWC (Table 7.1c). Considering this finding as representative, about 306 out of 2354 FWVs posted at the UHFWCs constructed up to December 1990 are living outside of the UHFWCs in deviation from the laid down principles of the government.

Reasons for not residing in the UHFWC: Of those who were not residing within the UHFWC, one-third (34 percent) mentioned that the UHFWC was located in an isolated place or insecure, another one-third (31 percent) mentioned that the `quarter is not habitable or damaged by cyclone'. Sixteen percent mentioned that their `husbands live elsewhere or that they needed to look after the family' and another 13 percent mentioned that there is no electricity/water in the UHFWC. Nine percent of the FWVs mentioned that their own residences are well communicated to the UHFWC (Table 7.1d).

Annual IUD performance is relatively higher in UHFWCs where the FWV lives within the UHFWC (89 cases) than where the FWV lives away (64 cases). In the rural areas, distance of the residence of FWV from the UHFWC makes a big difference in the number of IUD insertions in the UHFWC. Table 7.1e shows that the average number of annual IUD insertions in the UHFWC is inversely related to the distance of the residence of FWV. For example, the number of insertions falls from 75 cases for UHFWCs having the FWV living within a mile to 47 cases when she lives 5 miles away and to only 34 cases when she lives more than 10 miles away. This pattern does not prove a causal connection because there are many potentially confounding factors. For instance UHFWCs that are in poor condition and unsuitable for habitation, are likely to be situated in remote areas where demand for services is low. Nevertheless the results strongly suggest that FWVs who live in the center or very close to it are more productive. The matter warrants further investigation.

Table 7.1: Types of clinic and distance of service providers residence from the clinic.

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
a. Types of clinic:				
UHC (MCH Unit)	10	23	-	13
UZ Headquarters clinic	9	10	-	9
UHFWC (constructed)	55	33	-	44
UHFWC (hired)	9	6	-	7
FWCs in Union Parishads	12	12	-	11
FP clinic	-	9	-	3
Rural Dispensary/Sub-center	5	7	-	4
NGO clinic	-	-	100	9
Total	100	100	100	100
b. Distance of service provider's residence from the clinic:				
UHFWC	34	30	2	30
0	26	23	33	26
1	8	8	6	8
2	8	11	12	9
3	5	6	10	6
4	4	3	10	4
5	3	7	4	4
6-10	8	10	19	9
11+	4	2	4	4
Total	100	100	100	100
N	353	171	49	573
Mean distance	3.2	3.0	3.3	3.2
c. Distance of residence of FWVs having accommodation in the UHFWC but not residing there:				
0	28	12	-	25
1	12	-	-	10
2	21	6	-	18
3	11	12	-	12
4	6	6	-	6
5	6	23	-	9
6-10	9	35	-	13
11+	7	6	-	7
Total	100	100	-	100
N	86	17	-	103
Mean distance	3.4	6.8	-	4.0

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
d. Reasons for not residing in the FWV quarter within the UHFWC:				
Insecurity/isolated location	36	20	-	34
Quarter in not habitable/ damaged in cyclone	35	7	-	31
Husband lives elsewhere/to look after the family	13	33	-	16
Unavailability of electricity/water	12	20	-	13
Well communicated with FWV's own residence	9	7	-	9
No quarter allotted	-	7	-	1
No quarter in FWC	-	13	-	2
N	86	15	-	101
e. Mean annual number of attendances of IUD clients by residence of FWV:				
UHFWCs where the FWV resides within (Mean):	89			
UHFWCs where the FWV resides away (Mean):	64			
Distance				
0	75			
1	52			
2	67			
3	74			
4	69			
5	47			
6-10	46			
11+	34			
All				
N	86			

7.2. Accommodation arrangements, possession of IUD manual and equipment, and cleanliness of the clinic:

The quality of IUD insertions partly depends on the accommodation arrangements, availability of appropriate equipment and supplies, and cleanliness of the equipment and the clinic.

Accommodation arrangements: At the overall level 14 percent of the clinics had no waiting arrangements, while 39 percent of the clinics had no arrangement for allowing patients to lie down and rest awhile while recovering from a painful insertion or removal (Table 7.1a).

Receipt of IUD manual: One-fourth (24 percent) of the service providers did not have any IUD manual in their possession (Table 7.1b).

Possession of equipment: All but two to four percent of the service providers reported that they had sponge holder, speculum, uterine sound, artery forceps, scissors, and kidney tray (Table 7.2c). About 10 to 14 percent of the providers did not have a bowl for cotton, gloves, and savlon/dettol. Cotton, though an essential consumable item, was available only with 55 percent of the providers. Five percent of the providers did not have stove/cooker/heater and 32 had percent neither an IUD insertion table nor a general table for use as IUD insertion table. However, it is very important to note that, compared to the previous evaluations, the availability of an IUD insertion table and stove/cooker/heater for sterilizing instruments was much higher in 1990. For example, in 1988, an insertion table was available in 62 percent and stove/sterilizer in 68 percent of the clinics; the corresponding figures for 1989 were 67 percent and 75 percent respectively compared to 91 percent and 87 percent respectively in 1990.

Cleanliness: The research staff were instructed to observe the cleanliness of the clinic in terms of the floor, operating theater, instrument, and the IUD insertion table. Results presented in table 7.2d show that at the overall level the floor and the IUD insertion table were rated as clean in 44 and 45 percent of the clinics; the instrument were clean in 64 percent of the clinics; but the operating theaters were judged clean only in 37 percent of cases. Although these observations are subjective, the striking differences between the NGO and BDG clinics suggest that BDG clinics need to improve their current standards.

Table 7.2: Accommodation arrangements, possession of IUD manual and equipment, and cleanliness of the clinic.

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
a. **Accommodation arrangements:**				
Waiting arrangement:				
None	16	13	2	14
Chair	3	7	10	5
Bench	81	79	86	80
Other	0	1	2	1
Resting arrangement:				
None	46	33	12	39
Separate room	23	25	47	26
Veranda	25	30	29	26
Other	6	12	12	9

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
b. Type of manual:				
None	22	27	31	24
C-T 380 manual	61	49	49	56
IUD Manual	27	29	25	27
Other	0	4	4	2
c. Equipment:				
Sponge holder	96	94	100	96
Speculum	98	99	96	98
Valsellum (Tenaculum)	81	85	96	83
Uterine sound	97	92	96	96
Scissors	97	92	96	96
Artery Forcep	98	93	98	97
Kidney Tray	94	96	94	94
Bowl for cotton	85	91	98	88
Gloves	86	88	98	87
Cotton	53	53	80	55
Savlon/Dettol	85	85	98	86
Stove/Cooker/Heater/Sterilizer/ Autoclave	95	95	98	95
IUD insertion table	36	30	47	35
General table used for IUD insertion	30	33	51	33
d. Cleanliness:				
Floor was clean	37	46	94	44
OT was clean	29	39	92	37
Instrument was clean	60	66	92	64
IUD insertion table was clean	39	44	98	45
N	353	171	49	573

7.3. Steps followed in performing an IUD insertion and aseptic precautions:

Steps followed: The service providers were asked to describe the steps they follow in performing an IUD insertion. As may be seen in Table 7.3a, about 90 percent of the providers adhere to the following steps: clinical registration, selection of client, P.V. examination, and post-insertion counselling. Preparation of instrument, pre-counselling, and putting on gloves were mentioned by a proportion of respondents varying from 74 percent to 63 percent. Making payments to clients was mentioned by 81 percent of the providers. It is important to note that at

the overall level no more than 44 percent of the providers mentioned counselling about feeling the thread or patient rest time.

There exists a pronounced difference in these findings between the 1990 and previous two evaluations. Higher proportions of providers said that they followed the listed steps in 1988 and also in 1989. In the 1988 and 1989 evaluations the providers were asked, when relevant, the reason why they did not follow a step. In such cases, the providers tended to correct themselves and say that they had followed the particular step. In 1988 evaluation and also during the initial phase of 1989 evaluation the field interviewers corrected the answers, but in 1990 the questionnaire was redesigned and reasons were not asked. Thus, the difference between 1990 and the previous evaluation results reflects a change in the survey procedures rather than a genuine change in provision of services.

Use of hand gloves: Service providers were asked whether they use hand gloves. Ninety-one percent stated that they use hand gloves regularly, 7 percent sometimes, and 2 percent never (Table 7.3b). Research staff were asked to look at the condition of sterility of the gloves asking a question to the provider, "Would you please show me the gloves you would use, if an IUD client comes now ?" Table 7.2c shows that the gloves seen in one-third of the clinics were not sterile. Similarly, results of clinic observation also showed that no more than 85 percent of the providers used hand gloves and one-third of the gloves were found dirty.

Sterilization of equipment: Table 7.3d shows that no more than 81 percent of the providers always sterilize their instruments. Lack of a stove/sterilizer was mentioned as the reason by 6 out of 7 and shortage of kerosine oil was mentioned by 1 out of 7 providers who never sterilize their equipment. Providers were also asked how they sterilize their equipment. Very few providers reported using an autoclave or sterilizer for sterilization of equipment. The common practices of sterilization appear to be boiling in water (42 percent), using antiseptic solution (33 percent), and both boiling and using antiseptic solution (37 percent). One-third of the service providers said that they use antiseptic solution to sterilize their instruments (Table 7.3f). As antiseptic solution alone is an ineffective sterilizing agent, use of metal instrument without boiling or autoclaving is a possible source of infection. Results of clinic observation revealed that two-thirds (42 percent) use antiseptic solution only and a quarter boiled and used antiseptic solution. Since dettol/savlon solution is not enough for sterilization, use of tap water to prepare the solution may infect the boiled instruments for those who use antiseptic solutions after boiling. Thus, no more than one-third of the providers were following the appropriate procedure of sterilization.

Preparation of the C-T for insertion: Service providers were requested to demonstrate how they push the IUD into the inserter, that is, whether they do it keeping the IUD inside the plastic cover or after removing it from the plastic cover. Four-fifths (85 percent) of the service providers demonstrated that the IUD was prepared while keeping it inside the plastic cover; most of the remainder removed it from the plastic cover using hand gloves (Table 7.3g). The former method is preferable because it permits very little chance of infection.

Except for only one percent, all the providers said they insert the C-T into the inserter no longer than 5 minutes before insertion---the time suggested in the manual (Table 7.3h).

It is very important to note that contrary to the prescribed procedure, six percent of the providers put the C-T into dettol/savlon solution prior to insertion which is likely to destroy the sterility and also may cause irritation and introduce infection into the uterus (Table 7.3i). Perhaps the program has inherited a tradition of using antiseptic solution from the IUD program of the 1960s when Lippes Loop and its inserters were supplied in unsterile packets and providers were asked to put them into the solution. But that procedure is extremely harmful for TCu 380A since it comes in fully sterile packets.

Table 7.3: Reported steps followed by providers in performing IUD insertions and aseptic precautions.

Steps followed/health precautions	BDG		NGO	All
	Rural	Urban		
	(Percent)			
a. Steps followed:				
Clinical registration	91	85	88	89
Pre-counselling	67	73	69	69
Selection of the client/ case history/assessment of contra-indications	86	93	94	89
Preparation of instruments	72	78	80	74
Putting on gloves	59	64	88	63
Bimanual/P.V. examination	85	84	86	85
Post-insertion counselling	91	90	86	90
Feeling the thread	46	44	31	44
Patient rest time	33	40	57	38
Payment	80	85	67	81
b. Use of hand gloves:				
Always	89	94	98	91
Sometimes	9	5	2	7
Never	2	1	-	2

Steps followed/health precautions	BDG		NGO	All
	Rural	Urban		
		(Percent)		
c. Observation of gloves:				
Sterile	57	62	90	61
Not sterile	36	36	10	34
No gloves in stock	7	2	-	5
Total	100	100	100	100
d. Whether sterilize IUD equipment and materials before performing IUD insertion:				
Always	78	83	96	81
Sometimes	21	16	4	18
Never	1	1	-	1
Total	100	100	100	100
e. Reasons for not sterilizing the IUD equipments:				
		(Number)		
Shortage of sterilizer/stove	4	2	-	6
Shortage of kerosine oil	1	-	-	1
N	5	2	-	7
f. Sterilization process:				
Use autoclave	6	9	41	10
Use sterilizer	4	11	45	10
Boil in water	39	49	41	42
Boil and use antiseptic solution	39	36	27	37
Use antiseptic solution	37	29	16	33
Other	1	-	-	0
N	348	169	49	566
g. Process of pushing the C-T into the inserter:				
Push the C-T keeping it inside the plastic cover	27	35	57	32
Push the C-T removing it from the plastic cover using gloves	10	9	12	10
Push the C-T removing it from the plastic cover without gloves	5	5	-	4
Slightly open the bottom of the packet without removing the IUD	57	47	31	53
Other	1	4	-	1

Steps followed/health precautions	BDG		NGO	All
	Rural	Urban		
		(Percent)		
h. **Minutes before the arms of the IUD is inserted into the inserter:**				
0	-	9	-	3
1-5	99	90	98	96
6-10	1	1	2	1
Mean	1.9	1.6	1.8	1.8
Total	100	100	100	100
i. **Whether put the IUD into dettol/savlon solution prior to insertion:**				
Yes	7	4	4	6
No	93	97	96	94
N	353	171	45	573

7.4. Insertions in clinics and satellite clinics:

It is likely that the number of insertions performed in a clinic influences the quality of the services rendered (as well as vice versa). For example the retention rate for clients who used a clinic where 50 or less insertions were done in 1989 and also in 1990 was lower than the rate for clients who used a clinic where more insertions were done. Although interpretation of this finding is difficult, providers who perform few insertions per year may lose their skills through lack of practice and this lack of skill may influence the likelihood of pain during insertion, infection and client satisfaction. To broaden our understanding of this complex topic, the general MCH-FP performance of clinics was obtained in 1990 evaluation, and attempts are made to examine whether overall patient load has any influence on quality of services or vice versa.

IUD performance in 1990: On an average 110 IUDs were performed per clinic during the year 1990. Average performance in NGO clinics is much higher at 317. Thirty percent of the clinics performed up to 50 IUD cases, another 31 percent performed between 51 and 100 cases; 25 percent performed between 101 and 200 cases, and 11 percent of the clinics performed over 200 cases during 1990. Three percent of the clinics, however, could not show records of their performances (Table 7.4a).

Mothers served in 1990: Service providers were asked about how many mothers the clinic served during 1990. The reliability of this information is uncertain and caution is needed in interpretation of results. Moreover about one-seventh of the

clinics (14 percent) did not maintain any record. The mean number of female patient visits served was 2216, being higher for NGO clinics (3464) than in BGD urban (2136) and BDG rural (2098). Thirty percent of the clinics served more than 2500 mothers per clinic during 1990 (Table 7.4b).

Children served in 1990: The mean number of children seen per clinic in 1990 was 1713, being higher in NGO clinics (2578) than BDG urban (1873) and BDG rural (1547) (Table 7.4c). These findings are of particular interest because they suggest that health service utilization has increased. The findings of previous studies suggested that rural mothers are not very willing to attend MCH-FP clinical facilities.

Performances in satellite clinics: According to a government decision, satellite clinics or camps should be organised in all the three wards in a union. For unions having UHFWCs, the FWV should hold a weekly a satellite camp in each of the two wards, apart from the ward where the UHFWC is located. With this arrangement MCH-FP clinical services have been brought closer to the door-step of the rural population. Attempts were made in the 1990 evaluation to establish whether this new initiative is being implemented, the nature of the activities being carried out, and whether IUD insertions are done there. Performing IUD insertions at camps or at the households of the clients/relatives/field workers was found to be counter-productive during late 1960s due to lack of proper aseptic precautions. Although this evaluation did not attempt to observe the quality of services at the satellite camps, it attempted to assess the volume and types of services that are being rendered there.

Whether organise satellite clinics: Except for 12 percent, all the service providers mentioned that they had organised satellite clinics in their areas (Table 7.4d).

Types of services rendered: IUD insertions, MCH-FP and EPI services were the major types of services rendered through the satellite clinics (Table 7.4e).

Number of IUD insertions done in satellite clinics: If IUD insertions in satellite clinics were not spontaneously mentioned service providers were asked whether they had performed IUD insertions in satellite clinics. All but 13 percent of the service providers answered affirmatively (Table 7.4f). However the number of IUD inserted at the satellite clinics during the month preceding the date of interview was nil for about three-fifths (62 percent) of the providers, while the mean number of IUD insertions done by the rest of the providers was only 4 cases (Table 7.4g).

Number of IUD insertions done at the household of clients/ relatives/FWAs: Over one-half (57 percent) of the providers mentioned that they insert IUDs at the household of the clients/relatives/FWAs (Table 7.4h). The number of insertions

during the month preceding the date of interview was nil for three-fourths of the providers (76 percent), while the mean number of IUD insertions done by the rest of the providers was 2.5 cases (Table 7.4i).

The proportion of all IUDs inserted at satellite clinics or at home is still few but it may increase. Thus the pros and cons of performing IUD insertions at these sites should be carefully assessed, or else the IUD program of 1990s may face a similar fate to that of 1960s.

Table 7.4: Performance in clinics and satellite clinics.

Performance	BDG		NGO	All
	Rural	Urban		
	(Percent)			
a. **IUD performance in 1990:**				
1-25	14	13	4	13
26-50	19	17	4	17
51-75	16	21	-	16
76-100	16	14	4	15
101-150	18	14	10	16
151-200	8	10	13	9
201-250	3	2	6	3
250 +	3	5	55	8
Records not available	3	4	4	3
Mean	88.7	97.1	317.1	110.6
Total	100	100	100	100
b. **Number of mothers served by the clinic in 1990:**				
1-250	6	6	6	6
251-500	8	9	8	8
501-750	10	6	6	9
751-1000	6	4	4	5
1001-1250	7	7	10	7
1251-1500	4	6	-	5
1501-1750	4	4	-	4
1751-2000	6	6	6	6
2001-2500	9	4	5	6
2501 +	30	28	35	30
No record	10	18	20	14
Mean	2098	2136	3464	2216
Total	100	100	100	100

Performance	BDG		NGO	All
	Rural	Urban		
	(Percent)			
c. Number of children served by the clinic in 1990:				
1-250	8	6	14	8
251-500	7	9	2	8
501-750	9	12	6	9
751-1000	10	6	6	8
1001-1250	10	5	10	9
1251-1500	6	6	-	6
1501-1750	7	6	-	6
1751-2000	7	4	-	6
2001-2500	12	5	5	7
2501 +	15	23	29	19
No record	9	18	28	14
Mean	1547	1873	2578	1713
Total	100	100	100	100
d. Whether organise satellite clinics:				
Yes	98	82	39	88
No	2	18	61	12
e. Types of services rendered from the satellite clinics:				
None	2	18	61	12
IUD	85	69	29	75
EPI	16	13	6	14
Sterilization	1	1	4	1
Other MCH-FP services	43	28	16	36
f. Whether insert IUDs at the satellite clinics:				
Yes	97	79	34	86
No	3	21	66	13
N	353	171	45	573
g. Number of IUDs inserted in the satellite clinics during the month preceding the date of interview:				
0	65	54	67	62
1-5	30	40	7	32
6-10	4	5	7	4
11+	1	1	20	2
Mean	3.2	4.7	17.2	4.1
N	300	118	15	433

Performance	BDG		NGO	All
	Rural	Urban		
		(Percent)		
h. **Whether insert IUDs at the household of the clients/ relatives/FWAs:**				
Yes	64	56	16	57
No	36	44	84	43
N	353	171	45	573
i. **Number of IUDs inserted in the household of the clients/ relatives/FWAs during the month preceding the date of interview:**				
0	78	72	63	76
1-5	20	25	37	22
6-10	1	1	-	1
11+	1	1	-	1
Don't remember	0	1	-	0
Mean	2.5	2.7	1.0	2.5
N	224	95	8	327

7.5. Record keeping:

Clinics providing IUD services are supposed to maintain a client attendance register, certificate books, and a payment register. Usually, payment of the provider's fee is made upon seeing a certificate confirming insertion of each IUD. In all but one clinic, a client attendance register was found to be maintained, payment register was being maintained in 88 percent of the clinics, and certificate books in 70 percent of the clinics. Records of followups and removals were not maintained by more than 53 percent, and rejection register by no more than 34 percent (Table 7.5).

Table 7.5: Registers maintained by the providers for IUD insertions.

Name of register	BDG		NGO	All
	Rural	Urban		
Client attendance register	99	100	100	99
Rejection register	37	27	37	34
Removal register	53	49	61	53
Follow-up register	50	57	65	53
Complication register	24	30	49	28
Payment register	88	91	84	88
Certificate Book	75	70	29	70
N	353	171	49	573

7.6. Availability of IUD money:

About one-fifth (22 percent) of the service providers did not have any advance IUD money at their disposal (Table 7.6a). Those who had any advance, had on average Tk.360. Those providers having no cash at hand were asked how soon they are expecting the advance money. Nearly a quarter (23 percent) were expecting the money within a week, while about two-thirds (65 ercent) did not have any idea as to when they may receive the oney (Table 7.6b). When advance IUD money is not available, the rvice providers make payments and obtain reimbursement claim ter (60 percent) or advise the clients to receive payment ter (35 percent), or advise the client to come later (19 ercent) (Table 7.6c).

It is extremely important to note that uncertainty about the time within which the money will be available is increasing sharply. For example, in 1988 two-thirds of the providers were expecting the money within a week and the remaining one-third within a month; none was uncertain. But in 1989 no more than 38 percent were expecting the money within a week, 19 percent within a month, and 43 percent were uncertain, while in 1990 only 23 percent were expecting the money within a week, 12 percent within a month, and strikingly two-thirds (65 percent) were uncertain about the time within which they may expect the money. This uncertainty in receiving the money is not only jeopardizing the payment of transportation cost to the IUD clients but also certainly will affect the IUD performance. In focus group discussions with FWVs and FWAs, cases were cited where clients had returned home without an insertion because of lack of money.

Table 7.6: Availability of IUD money and measures taken when there is no money available.

	BDG			
	Rural	Urban	NGO	All
	(Percent)			
a. **Amount in hand at present:**				
Payment made by UFPO/staff	2	5	52	10
No payment is made/provider did not receive money from office	4	8	45	8
No money at hand	20	22	31	22
1 -50	9	10	4	9
51 -100	10	6	4	8
101 -150	7	10	-	7
151 -200	8	9	2	8
201 -250	7	8	2	7
251 -500	22	16	6	19
501 +	13	11	6	12
Total	100	100	100	100
N	353	171	45	573
Mean for those having any money	361.6	356.4	385.3	360.7

	BDG			
	Rural	Urban	NGO	All
		(Percent)		
b. Expected delay before receiving the money by the providers: (Limited to those not having any cash)				
0-7 days	29	16	13	23
8-14 days	3	10	-	5
15-21 days	3	3	-	3
21-30 days	1	3	7	2
30 + days	1	5	-	2
Don't know	63	63	80	65
Total	100	100	100	100
N	70	38	15	123
Mean (days)	9.4	22.1	12.7	13.8
c. Measures taken when there is no cash at hand:				
Providers make payment and obtain re-imbursement claim later	61	58	59	60
Advise to receive payment later	34	41	17	35
If clients want, insertion is done without payment	5	13	7	8
Advise to come later	18	21	11	19
Stop inserting IUD	6	3	-	5
Other	5	4	7	4
N	332	158	27	517

7.7. Problems in rendering IUD services:

The service providers were asked about the common problems they face in rendering IUD services. One-third (34 percent) of the service providers reported having no problem (Table 7.7). The important problems which the service providers face were `shortage of equipment and supply' (28 percent), `shortage of medicine' (13 percent), and `shortage of funds/irregular flow of funds' (10 percent). `Shortage of accommodation in unions having no UHFWC' was mentioned by 8 percent of the service providers. `Objection by husbands/religious taboos' was mentioned as a problem by over one-third (38 percent) of the service providers. About one-fifth (19 percent) of the service providers mentioned that they face difficulty in `management of side-effects/complications'. Objections by husband were primarily because of three reasons--frequently bleeding and sometimes the thread creates problem for intercourse, deterioration of health, and religious reasons. Religious taboos against the IUDs in particular is that if a patient dies with the IUD, it cannot be removed and the deceased would be seriously punished for this

sinful act. Focus group discussions with FWVs revealed that shortage of funds was a common phenomenon in a large proportion of clinics and irregular flow of funds was mentioned as hindering smooth functioning of the program. Inadequate supplies of kerosine oil, torch light, batteries, cotton wool, and dettol creates problem for most of the time. It is important to note that in two out of ten upazilas the FWVs mentioned that, owing to shortage of funds, IUD and sterilization clients were being rejected for the last two months.

Table 7.7: Types of problems faced in rendering the IUD services.

Type of problems	BDG		NGO	All
	Rural	Urban		
		(Percent)		
No problem	32	36	49	34
Shortage of equipment and supply	36	19	2	28
Shortage of medicine	14	12	6	13
Shortage of fund/irregular flow of fund	9	11	10	10
Shortage of IUD	1	-	4	1
Objection by the husband/ religious taboos	35	49	22	38
Shortage of accommodation in unions having no UHFWC	11	2	-	8
Erosion in cervix/prolaps uterus	10	20	25	14
Difficulties in management of side-effects/complications	17	28	18	19
Pregnancy during IUD use	4	11	2	6
Other	11	7	14	10
N	353	171	49	573

A detailed list of problems mentioned by the FWVs in the focus group discussions is as follows:

Problems of the FWVs:

- insufficient light/no torch light, no electricity in FWC electric supply irregular in UHC;
- no insertion table;
- no gloves, stove, gauze, cotton, saucepan, soap, etc.;
- supply of CT is also inadequate;
- no resting room or bed, inadequate waiting arrangement at UHC;

- no OT, insertion is done in the same room where FWVs work;

- shortage of fund, advance money is not paid timely, clients get annoyed and angry;

- the FWVs have to pursue officials for advance money month after month;

- "when there was no provision for payment we did lot of insertion, but since the govt. has introduced payment clients expect ready payment and we have to defer payment regularly";

- instruments cannot be sterilized regularly because there is no kerosine, but they are washed in savlon solution.

- when there is no money sometimes payment is made to client from personal money;

- in two FWCs no insertion is being done for last two months because no advance money is available;

- furniture in dilapidated condition;

- acute shortage of register and other stationery, recording becomes difficult, FWVs spend personal money for buying stationery;

- there is not even a broom for sweeping the clinic;

- local people consider FWC as a hospital, so they request for all sorts of medicine; and

- more bleeding and white discharge from CT-380A than from CT-200, more women complain of side-effects and request removal.

Although the complaints made by the FWVs are not based on findings from any research study, most of them mentioned that the CT-200 clients had relatively lower rate of complaints of bleeding and white discharge compared to those with a CT-380A. The FWVs feel that if the CT-380A is replaced by CT-200 the rate of side-effects will be reduced and acceptance of IUD would increase.

Chapter 8

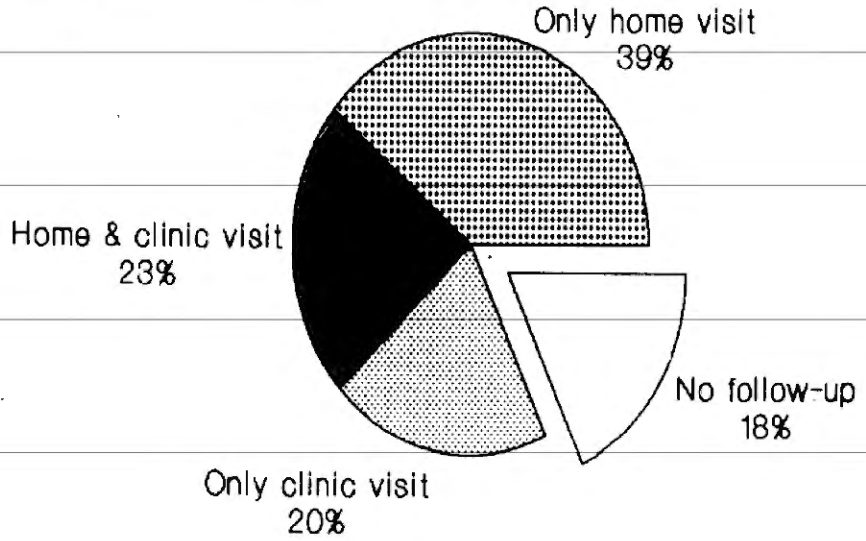
POST-INSERTION EXPERIENCE

This chapter contains information on post-insertion follow-up visit, experience of problems or side-effects, sources and nature of advice regarding problems, status of IUD use, retention rate for the IUD, reasons for removal, and satisfaction with insertion and follow-up services.

8.1. Follow-up:

Rate of follow-up: Ideally, an acceptor should be examined within one or two months of insertion, at six months, and thereafter annually. IUD acceptors were asked whether they revisited the clinic for any treatment or counselling after the IUD insertion. The interview was conducted after a year of insertion, on an average. Over one-half (57 percent) of the IUD acceptors mentioned that they had not made any visit to the clinic, 43 percent made one visit, 18 percent two visits, and only 8 percent three visits. However, four-fifths (82 percent) of the IUD acceptors reported that they had a follow-up; either they themselves returned to the clinic or they were visited at home (Table 8.1a). The remaining one-fifth (18 percent) neither returned to the clinic nor were visited at their household following the IUD insertion. Nearly one-fourth of the acceptors (23 percent) had a follow-up both at the clinic and in the household. One-fifth visited the clinic and two-fifths were visited at their household (Figure 8.1). The proportion having had a follow-up has been gradually increasing from 75 percent in 1988 to 82 percent in 1990. Clinic revisits for follow-up are at a much lower level than the recommended number (Table 8.1b). This is perhaps because of a relaxation of recommended standards in the Bangladesh program; users are not usually advised to return annual check-ups.

Figure 8.1: Post-insertion follow-up.



Timing of re-visit to clinic: Less than one-half of the acceptors (43 percent) returned to the clinic for a follow-up visit (Table 8.1c). About a quarter (26 percent) returned to the clinic within two months of the insertion, while the remaining 17 percent reported to the clinic after two months. Of the 43 percent having returned to the clinic 18 percent made a second visit and 8 percent a third visit. The median number of days after which the first visit was made was 45 days; the median interval between first and second visit was 90 days and for the interval between second and third visit it was 96 days.

Whether visited the same center: All but six percent of the acceptors returned to the same center at which the insertion was made (Table 8.1d). Major reasons for not returning to the same center were the distance of the center (41 percent), `another doctor/FWV was well known' (24 percent), and another FWC was situated nearby (11 percent). Among other reasons were that the `FWV was on leave/absent/clinic was not open' (10 percent), `thought that clinic would not agree to remove' (4 percent), and absence of someone to accompany her (4 percent) (Table 8.1e).

Main reason for the re-visit:: Nearly two-thirds' (63 percent) made the re-visit to have treatment of side-effects/complications, a quarter (23 percent) re-visited for removal of the IUD, and the rest (14 percent) re-visited for a check-up (Table 8.1f).

Action taken at the the center: Removal was done for 25 percent of those who visited the clinic, indicating that at least 2 percent had the removals even though they had not come to the clinic with an intent to do so. Most of those who came with side-effects and complications were supplied with medicine and/or provided counselling or advice (Table 8.1g).

Reasons for the second and third visits were also similar, and the actions taken by the center were also quite similar (not shown in the table).

Table 8.1.1 shows that distance influences the probability of a return visit to the clinic. The percentage returning falls from 59 percent for those living within a mile of the clinic to 42 percent for those living five or more miles away. Return to the clinic is significantly lower for those having had the insertion in satellite camps or households of the clients or workers.

Timing of home visit: Three-fifths (62 percent) of the acceptors received a follow-up visit in their household. One-half of these follow-up visits was provided within two weeks of insertion and almost all the rest within two months (Table 8.1h). The median interval between insertion and home visit was ten days. All these home visits were made by FP workers (Table 8.1i).

The proportion visited at their household has been gradually increasing from 53 percent in 1988 to 58 percent in 1989, and to 62 percent in 1990.

As mentioned earlier, level of satisfaction was found to be higher with the insertion services than with subsequent services for treatment of side-effects and complications or routine follow-up visits at home. Table 8.1.2 shows that the level of satisfaction for the subsequent services is also higher for those who revisited the clinic, but is substantially lower for those who did not revisit the clinic. For example, the proportion who were not at all satisfied ranged from 5-8 percent for those who visited the clinic, but it was much higher 25-27 percent for those who did not visit the clinic. This finding may seem to suggest that the users who experience some problem but do not return to the clinic remain dissatisfied even though they receive a visit at their household.

The topic of client satisfaction is further explored in Table 8.1.3, where the analysis is confirmed to clients who made at least one return visit to the clinic where the insertion took place. Even for the group, there is an appreciable decline from high levels of satisfaction with insertion services to lower levels with subsequent services. For instance among those expressing high satisfaction with initial services, only 34 percent are similarly satisfied with subsequent services. This regrettable change presumably rejects the experience of side-effects combined with the limited ability of FWVs to treat these successfully.

Table 8.1: Post-insertion experience.

	BDG			
	Rural	Urban	NGO	All
a. Status of follow-up:	(Percent)			
Not followed-up	20	15	7	18
Followed-up	80	85	93	82
At clinic	19	23	19	20
At home	39	34	51	39
Both at clinic and at home	22	28	23	23
Total	100	100	100	100

b. **Number of times return to clinic after insertion:**

Duration of use	Ideal No. of visits	N	Visits	Percent visits
< 6 months	1	3679	0	57
			1	25
			2	10
			3+	8
6-12 months	2	2646	0	62
			1	21
			2	9
			3+	8
13-20 months	3	1066	0	65
			1	20
			2	8
			3+	7

	BDG			
	Rural	Urban	NGO	All
	(Percent)			
c. **Timing of re-visit to clinic:**				
First time:				
No revisit	59	49	58	57
1-6 days	3	3	2	3
7-13 days	5	6	2	5
14-20 days	4	5	10	4
21-27 days	1	1	2	1
28-60 days	12	15	17	13
60+ days	16	21	9	17
Don't remember	0	-	-	0
Total	100	100	100	100
(median for those who ever visited)	45	45	30	45
Second time:				
No revisit	84	78	76	82
(median for those who ever visited)	90	90	90	90
Third time:				
No revisit	93	90	87	92
(median for those who ever visited)	96	96	96	96
N	2668	740	271	3679

		BDG			
		Rural	Urban	NGO	All
			(Percent)		
d.	**Whether visited the same center from where it was inserted:**				
	First visit:				
	Yes	95	93	92	94
	No	5	7	8	6
	Total	100	100	100	100
	N	1084	375	113	1572
e.	**Reasons for not visiting the same center:**				
	Long distance	41	42	44	41
	Another doctor/FWV was well known	25	27	11	24
	Another FWC situated nearby	7	19	11	11
	FWV was on leave/absent/ clinic was not open	12	8	-	10
	Thought that clinic would not agree to remove	3	4	11	4
	Dislike for clinic staff	5	4	22	6
	Absence of accompanier	3	8	-	4
	Went to clinic near parental home	3	-	-	2
	Other	7	4	11	6
	N	59	26	9	94
f.	**Main reason for the re-visit:**				
	Side-effect/complication	65	61	45	63
	Removal of IUD	24	20	15	23
	Checkup	10	19	40	14
	Other	1	-	-	0
	Total	100	100	100	100
g.	**Action taken from the center:**				
	Removed the IUD	27	22	14	25
	Supplied medicine/ counselled/advised	59	56	41	57
	Checked-up	9	18	40	13
	Other	5	4	5	5
	Total	100	100	100	100
	N	1084	375	113	1572

	BDG			
	Rural	Urban	NGO	All
		(Percent)		
h. **Timing of home visit:**				
No visit	39	38	26	38
0	1	2	0	1
1-6 days	14	14	15	14
7-13 days	16	16	16	16
14-20 days	10	9	13	10
21-27 days	1	1	1	1
28-60 days	15	18	26	17
60+ days	4	2	3	3
Total	100	100	100	100
(median for those who were ever visited)	12	12	15	12
i. **Identity of home visitor:**				
FP worker	60	62	74	61
Other	1	0	-	1
None	39	38	26	38
Total	100	100	100	100
N	2668	740	271	3679

Table 8.1.1: Whether re-visited clinic, by distance from clinic.

Distance in miles	Visited clinic		Total	N
	Yes	No		
0	59	41	100	619
1	53	47	100	687
2	52	48	100	415
3	46	54	100	338
4	45	55	100	137
5 +	42	58	100	376
Had insertion in camps/ households	23	77	100	1107
All	43	57	100	3679

Table 8.1.2: Satisfaction with services received by whether visited clinic/visited at home.

Visits	Satisfaction					
	Highly satisfied	Satisfied	Somewhat satisfied	Not at all satisfied	Total	N
			(Percent)			
a. Insertion services:						
Clinic & home visit	24	52	21	3	100	858
Clinic visit only	24	58	16	2	100	1432
Home visit only	15	54	24	6	100	714
No visit	16	53	24	7	100	674
All	21	55	20	4	100	3679
b. Subsequent services:						
Clinic & home visit	12	51	29	8	100	858
Clinic visit only	15	52	28	5	100	1432
Home visit only	4	32	39	25	100	714
No visit	4	30	39	27	100	674
All	10	44	32	14	100	3679

Table 8.1.3: Satisfaction with insertion services by subsequent services (Insertion in a clinic and return to same clinic).

Visits	Satisfaction with subsequent services					
	Highly satisfied	Satisfied	Somewhat satisfied	Not at all satisfied	Total	N
			(Percent)			
a. Insertion services:						
Highly satisfied	34	48	15	3	100	262
Satisfied	3	59	28	10	100	668
Somewhat satisfied	-	9	70	21	100	269
Not at all satisfied	3	2	5	90	100	57
All	9	43	33	15	100	1256

8.2 Side-effects and complications:

Twenty nine percent of the acceptors reported having experienced no problems or side-effects (Table 8.2b). About one-third (35 percent) mentioned suffering from heavy menstrual bleeding and nearly one-seventh (13 percent) mentioned pain in lower abdomen. Eight percent of the acceptors reported having irregular menstruation or spotting and six percent had foul

smelling (white) discharge. Four percent of the acceptors reported discomfort during intercourse. The median number of days at which the acceptors had the severest problem was 30 days (Table 8.2c). It appears from the findings that reporting of problems/side-effects for each specific item was slightly lower in 1990 than those observed in the previous two evaluations.

Table 8.2d shows that of those having experienced side-effects, one-seventh (14 percent) suffered from functional impairment associated with the problem. Of the 14 percent having had functional impairment, 4 percent had it twice, and 2 percent thrice. The median number of days for which the acceptors could not carry on with their normal work was 6 days at the first time, 5 days at the second time, and 5 days at the third time.

Source of advice for problems: Of those experiencing problems, nearly one-fifth (18 percent) did not seek any advice from anyone (Table 8.2e). Nearly one-half (48 percent) went to an FWV/doctor, and almost all the remaining half approached a FP worker. These findings are broadly similar across the three evaluation years.

Nature of advice given: For those who sought advice, two-thirds (69 percent) were prescribed medicine and two-fifths (41 percent) were informed that the initial problems and discomforts would disappear and were advised to retain the IUD. One-fifth were advised to have the IUD removed, while another one-fifth were advised to go to the clinic or were taken to the clinic (Table 8.2f). The nature of advice given to IUD acceptors did not differ very much by different sources of advice (Table 8.2.1).

Whether problem has been resolved: At the time of interview the severest problems had not been resolved for one-fourth (24 percent) of those experiencing problems and for another two percent the severest problem was continuing (Table 8.2g).

In an attempt to establish whether clinic conditions influenced the prevalence or severity of side-effects, the data collected from providers were linked to the data collected from clients. Results of these analyses did not show significant variations in the reported side-effects by different indicators of medical quality of clinic services. This failure to demonstrate that the nature of clinic services influences the incidence of side-effects and their severity may reflect the difficulties of measuring service quality through prospective studies of this nature. For instance the mere availability of equipment does not necessarily mean that it is used. Similarly, providers may demonstrate a knowledge of correct insertion procedures, but may not always follow correct procedures in their day to day work. Assessment of influence of quality of services on side-effects or complications thus call for prospective studies.

Table 8.2: Side-effects and complications.

	BDG			
	Rural	Urban	NGO	All
		(Number)		
a. **Total number of clients with problem and remove:**				
Number of cases having problem	1878	547	179	2604
Number of cases still using	986	290	102	1378
Number of cases removed	779	237	72	1088
Number of cases fallen out	113	20	5	138
		(Percent)		
b. **Experience of problems/side-effects:**				
None	30	26	34	29
Heavy menstrual bleeding	35	35	29	35
Pain in lower abdomen	13	14	16	13
Foul smelling(white) discharge	6	6	4	6
Irregular menstruation/ spotting	8	9	7	8
Infection/itching	1	1	2	1
Pain in lower abdomen with fever	1	2	0	1
Discomfort during intercourse	3	3	5	4
Missing thread	0	0	-	0
Perforation of the uterus	-	-	-	-
Other	3	4	3	3
c. **Timing of (severest) problem:**				
No problem	30	26	34	29
0	6	6	8	6
1-6 days	13	14	8	13
7-13 days	7	7	7	7
14-20 days	6	5	9	6
21-27 days	1	2	2	1
28-60 days	23	25	22	24
60+ days	14	15	10	14
Total	100	100	100	100
(median for those with problem)	30	30	25	30
N	2668	740	271	3679
d. **Duration of functional impairment caused by problem (restricted to those with problem): First time:**				
No impairment	86	89	81	86
1-2 days	2	1	3	2
3-4 days	4	4	5	4
5-6 days	2	1	4	2
7-13 days	4	4	4	4
14-20 days	1	1	2	1
21-27 days	0	-	-	0
28-60 days	1	0	1	1
60+ days	0	-	-	0
Total	100	100	100	100
(median number of days)	6	7	5	6

	BDG			
	Rural	Urban	NGO	All
	(Percent)			
Second time:				
No impairment	95	96	97	96
(median number of days)	4	5	5	5
Third time:				
No impairment	98	98	99	98
(median number of days)	5	4	20	5
e. Source of advice for problem (restricted to those with problem):				
No advice sought	18	17	17	18
FWV/Doctor	48	52	43	48
FP worker	48	52	54	49
Dai/TBA	2	1	-	2
Other	1	0	-	1
N	1878	547	179	2604
f. Nature of advice given (restricted to those with advice):				
Prescribed medicine	68	74	68	69
Informed that initial problems and discomforts will disappear and advised to retain the IUD	41	39	46	41
Advised to remove the IUD/removed the IUD	20	21	16	20
Advised to go to the clinic/Took the client to the clinic	22	23	18	22
Advised to refrain from intercourse for a few days	3	4	5	3
Advised to take good food/cold drinks	3	2	6	3
No advice/action	1	1	2	1
Other	3	2	3	3
N	1543	456	148	2147

	BDG			
	Rural	Urban	NGO	All
	(Percent)			
g. **Whether problem has been resolved (for those with problem):**				
Severest problem resolved	76	76	71	76
Severest problem not resolved	22	22	23	22
Severest problem resolved but another problem continuing	2	2	6	2
Total	100	100	100	100
N	1878	547	179	2604

Table 8.2.1 Nature of advice received by source of advice (restricted to those who sought advice about problem).

Source of advice	Nature of advice								N
	Removal	Took/ go to clinic	Medicine	Advised to retain IUD	Refrain intercourse	Good food	No advice	Other	
	(Percent)								
FWV/ doctor	25	21	73	39	4	3	0	2	1250
FWA	17	30	69	42	3	3	1	3	1281
Dai/TBA	21	30	64	34	2	5	2	5	44
Other	29	42	50	38	-	4	-	-	24
All	20	22	69	41	3	3	1	3	2147

8.3. Status of use of IUD:

Slightly over three-fifths of the acceptors (63 percent) were using the reference IUD at the time of interview, one-third (32 percent) had had it removed, and the remaining five percent reported that their IUD had been expelled (Table 8.3). The proportion of acceptors using the reference IUD at the time of interview was higher (71 percent) in 1989 evaluation compared to both the 1988 evaluation (53 percent) and the 1990 evaluation (63 percent). This difference reflects differences in the average interval between insertion and interview; the field work for 1989 evaluation started from February 1990, while that for the 1988 evaluation from July 1989 and for 1990 evaluation from May 1991.

Table 8.3: Status of use of IUD (first segment).

	BDG			
	Rural	Urban	NGO	All
	(Percent)			
Expelled	5	4	2	5
Removed	32	34	29	32
Still using	63	62	69	63
Total	100	100	100	100

Use status at the time of the survey is related to the experience of problems, amount of counselling, and stated satisfaction with services. Removal of the IUD was more frequent among those reporting side-effects with functional impairment (68 percent), compared to those with side-effects but no functional impairment (44 percent), and those who reported no side-effects (only 12 percent) (Table 8.3.1a). Of potentially greater interest is the finding that the amount of counselling is positively associated with the likelihood of continuation of use. The percentage who had the device removed falls from about 45 percent among women who received little counselling to 36 percent among those who received counselling on all five aspects (Table 8.3.1b).

Level of satisfaction was assessed separately for services received during insertion and during subsequent phases of follow-up. Level of satisfaction was in general higher for insertion services than for follow-up services. The level of satisfaction with services is found to be inversely related to removal. The proportion of continuing users declined from 76 percent for those who were highly satisfied to 30 percent for those who were not at all satisfied with the insertion services; and similarly from 83 percent to 44 percent for the follow-up services (Table 8.3.1c,d). These results strongly suggest that the quality of service has a large impact on IUD retention, but it is impossible to establish cause and effect with certainty. There is a universal human tendency to justify behavior. Thus women who, for whatever reason, decide to stop using the IUD may be tempted to blame the adequacy of services even when criticism is unwarranted.

Table 8.3.1: Status of use, by experience of problems, amount of counselling (summary score), and satisfaction with services.

	Use (first segment)		Total	N
	Removed/expelled	Still using		
	(Percent)			
a. Experience of problem:				
Yes, and functional impairment	68	32	100	355
Yes, but no functional impairment	44	56	100	2249
No problem	12	88	100	1075
b. Amount of counselling (summary score):				
<2	45	55	100	95
2	45	55	100	139
3	39	61	100	341
4	36	64	100	1002
5	36	64	100	2103
c. Satisfaction with insertion services:				
Highly satisfied	24	76	100	776
Satisfied	37	63	100	2018
Somewhat satisfied	42	58	100	745
Not at all satisfied	70	30	100	140
d. Satisfaction with subsequent services:				
Highly satisfied	17	83	100	382
Satisfied	31	69	100	1605
Somewhat satisfied	42	58	100	1189
Not at all satisfied	56	44	100	503
All	37	63	100	3679

8.4. Retention rate for the IUD:

Life table analysis techniques were used in order to calculate continuation rates of IUD use, or the proportions still using the IUD at specified durations after insertion. This procedure takes into account the variable `observation period'. IUD acceptors included in the sample were drawn from the cohort that had the insertions during 1990 and included both continuers and discontinuers. The interviews were conducted between May and August, 1991. Thus, some respondents were interviewed only four or five months after the 1990 insertion, while others were interviewed 18 or more months after insertion. Life table techniques permit the inclusion in the analysis of women up until the end of their observation period.

Retention rates are shown in Table 8.4. Two months after insertion, 88 percent of women are still using the IUD. The proportion falls to 74 percent after six months. The retention rate at the end of one year is 65 percent and at the end of 20 months is 57 percent.

Table 8.4: Cumulative proportions still using at the start of specified intervals, calculated by life table methods:

	BDG			
	Rural	Urban	NGO	All
2 months	.87	.90	.89	.88
4 months	.78	.81	.81	.79
6 months	.74	.76	.78	.74
8 months	.69	.70	.75	.70
10 months	.66	.67	.72	.67
12 months	.64	.65	.69	.65
14 months	.59	.57	.65	.59
16 months	.57	.56	.62	.58
18 months	.57	.53	.62	.57
20 months	.57	.53	.62	.57

8.5. Comparison of the retention rates:

Comparisons of the results presented in Table 8.5 shows that the retention rates for the IUD are identical for 1988, 1989, and in 1990. The rates are also similar to that estimated in a study conducted by BIRPERHT formerly known as BFRP. Results of the BIRPERHT study estimated the rates of retention of 73 percent at the end of six months, 60 percent at the end of one year, 48 percent at the end of 18 months, and 37 percent at the end of two years (Akhter et al., 1988). These results indicate that in general the rate of retention is lower compared to special project areas in Bangladesh. For example, ICDDR,B's MCH FP project area at Matlab had higher rates of IUD retention--82 percent at the end of 12 months (Rob, 1987).

Table 8.5: Comparisons of the retention rates.

Months	BIRPERHT	1988	1989	1990
2	-	91	89	88
4	-	82	82	79
6	73	78	77	74
8	-	72	73	70
10	-	67	68	67
12	60	63	65	65
14	-	58	60	59
16	-	53	-	58
18	48	50	-	57
20	-	-	-	57
24	37	-	-	-

Not available.

Analysis was performed to examine variations in retention rates according to the individual characteristics of clients (Table 8.5.1). The following variables were selected:

- age
- number of living children
- desire for another child
- FP method used in the month prior to insertion
- ever-use of FP method prior to insertion
- education
- work status

The general expectation is that older women, with larger families, who wanted no more children would report higher retention trends because of a presumably greater motivation to avoid further pregnancies and births. The results of the 1990 evaluation, similar to those of the 1989 evaluation, show that, contrary to the general expectation, the rates of retention of the IUD do not vary by the different characteristics of the acceptors. Moreover, the retention rates are consistently higher for women who had never before used any contraceptive method than for those who had used other methods in the past (82 percent versus 59 percent at the end of one year and 78 percent versus 50 percent at the end of 18 months). This finding is true for both the 1989 and the 1990 evaluations. Without further analysis, an explanation for this result can only be speculative. It is a subject which bears further investigation.

The analysis of retention rates has also been further explored in order to ascertain whether service-related factors influence the willingness of clients to continue using the IUD. Life-table analysis was repeated for the following variables:

- place of insertion
- number of items of equipment
- procedure for preparation of the IUD for insertion
- sterilization procedure
- number of insertions performed in 1989
- length of service of provider
- home visit was made within 4 weeks of insertion.

There was only a limited variation in the retention rates by the individual service-related variables after running this analysis. However, in order to understand this phenomenon, it would take a prospective study and a multivariate analysis of social and economic characteristics of both clients and service providers, service-related indicators, and retention rates. It would be essential to identify important interactions between the service-related indicators because these indicators may not operate independently of each other. Barring such an analysis, it is difficult to draw valid conclusions about the relationship between service-related variables and retention rates.

Level of satisfaction is highly correlated with retention levels. Women who report that they are highly satisfied or satisfied with the services that they received during insertion and later on are more likely to continue with the method than women reporting lower level of satisfaction. For example, the rate of retention at the end of 20 months falls from 71 percent for those who were highly satisfied with the insertion services to 24 percent for those who were not at all satisfied. Similarly, the rate falls from 81 percent for those who were highly satisfied with the subsequent services to 37 percent for those who were not at all satisfied.

Table 8.5.1: Life table analysis by individual characteristics of clients.

	N	Retention rates for the IUD (months)									
		2	4	6	8	10	12	14	16	18	20
a. Age:											
< 25	1494	.88	.81	.76	.72	.68	.66	.61	.59	.58	.58
25 +	2185	.87	.78	.73	.68	.66	.64	.58	.56	.56	.56
b. Number of living children:											
< 2	760	.88	.79	.74	.70	.67	.64	.57	.56	.56	.56
2 -3	1848	.88	.80	.76	.71	.68	.65	.60	.58	.57	.57
4 +	1071	.87	.77	.72	.67	.65	.63	.58	.58	.57	.57
c. Desire for another child:											
Yes/uncertain	1363	.89	.81	.76	.72	.68	.66	.60	.58	.56	.56
No	2316	.87	.78	.73	.68	.66	.64	.59	.57	.57	.57
d. FP method used in the month prior to insertion:											
MR	309	.83	.74	.69	.63	.60	.59	.52	.52	.52	.52
Other	1308	.88	.79	.73	.68	.65	.63	.58	.57	.56	.56
No method	2062	.88	.80	.76	.72	.69	.66	.61	.59	.68	.58
e. Ever-use of FP method prior to insertion:											
Yes	2765	.86	.76	.70	.65	.61	.59	.53	.51	.50	.50
No	914	.93	.89	.87	.85	.83	.82	.79	.78	.78	.78
f. Education:											
No education	1892	.86	.78	.73	.69	.66	.64	.58	.57	.57	.57
Primary	1078	.88	.80	.75	.70	.67	.65	.59	.57	.57	.57
Secondary and above	709	.90	.82	.77	.72	.69	.67	.61	.58	.55	.55
g. Work status											
Never worked	2737	.88	.79	.75	.70	.67	.65	.59	.58	.57	.57
Worked in the past/currently working	942	.87	.78	.73	.68	.66	.64	.59	.57	.57	.57

8.6. Removal, re-insertion, and use of contraceptives:

Main reasons for removal: Nearly one-half (48 percent) had the IUD removed because of `heavy menstrual bleeding and/or cramp'. About a quarter (23 percent) had the removal because of a number of reasons likely to be related to infection, such as, `pain in lower abdomen', `infection/itching', `foul smelling (white) discharge'. Eight percent had the removal because of `irregular menstruation/spotting'. Six percent had the removal because of `objection by husband/discomfort during intercourse', while another three percent because of desire for children (Table 8.6a). The reasons for removal as observed in 1990 are quite similar to those observed in 1989 but are very different from that in 1988. In 1988 evaluation, multiple reasons were collected, while in 1990 and 1989 the main reason for removal was singularly identified in the table. Thus, the difference does not reflect any real change but is caused by the difference in survey methodology between the years of evaluation.

Table 8.6.1 shows that there are minor variations in the reported reasons for removal by length of use. Early removals are particularly associated with objection by husbands, pain in the lower abdomen, and heavy menstrual bleeding.

Whether removed at the same center where inserted: Slightly over two-fifths of the acceptors (43 percent) did not remove the IUD from the same center from where it was inserted (Table 8.6b). The corresponding proportion for the 1989 evaluation was also similar (47 percent). Of those who did not have the device removed from the same center, one-third mentioned the reason that the center staff were away or communication was difficult or expensive, and another one-third perceived that the clinic staff would be unwilling to remove. Fourteen percent mentioned that IUD can be removed by themselves and another six percent removed them by themselves. It is important to note that five percent of the acceptors mentioned that their request for removal was turned down by the clinic staff and another two percent mentioned that they did not go to the same center because of the poor treatment by the clinic staff.

There is a clear cut relationship between satisfaction with services and place of removal (Table 8.6.2). The proportion of women who had the removal done by the same person (place) where it was inserted falls from 64 percent among the highly satisfied group to 49 percent among those who were not at all satisfied. Nevertheless the fact remains that a large minority (36 percent) of women expressing high satisfaction do not return to the same provider or clinic for removal. No doubt the cost and inconvenience of travel is a major deterrent. It is easier for women to remove the device themselves or to find a friend, or perhaps a Dai, to remove it.

Reinsertions: Of those having had the IUD removed or expelled, only one percent had had a re-insertion (Table 8.6d).

Contraceptive use status: At the time of the interview 14 percent of all the IUD acceptors or 39 percent of those who had the IUD removed or expelled were not using any contraceptives (Table 8.6e). Of those who were using contraceptives most of them were using oral pill, followed by injectables and condom. As mentioned earlier, only 3 percent of those having removed the IUD desired a child. Thus, 36 percent of those having removed the IUD and were not desiring a child was not using any method. This finding reflects the need for contraceptive counselling at the time of removal of IUD.

Table 8.6: Removals, re-insertion, and use of contraceptives.

	BDG			
	Rural	Urban	NGO	All
	(Percent)			
a. Main reasons for removal (for those with removal):				
Heavy menstrual bleeding and/or cramp	49	47	37	48
Pain in lower abdomen	12	14	13	12
Pain in lower abdomen with fever	2	3	1	2
Infection/itching	2	4	3	3
Foul smelling (white) discharge	6	5	5	6
Irregular menstruation/spotting	8	9	9	8
Objection by husband/ discomfort during intercourse	6	4	11	6
Desire for children	3	2	4	3
On health grounds (not related to IUD)	1	1	1	1
Other	11	11	16	11
Total	100	100	100	100
b. Whether IUD was removed from the same center it was inserted:				
Yes	56	63	48	57
No	44	37	52	43
Total	100	100	100	100
N	849	251	79	1179

	BDG			
	Rural	Urban	NGO	All
		(Percent)		
c. Reasons for not going to the same center for removal:				
Long distance/difficult communication/expensive	29	42	37	32
Perceived that clinic staff will be unwilling to remove	36	18	27	32
Can remove the C-T by myself/ removed it myself	13	10	14	14
Didn't want other people to know/was afraid/shy so removed it myself	6	6	2	6
Refusal of clinic staff to remove IUD	4	3	10	5
Poor treatment by the clinic staff	2	3	2	2
Husband, mother-in-law didn't allow to go alone to hospital	1	2	2	2
FWV is not always available at the clinic	3	5	7	4
Another clinic/provider was well known	3	6	-	3
Other	1	3	-	1
N	378	94	41	513
d. Whether re-insertion was performed (for those with removal, expulsion):				
Yes	1	3	-	1
No	99	97	100	99
Total	100	100	100	100
N	993	279	85	1357
e. Contraceptive use status at the time of survey:				
IUD (first segment)	63	62	68	63
IUD (second or later segment)	1	1	-	1
Sterilization	1	0	1	1
Pill	14	15	13	14
Condom	2	2	3	2
Injectables	3	3	3	3
Foam/Jelly, etc.	0	-	-	0
Other	2	2	3	2
No method	14	15	9	14
Total	100	100	100	100

Table 8.6.1: Main reason for removal, by length of use (for those with removal).

Length of use (month)	Main reason for removal										N
	Heavy menstrual bleeding	Irregular menstruation/Spotting	Foul smelling discharge	Infection/ itching	Pain in lower abdomen	Pain in lower abdomen with fever	Objection by husband/ discomfort during intercourse	Desire for children	For health grounds (not related to IUD)	Other	
0	45	7	3	1	13	5	5	1	2	18	224
1	49	10	4	2	10	2	10	1	1	11	142
2	53	5	7	-	10	1	11	3	1	9	122
3-5	46	10	9	3	13	2	4	3	1	9	311
6+	48	7	5	4	12	2	5	4	2	11	380

Table 8.6.2: Place of removal of IUDs by satisfaction with insertion and subsequent services (for those with removal).

Satisfaction	N	Place of removal		Total
		Same place/ person	Different place/person	
a. Insertion services:				
Highly satisfied	164	64	36	100
Satisfied	380	57	43	100
Somewhat satisfied	143	52	48	100
Not at all satisfied	78	49	51	100
b. Subsequent services:				
Highly satisfied	56	66	34	100
Satisfied	444	62	38	100
Somewhat satisfied	441	53	47	100
Not at all satisfied	238	51	48	100
All	1179	57	43	100

8.7. Satisfaction with services:

Some analysis of levels of satisfaction has already been presented. In Table 8.7, these levels are compared for different strata. Differences between BDG rural, BDG urban and NGO strata are very modern.

Whether recommended IUD to others: Another indicator of satisfaction was taken by asking the acceptors whether they had recommended the IUD to others. About one-half (52 percent) mentioned that they had already recommended the IUD to others and nearly one-third (30 percent) said that they would do so. The remaining 18 percent said they would not recommend the IUD to others (Table 8.7c). Those who did not want to recommend the IUD to anyone were asked the reason for not intending to do so. One-half (48 percent) of them said others may also suffer from the same problems they have suffered from and surprisingly nearly one-third (29 percent) mentioned that their secrecy would be lost, if they tell others.

Further information on dissemination of information about the IUD is available from the in-depth interviews with 42 acceptors. The bulk of discussion takes place with women of the same generation. Out of 27 instances where generation could be ascertained, 24 discussions involved person of the same generation as the acceptor. A great deal of discussion is compared to relatives. Over half (54 percent) of those mentioned by acceptors as persons with whom they had talked about the IUD since insertion were relatives. Relatives on the husband's side were slightly more frequently cited than relatives on the wife's side.

As mentioned earlier, the level of satisfaction is positively related to use status: the proportion of acceptors still using the IUD is higher for those having a relatively higher level of satisfaction. Similarly, the experience of side-effects is related, in the expected manner, with satisfaction (Table 8.7.1). The amount of counselling was found to be positively associated with level of satisfaction (Table 8.7.2). The level of satisfaction rises to 80 percent among respondents who were counselled on all the five items from 50 percent among those who were not counselled at all or to 52 percent among those who were counselled only on one item. Similar findings were obtained in the 1989 evaluation. This may seem to suggest that improvement upon counselling practices is likely to have improvements in the IUD program.

Table 8.7: Satisfaction with IUD services.

	BDG			
	Rural	Urban	NGO	All
		(Percent)		
a. Satisfaction with insertion services:				
Highly satisfied	21	21	21	21
Satisfied	55	57	52	55
Somewhat satisfied	20	18	24	20
Not at all satisfied	4	4	3	4
Total	100	100	100	100

	BDG			
	Rural	Urban	NGO	All
		(Percent)		
b. Satisfaction with subsequent services followup/treatment:				
Highly satisfied	10	10	14	10
Satisfied	44	44	42	44
Somewhat satisfied	32	33	37	32
Not at all satisfied	14	13	7	14
Total	100	100	100	100
c. Whether IUD was recommended to others:				
Recommended	50	55	59	52
Will recommend	31	27	27	30
Will not recommend	19	18	14	18
Total	100	100	100	100
N	2668	740	271	3679
d. Reasons why IUD will not be recommended for any one (restricted those who will not recommended):				
Others may suffer from the same problem I have suffered from	50	36	63	48
I did not receive proper treatment for side-effects/ complications	2	2	8	2
If any one accepts IUD upon my advice and suffers from side-effects/complications, she will blame me	5	8	5	6
Accepting IUD is a personal matter, I do not want to influence anyone's decision	6	11	-	6
If I tell others, my secrecy will be lost	27	35	26	29
I am ashamed of suggesting to others	9	6	11	8
To some people it is anti-religious	2	4	-	2
When FP workers fail to motivate the clients after so much of efforts, what could I advise them	1	1	-	1
I did not find any body suitable to give advice	2	2	-	2
Other	4	2	3	3
N	505	132	38	675

Table 8.7.1: Satisfaction with insertion and subsequent services by experience of problems.

Problems	Satisfaction: Highly satisfied	Satisfied	Somewhat satisfied	Not at all satisfied	Total	N
a. Insertion services:						
Yes, and functional impairment	11	51	27	11	100	355
Yes, but no functional impairment	20	55	21	4	100	2249
No problem	26	56	16	2	100	1075
All	21	55	20	4	100	3679
b. Subsequent services:						
Yes, and functional impairment	7	27	32	34	100	355
Yes, but no functional impairment	9	42	35	14	100	2249
No problem	16	52	26	6	100	1075
All	10	44	32	14	100	3679

Table 8.7.2: Percentages who are highly satisfied or satisfied with services from clinic, by type of clinic and amount of counselling (Summary Score).

Summary Score	BDG: Rural	Urban	NGO	All
	(Percent)			
0 %	50	-	-	50
N	(2)	(-)	(-)	(2)
1 %	53	42	67	52
N	(78)	(12)	(3)	(93)
2 %	63	64	-	62
N	(108)	(28)	(3)	(139)
3 %	69	80	71	71
N	(250)	(56)	(35)	(341)
4 %	74	73	76	74
N	(702)	(202)	(98)	(1002)
5 %	80	82	73	80
N	(1528)	(442)	(132)	(2102)
All	76	78	73	76
N	(2668)	(740)	(271)	(3679)

8.8. Suggestions for improvement of IUD services:

Service providers as well as acceptors were asked about their suggestions for improvement of IUD services. Among all acceptors, about a quarter had no suggestions to make. Among those making suggestions, several aspects were mentioned, primarily related to treatment of complications, followup, counselling, and user friendly behavior from the clinic. Nearly three-fifths (58 percent) mentioned that medicine should be supplied for treatment of complications, one-third (35 percent) mentioned `arrangement for treatment of complications'; and one-fourth (27 percent) mentioned that measures should be taken to reduce complications. `Arrangements for followup' was mentioned by two-fifths (42 percent) of the acceptors and need for appropriate counselling was cited by one-third (31 percent), while `cordiality and more attention by clinic staff' was mentioned by one-fifth (22 percent) of the acceptors. Nearly a quarter (23 percent) of the acceptors mentioned that `transportation cost should be paid/enhanced' (Table 8.8).

Among the service providers, the FWV's suggestions primarily related to treatment of complications and supply of medicine and other logistics. Treatment of complications cannot be ensured by FWVs without appropriate support from a hospital and a doctor. Many of the FWVs in FGDs suggested that there should be a central referral hospital where IUD complication cases should have priority treatment facilities. Supply of medicine for treatment of complications was also suggested by both FWVs and FWAs. FWVs having problems with accommodation opined that, unless a separate room for insertion is arranged, quality of service could not be ensured. To ensure supply of consumable items like kerosine, batteries, dettol/savlon, and cotton, the FWVs suggested the placement of required funds directly to each clinic. Some of the FWVs mentioned that the insertion fee should be enhanced. Most of the FWAs opined in the FGDs that the referral fee should be re-introduced and spot payment of transportation cost should be ensured.

Table 8.8: Suggestions of acceptors for improvement of IUD services.

Suggestions	BDG		NGO	All
	Rural	Urban		
	(Percent)			
Arrangement for followup	43	41	46	42
Appropriate counselling	30	35	32	31
Cordiality and more attention by clinic staff	20	25	31	22
Arrangement for treatment of complications	35	33	41	35
Supply of medicine for treatment of complications	58	55	62	58
Measures to reduce complications	27	27	26	27
Making payments of transport cost/enhancement of transport cost	23	23	23	23
Insertion in clients house/ maintaining secrecy	11	9	23	11
Other	2	2	2	2
N	1949	555	210	2714

Chapter 9

CONCLUSIONS

9.1. Overview of changes, 1988-1990:

In Table 9.1, a summary is provided of changes in key indicators over the three IUD evaluations. Several important features such as the reported procedure for IUD insertion could not be shown because of a shift in measurement techniques across the three annual evaluations. Nevertheless this table gives a convenient overview.

Perhaps the single most important change in the IUD program is the improvement in the reliability of reporting. In the 1988 study, nearly 40 percent of cases were judged to be fictitious; the corresponding proportion in 1990 was only 16 percent. This change serves to demonstrate the huge value of objective, high quality evaluation in preventing abuses, particularly for aspects of the program that involve payments to individuals for work (allegedly) done. Now that the series of USAID sponsored evaluations has come to an end, the government should consider the means by which this improvement can be sustained or indeed enhanced.

Once the level of falsification is taken into account, the trend in the total number of IUDs inserted can be more clearly discerned. While the MIS figures show a substantial drop in IUD performance, the results of the IUD evaluation suggest that the number of genuine insertions has increased. The rise was modest between 1988 and 1989 but more marked between 1989 and 1990. Nevertheless, the fact remains that the IUD still makes only a minor contribution to overall contraceptive protection in the whole country.

Various features of financial reimbursement were examined in all three evaluations. The proportion of clients who received reimbursement of transportation costs has fluctuated but shows no clear trend. Both in 1988 and 1990, over one-third of clients did not receive prompt payment. This is an unsatisfactory situation that shows no sign of improvement. However, the flow of funds to FWVs and other service providers does appear to have improved marginally.

There are some encouraging trends in terms of clinic facilities and procedures. The percentage of providers who had access to a means of sterilizing equipment has increased substantially and there has been a smaller upward shift in the availability of a table for inserting IUDs. Actual sterilization procedures, however, have not changed much over the three years, which is disappointing in view of the apparent improvement in equipment, and the marked increase in refresher training. While

the proportion of providers who remove the device from its sterile packet in order to put the IUD into the inserter has declined slightly, the proportion who rely on anti-septic solution only to sterilize insertion equipment has not fallen.

There are indications that domiciliary services are increasing. The proportion of insertions performed at clients homes is growing, and the number of clients who received a follow-up visit within 60 days of insertion has risen. These changes no doubt reflect the impact of the recent increase in the number of FWAs and the use of satellite clinics.

Removal rates have remained constant. In all three evaluations, about one-third of clients had the device removed. The incidence of reported side-effects has increased. This may be an indication that Bangladeshi women are becoming less tolerant of pain and discomfort and perhaps more demanding of health and family planning services. The incidence of more serious disorders--as measured by functional impairment--has not changed. Levels of reported satisfaction with services also shows no clear trend over time.

Table 9.1:Consolidated comparison of IUD evaluations 1988 to 1990

		1988	1989	1990
A.	**Accuracy and validity of reporting**			
A1.	Ratio of insertions reported by MIS to insertions recorded in clinic records.	*	.99	.94
A2.	Percentage of clients in clinic records classified as genuine cases.	61	74	86
B.	**Performance:**			
B1.	Estimated total number of genuine IUD insertions:			
	National	235,702	241,805	282,091
	BDG	205,202	209,973	250,215
	NGO	30,500	31,832	31,876
C.	**Financial aspects:**			
C1.	Percentage of clients who received Tk.15+ as transportation cost	65	55	63

*Could not be ascertained due to reporting anomalies.

		1988	1989	1990
C2.	Percentage of providers who had received full payment of insertion fees	62	69	72
C3.	Percentage of providers who had no advance money for client reimbursement	28	23	22
D.	**Clinic facilities:**			
Percentage possessing:				
D1.	Any IUD manual	82	79	76
D2.	Stove/cooker/heater/ sterilizer/autoclave	68	75	95
D3.	IUD insertion table/ general table	62	67	68
E.	**Indicators of service quality:**			
E1.	Percentage of service providers received refresher training	49	39	66
E2.	Percentage service providers reporting use of gloves for all insertions	95	96	91
E3.	Percentage service providers reporting use of antiseptic solution alone for sterilization of equipment	35	20	33
E4.	Percentage service providers reporting removal of C-T from packet in order to insert the IUD into the inserter	20	25	15
E5.	Mean counselling score (reported by clients)	3.2	2.9	3.5
E6.	Among clients who received insertion at clinic, percentage accompanied by FP worker	(40)	27	24
E7.	Percentage clients who received home insertion	7	10	13
E8.	Percentage clients visited at home within 60 days of insertion	50	54	59

	1988	1989	1990
F. Client behaviour and attitude:			
F1. Percentage clients who revisited clinic within 60 days of insertion	29	37	26
F2. Percentage clients reporting side-effects	60	67	71
F3. Percentage clients reporting functional impairment	12	7	10
F4. Percentage clients still using C-T at 12 months	63	65	65
F5. Percentage clients using no method at time of survey	(25)	13	14
F6. Percentage clients highly satisfied or satisfied with:			
Insertion services	71	58	76
Subsequent services			54
F7. Percentage clients who had recommended IUD to others	53	59	52

9.2. Problems and possible solutions:

Results of the three annual evaluations revealed several important problems related to the iud program. These problems and possible solutions are presented below:

Problems	Possible solutions
Falsification of IUD returns though reduced, still remains, particularly in Dhaka city.	Further rigorous checking of non-bonafide NGOs and Dhaka division.
Timely flow of reimbursement money is still defective, most clients refused to have an IUD if they can not be re-imbursed for their transportion cost.	Better financial controls and reporting by upazila offices.
A significant minority of service providers (10%) did no insertions during the basic training.	Reinforcement of training procedures plus remedial training.

Problems	Possible solutions
A significant minority of FWVs (13%) do not live in UHFWC despite availability of family accommodation. There is evidence that performance is adversely affected.	Case-by-case review plus disciplinary action where appropriate.
A large proportion of clinics (40%) have no facilities for a patient to lie down and rest.	Further upgrading of facilities
Though the situation has improved in last 3 years, a significant minority of clinics (5%) still have no means to sterilize equipment effectively.	Further upgrading of facilities
Very few service providers or clients are aware that TCu 380A can be used for 6 years.	Issue directive to all FWVs and FWAs.
Many prospective clients lack detailed knowledge of IUDs and have unwarranted fears about it. Correct information about privacy, sex of provider, and degree of pain or discomfort during insertion is particularly lacking.	Issue FWAs with visual illustrations of TCu 380A + a device to show to prospective clients.
Prospective clients do not always fully trust information given by FWAs. Dissemination of information and encouragement from relatives and neighbors is very important in the adoption process.	FWAs should be encouraged to make good use of satisfied users to assist in motivation. Prospective clients should be asked whether they know any users of IUD. If not, FWAs may be able to suggest satisfied users with whom they can talk.
A minority of IUD acceptors choose this method, because its use can be concealed from husband/other relatives.	Such cases should be carefully identified by FWAs and steps taken to ensure confidentiality.
Even when appropriate sterilizing equipment is available, a large number of service providers either use anti-septic solution only or place equipment in anti-septic solution after boiling.	Issue FWVs with detailed instructions about correct sterilization of equipment.

Problems	Possible solutions
An appreciable minority of (14 %) providers unnecessarily remove device from its sterile plastic cover in order to insert the IUD into the inserter.	Issue directives to FWVs.
An increasing proportion of insertions are performed at home or satellite clinics (13 %). While this trend is welcome in terms of client access/convenience, it raises problems of maintaining sterile conditions.	Review by medical experts and issue of guidelines.
A large number of clients suffer side-effects and have the device removed for this reason.	This problem cannot be avoided. Detailed instructions for treatment of main side-effects (heavy menstrual bleeding, pain) should be issued to FWVs. In view of the significant minority of clients (6 %) who complain of vaginal discharge, a detailed medical study of reproductive tract infections (RTIs) might be useful. In the longer term, better training of FWVs in diagnosis and treatment of RTIs would be very beneficial.
A minority of clients (14%) uses no method after removal of IUD, despite the desire for no pregnancy.	Further strengthen contraceptive counselling for these cases. Increase the emphasis on finding the best method for each client.
Despite its effectiveness and low cost, IUD-use remains low.	All the above. Also, a possible strategy to popularize IUD may be considered.

REFERENCE

Akhter, H. H., A. J. Faisel, Y. H. Ahmed, S. Ahmed, N.H. Khan, J. B. Chowdhury, S. Ali, and A. U. Ahmed 1988. **An IUD Study to Assess Follow-up Needed for Removal or Reinsertion,** Bangladesh Fertility Research Program, Dhaka, Bangladesh.

BBS (Bangladesh Bureau of Statistics), 1991, **Statistical Yearbook of Bangladesh, 1991.** Dhaka, Statistics Division, Government of the People's Republic of Bangladesh.

EPI, 1991, **Needs Assessment Study of Field Workers Involved in the Expanded Programme on Immunization**, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh.

Gallen, M. and R. N. Lettenmaier, Counseling Makes a Difference. **Population Reports**, Series J, No.35 (1987).

GOB/DFP (Government of the People's Republic of Bangladesh, Directorate of Family Planning), **IUD Manual**, Azimpur, Dhaka-1986.

Huq, Md. Najmul and John Cleland, **Bangladesh Fertility Survey-1989**, National Institute of Population Research and Training (NIPORT), 1990, Dhaka, Bangladesh.

IEM (Information Education and Motivation) Unit, Directorate of Family Planning, **Copper-T 380A IUD Information for Clients**, Dhaka - June 1987.

IEM (Information Education and Motivation) Unit, Directorate of Family Planning, **Instruction Manual of Copper-T 380A for Clinicians**, Dhaka - June 1987.

IPPF (International Planned Parenthood Federation). **Family Planning Handbook for Doctors**, -- London, England 1980.

Kamal G. M., Ashrafuddin Ahmed, and Shafiur Rahman, 1990. **IUD Annual Evaluation-1988**, Associates for Community and Population Research, Dhaka, Bangladesh.

Kamal G. M., Shafiur Rahman, Tauhida Nasrin and Zakir Hossain, 1991, **IUD Annual Evaluation-1989,** Association for Community and Population Research, Dhaka, Bangladesh.

Mitra and Associates, 1992, **Bangladesh Contraceptive Prevalence Survey 1991** (draft under review), Dhaka, Bangladesh.

Mitra, S.N., 1986. **Bangladesh Contraceptive Prevalence Survey-1985**, Mitra and Associates, Dhaka, Bangladesh.

Mitra, S.N., Ann Larson, Gillian Foo, and Shahidul Islam, 1990. **Bangladesh Contraceptive Prevalence Survey- 1989,** Mitra and Associates, Dhaka, Bangladesh.

Network, September 1991, **A bright future for IUDs: New technology and research trigger expanded interest.** Volume 12, Number 2, 1991.

NIPORT (National Institute of Population Research and Training), 1989. **Study of Compensation Payments and Family Planning in Bangladesh: A Synthesis**, NIPORT, Dhaka, Bangladesh.

Olson, Clifford D. and Laura E. Evison, 1989. **An Assessment of Discrepancies Between the Family Planning Logistics Management Information System and the Family Planning Performance Management Information System,** POPTECH/1601, North Kent Street, Suit 1014, Arlington, Virginia 22204.

Porter, C.W., Jr. and Waife, R.S. **Intrauterine Devices: Current Perspectives.** The Pathfinder Fund, 1978.

Quasem, M. A. and Co., 1985. **Evaluation of Strenthening of Intra-uterine Device (IUD) Program,** M.A. Quasem and Co., Dhaka, Bangladesh.

Quasem, M.A. and Co., 1986. **Evaluation of Strengthening of Intra-uterine Device (IUD) Program** Dhaka, Bangladesh.

Rob, U, J.F. Phillips, 1987. **The Use Effectiveness of the Copper-T 200 in Matlab, Bangladesh.** International Journal of Gynecology and Obstetrics, 1987, 25.

Tatum, H.I., Intrauterine Contraception. American Journal of Obstertrics and Gynecology, Volume 112, Number 7. April 1, pp.1000-1021 In Liskin, L.S. Complications of Abortion in Developing Countries. **Population Reports,** Series F, Number 7, 1980.

World Health Organization. **Mechanism of Action, Safety and Efficacy of Intrauterine Devices.** WHO Technical Report Series, No.753, Geneva, 1987.

APPENDIX A

NEWLY DEVELOPED IUDS

NEWLY DEVELOPED IUDs

Copper Safe 300: More commonly known as the Cu-SAFE IUD, this IUD was developed to fit the dimensions of the uterine cavity. The crossarm of the plastic body bends inward, so that protrusions of the IUD frame will not irritate the uterine wall. The Cu-SAFE is flexible, lightweight and smaller than other copper-bearing IUDs so that it will conform to the interior shape of the uterus throughout the menstrual cycle. Penetration into the uterus and Fallopian tubes is generally avoided, thereby reducing bleeding and pain.

Because of its smaller size and high degree of flexibility, the Cu-SAFE 300 does not require pre-insertion loading into an inserter tube with plunger. Instead, the IUD can be inserted with one hand using a simple procedure known as "push-in, control, withdraw". This system works well for women who have a relatively narrow endocervical canal. Initial data on efficacy, expulsion and removals due to bleeding and pain are favorable.

Copper-Fix: Also known as the Flexi-Gard 330, this IUD was developed in the late 1980s. It does not have a frame but has six copper sleeves on a single filament of polypropylene thread. It has a total copper surface area of 330 square mm. The end of the thread is knotted and anchored at the fundus of the endometrial cavity into the myometrium. The upper and lower sleeves are crimped to the thread to prevent the copper sleeves from sliding into the vagina. The insertion procedure requires some training but is considered to be easy once mastered.

Early studies have shown favorable results. Currently, a study in 26 centers in Europe, the United States and Canada involving 3,200 patients is comparing this device to the TCu 380A. The World Health Organization is also funding a large clinical trial involving 6,000 patients in 300 sites in 13 developing countries as well as the Soviet Union and China.

Hormonal: A levonorgestrel-releasing IUD (LNG-IUD) represents a method of contraception that combines the positive characteristics of oral contraceptives, IUDs, and steroid-releasing implants. It is especially attractive for women suffering from menorraghia and dysmenorrhea, as well as for those who experience increased menstrual blood loss when using copper IUDs. One LNG-releasisng IUD has been developed by Leiras and registered in Finland. The company has plans for expanded registration in the European Economic Community. The U.S.-based Population Council is pursuing with the U.S. Food and Drug Administration possible U.S. approval procedures.

The LNG-IUD has a daily release rate of 20 mcg of levonorgestrel and has an estimated effective lifespan of up to seven years after insertion. A major benefit of levonorgestrel released in the uterine cavity is a reduction in menstrual blood loss. One benefit of decreased menstrual blood loss is a rise in hemoglobin and iron stores, important concerns since iron deficiency anemia often accompanies copper-IUD use. Lastly, use of levonorgestrel has been associated with a significant reduction in menstrual pain (Network 12(2)/September 1991).

APPENDIX B

CLIENT QUESTIONNAIRE

IUD ANNUAL EVALUATION - 1990

CLIENT QUESTIONNAIRE

ASSOCIATES FOR COMMUNITY AND POPULATION RESEARCH
House #60, Road #2A, Dhanmondi R.A., Dhaka-1209

IUD ANNUAL EVALUATION-1990

SAMPLE IDENTIFICATION

Year of evaluation [ ][ ] Converted client No. [ ][ ][ ][ ] Stratum [ ]

District [ ][ ] Upazila [ ][ ] Sample client No. [ ][ ][ ][ ]

SUPERVISION AND DATA PROCESSING INFORMATION

Scrutinized	Reinterviewed or spot checked	Edited	Coded
[ ]	[ ]	[ ]	[ ]
By [ ][ ]	By [ ][ ]	By [ ][ ]	By [ ][ ]
Date _____	Date _____	Date _____	Date _____

INFORMATION FROM CLINIC RECORDS

A. CLIENT IDENTIFICATION

Client name: _____ W/O: _____

House No./Village: _____ Road No./Union: _____

Upazila: _____ District: _____

Client Registration No. [ ][ ][ ][ ] Date of insertion: _____

Number of living children: Son: _____ Daughter: _____

B. CLINIC IDENTIFICATION

Name of clinic/NGO: _____ Code [ ][ ]

Address: _____

C. PROVIDER IDENTIFICATION

Name of provider: _____ Code: [ ]

Whether provider successfully interviewed: Yes 1 No 2

Converted number of provider: [ ][ ][ ]

D. REFERRER IDENTIFICATION

Name of referrer: _____

Address of referrer: _____

Type of referrer:

BDG FP Field worker	1	Registered Dai	4
NGO FP Field worker	2	Clinic personel	5
FP Field worker (not ascertained whether BDG or NGO)	3	Self/relative/neighbor	6
		Other _____ (Specify)	7

INFORMATION ON ATTEMPTS TO LOCATE AND INTERVIEW THE CLIENT

Attempt No.	1	2	3	4
Date				
Person Assisting*				
Result Code**				
Interviewer Code				

*PERSON ASSISTING

None	1	Villagers	5
Referrer	2	Ward Members	6
BDG FP Worker	3	Other _____ (Specify)	7
NGO FP Worker	4		

**RESULT CODE

Client located and successfully interviewed	1	Address found, but client has permanently left/ temporarily visiting	5
Client located but not not available	2	Address does not exist/found	6
Client located but interview deferred/refused	3	Address given on forms was incomplete	7
Address fund, but no such person ever lived at that address	4	Not attempted	8
		Other _____ (Specify)	9

INTERVIEWER: IF THE RESULT CODE IS OTHER THAN 1, 2, AND 3 WRITE THE REASONS AND COLLECT EVIDENCE FROM FWA, FPA, NGO WORKER, REFERRER, OR WARD MEMBER.

Reasons: _____

_____

Section-1

RESPONDENT'S BACKGROUND

Time Started: _____

	RESPONSE	SKIP
101. How old are you ? **(PROBE FOR AGE IN COMPLETED YEARS)**	Age [ ][ ]	
102. Have you ever attended school ? **IF YES** what was the highest level of school you attended ?	No school 1 Madrasha 2 Primary 3 High school 4 College 5	--> 104
103. What was the highest class you passed ?	Class or Year [ ][ ]	
104. What is your religion ?	Islam 1 Hinduism 2 Christianity 3 Buddhism 4 Other_____ (specify) 5	
105. Have you ever worked for payment in cash or kind ?	Yes 1 No 2	--> 107
106. Are you currently working for payment ?	Yes 1 No 2	

	RESPONSE	SKIP
107. Are you currently married ?	Currently married 1 Other _____ (specify) 2	
INTERVIEWER: ASK 108 TO 109 ABOUT CURRENT OR LAST HUSBAND		
108. Has your husband ever attended school ? **IF YES** what was the highest level of school he attended ?	No school 1 Madrasha 2 Primary 3 High school 4 College 5 Don't know 6	--> 110
109. What was the highest class he passed ?	Class or Year [ ][ ]	
110. How many living children do you have ?	[ ][ ] Number	
111. How many of them are sons and how many are daughters ?	[ ][ ] Son [ ][ ] Daughter	
112. Do you want to have any (more) children ?	Yes 1 No 2 Uncertain 3	--> 201
113. When do you want to have your next baby ? Within the next year, in one or two years time or after a longer gap ?	Within one year 1 One or two year time 2 After longer gap 3 Uncertain 4	

SECTION-2

KNOWLEDGE AND USE OF CONTRACEPTIVES

201. You may know that there are various ways a couple can delay or avoid pregnancy. Which of these ways or methods have you heard about ?

INTERVIEWER: DO NOT READ OUT ANY METHOD TO THE RESPONDENT. CIRCLE RESPONSE IN COLUMN-2 AT TABLE-2.1 ALL METHODS SPONTANEOUSLY MENTIONED BY THE RESPONDENT. PROBE AND BE SURE WHETHER SHE KNOWS OF ANY OTHER METHOD, CIRCLE RESPONSE IN COLUMN-2 FOR ANY OTHER METHOD MENTIONED SPONTANEOUSLY.

202. There are methods of family planning other than those you have mentioned. I want to know for sure whether you have heard of any of them ?

INTERVIEWER:PLEASE READ OUT THE DESCRIPTIONS OF THE METHODS THE RESPONDENT DID NOT SPONTANEOUSLY MENTION AND CIRCLE RESPONSE IN COLUMN-3.

203. Do you know any place or person from where _____ (method) can be obtained ?

INTERVIEWER: PLEASE DESCRIBE ALL THE METHODS CIRCLED YES IN EITHER COLUMN-2 OR 3 AND CIRCLE RESPONSE IN COLUMN-4.

204. Have you or your husband ever used _____ (method) ?

INTERVIEWER: PLEASE ASK ABOUT ALL THE METHODS CIRCLED YES IN EITHER COLUMN-2 OR 3 AND CIRCLE RESPONSE IN COLUMN-5.

TABLE 2.1: CONTRACEPTIVE KNOWLEDGE AND EVER USE.

Method and descriptions (1)	201 Knowledge (Unprompted) (2)	202 Knowledge (Prompted) (3)	203 Do you know the sources ? (4)	204 Have your or your husband ever used ? (5)
01 **PILL**: Women can take a pill every day.	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 1 No 2
02 **CONDOM**: Men can use a rubber sheath on their penis during intercourse	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 1 No 2
03 **FOAM TABLET/JELLY/EMKO/CREAM/DIAPHRAGM**: Women can place a tablet, cream or a rubber object inside their vagina before intercourse	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 1 No 2
04 **INJECTION**: Women can have an injection by a doctor or health worker which stops them getting pregnant for several months	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 1 No 2
05 **IUD/Copper T/Coil**: Women can have a small object placed inside their uterus by a doctor or health worker.	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 1 No 2
06 **FEMALE STERILIZATION**: Women can have an operation at a hospital or health centre to stop them having any more children.	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 1 No 2
07 **MALE STERILIZATION**: Men can have an operation at a hospital or health centre to stop any more children.	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 1 No 2
08 **MR**: Women can have termination of an early pregnancy by clearing their menstruation by Doc/FWV	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 1 No 2
09 **OTHER**: (Specify)___	Yes 1	/\/\/\/\/\/\/\	/\/\/\/\/\/\/	Yes 1 No 2

	RESPONSE		SKIP
205. Are you or your husband currently using any method ?	Yes	1	
	No	2	--> 207
206. What method are you or your husband currently using ?	Pill	01	
	Condom	02	
	Foam etc.	03	
	Injection	04	
	IUD	05	---> 209
	Tubectomy	06	
	Vasectomy	07	
	Other	09	
207. **INTERVIEWER: CHECK 04: IF YES IN Q 204 COLUMN-5 ROW-05, TICK CODE-1, OR ELSE CODE-2.** EVER USED IUD [1] NEVER USED IUD [2] (SKIP TO 209)			
208. Have you ever accepted the IUD (Coil or C-T) ? (PROBE)	Yes	1	
	No	2	--> 213 AND CODE 5
209. How many times have you accepted such IUD ?	Times	[ ]	

210. I would like to ask you a few questions relating to the IUDs that you have accepted.
I will ask you questions beginning with the IUD that you are currently using (or, the last one that you have used).

		Latest IUD	Earlier IUD
211.	When did you accept this IUD(Coil/C-T)?	Date _____ or ☐☐ Months ago	Date _____ or ☐☐ Months ago
212.	Where did you accept this IUD (Coil/ C-T)? **(PROBE)** **(PROBE ABOUT THE RECORDED CLINIC AND THE SATELLITE CAMP)**	In recorded clinic 1 Name of clinic _____ Address: _____ _____ In own/relative/FWA/ provider's house 2 Satellite camp 3	In recorded clinic 1 Name of clinic _____ Address: _____ _____ In own/relative/FWA/ provider's house 2 Satellite camp 3

	RESPONSE	SKIP
213. **SPECIAL INSTRUCTIONS** **INTERVIEWER: CHECK ALL INFORMATION GIVEN BY THE RESPONDENT IN RESPONSE TO QUESTIONS FROM 205 ONWARD. EXAMINE THOROUGHLY WHETHER THE REPORTED INFORMATION REGARDING THE IUD (Coil/C-T) HAD IN 1990 MATCHES WITH THOSE RECORDED AND CIRCLE THE APPROPRIATE CODE.**	Both the clinic and time match 1 Clinic matches but time does not match 2 Time matches but clinic does not match 3 Neither clinic nor time matches 4 Never accepted IUD 5	--> 217

	RESPONSE	SKIP
214. **(FOR RESPONDENTS WHERE EITHER CLINIC OR TIME DOES NOT MATCH OR WHO HAVE NEVER ACCEPTED AN IUD)** Did you visit the _____ (recorded clinic) clinic during _____ (year) last ?	Yes 1 No 2	--> 216
215. Why did you go there ? (PROBE) **(MULTIPLE ANSWERS)**	For having an IUD 1 For general treatment 2 For having an MR 3 For immunization 4 Other _____ (Specify) 5	

216. **INTERVIEWER: PLEASE CHECK 207 AND 213, AND TICK APPROPRIATE BOX**

EVER ACCEPTED IUD ☐ V

NEVER ACCEPTED IUD ☐ (SKIP TO 298)

217. **INTERVIEWER: PLEASE ASK ALL THE QUESTIONS FOR THE IUD INSERTED DURING 1990. IF MORE THAN ONE INSERTION IN 1990, ASK ABOUT CURRENT OR LAST IUD(Coil/C-T). IF NO INSERTION WAS DONE IN 1990, ASK ABOUT LAST INSERTION. START WITH, " I would like to ask you a few questions about the IUD (Coil/C-T) you had from _____ (write clinic name) on _____ (write date).**

	RESPONSE	SKIP
218. Before having the IUD insertion, who are the persons you discussed about IUD with ? (PROBE, anyone else ?) **(MULTIPLE ANSWERS)**	Husband 1 Relative _____ (Specify) 2 Friend/neighbor 3 FP worker 4 DAI/TBA 5 IUD user 6 Other _____ (Specify) 7 None 8	

	RESPONSE	SKIP
219. Do you know any FP worker in your area ?	Yes 1 No 2	--> 225
220. How far from your house does she live ?	Distance [ ][ ] Miles	
221. Before acceptance of IUD, did you ever discuss about FP with her ?	Yes 1 No 2	
222. Before acceptance of IUD, did you ever discuss about IUD with her ?	Yes 1 No 2	--> 225
223. Did the FP worker on her own tell you about IUD or did you ask her ?	FP worker told 1 Client asked 2	
224. What did you discuss with her about the IUD ? **(MULTIPLE ANSWERS)**	Procedure of IUD insertion 1 Pain during insertion 2 Size, shape, and the look of the IUD 3 Whether suffered from side-effects/ complications 4 Whether IUD causes problem to normal work 5 Whether IUD causes any problem in intercourse 6 Whether create any problem in menstruation 7 What to do in case of side-effects/ complications 8 Effective duration of the IUD 9 How to remove the IUD 10 Advantages of IUD use 11 Disadvantages of IUD use 12 Whether the provider is male or female 13 Payment of transport cost 14 Motivated to use IUD 15 Other _____ (Specify) 16	

	RESPONSE		SKIP
INTERVIEWER: CHECK 218, IF CODE 6 IS NOT CIRCLED, ASK 225; OR ELSE SKIP TO 227			
225. Before you accepted the IUD did you know anyone who had accepted an IUD (Coil/C-T) ?	Yes	1	
	No	2	--> 232
226. Did you discuss about the IUD (Coil/C-T) with any one of the IUD users before you accepted the IUD (Coil/C-T) ?	Yes	1	
	No	2	--> 232
227. Did the IUD user on her own tell you or did you ask her about the IUD ?	I asked the user	1	
	The user told me	2	
228. What did you discuss with her about the IUD ? **(MULTIPLE ANSWERS)**	Procedure of IUD insertion	1	
	Pain during insertion	2	
	Size, shape, and the look of the IUD	3	
	Whether suffered from side-effects/ complications	4	
	Whether IUD causes problem to normal work	5	
	Whether IUD causes any problem in intercourse	6	
	Whether create any problem in menstruation	7	
	What to do in case of side-effects/ complications	8	
	Effective duration of the IUD	9	
	How to remove the IUD	10	
	Advantages of IUD use	11	
	Diadvantages of IUD use	12	
	Whether the provider is male or female	13	
	Payment of transport cost	14	
	Motivated to use IUD	15	
	Other _____ (Specify)	16	
229. Among the IUD users you know from whom did you obtain most information about the IUD. Who is (s)he ? **(SINGLE ANSWER)**	Relative _____ (Specify)	1	
	Friend	2	
	Neighbor	3	
	Other _____ (Specify)	4	

	RESPONSE		SKIP
230. Where does she live ? **(SINGLE ANSWER)**	In the same household Within the same bari/slum Within the neighboring bari/goshti Parent's household/ bari/goshti Other _____ (Specify)	1 2 3 4 5	--> 232
231. Does she live in the same village/ neighboring house ? **IF NO**, how far is her house from yours ?	Same village/ neighboring house Distance: [ ] Miles	96	
232. Does your husband know that you have had an IUD (Coil/C-T) inserted ? **IF YES**, Did he know before the insertion or after the insertion ?	Knew before insertion Knew after insertion He does not know Not currently married	1 2 3 4	--> 234 --> 235 --> 235
233. Why did not you tell your husband ? **(SINGLE ANSWER)**	He desires a child He dislikes FP He disapproves IUD use Other _____ (Specify)	1 2 3 4	-->235
234. Did your husband suggest you to accept an IUD or did you suggest to him ?	I suggested to him He suggested to me	1 2	
235. Among all the methods of FP why did you choose the IUD (Coil/C-T) ? **(PROBE, MULTIPLE ANSWERS)**	Advantage and effectiveness of IUD Disadvantage of other methods Absence of prior knowledge on other FP methods Advised by field/ clinic worker/ for IUD after MR Advised by field/ clinic worker Advised by friends/ neighbor/relative Other _____ (Specify)	1 2 3 4 5 6 7	

	RESPONSE	SKIP
236. Did you or your husband use any family planning method during one month prior to your acceptance of this IUD (Coil/C-T) ? (PROBE)	Yes 1 No 2	--> 338
237. What family planning method did you or your husband use at that time ? **(INTERVIEWER: SINGLE ANSWER)**	Pill 1 Condom 2 Foam etc. 3 Injection 4 IUD 5 MR 8 Other 9	
INTERVIEWER: CHECK 204 AND 235: IF YES IN 204 COLUMN 5, ROW 08 (MR), OR CODE 4 IN 235, ASK 238 OR ELSE SKIP TO 240.		
238. When you had IUD insertion, did you have MR at the same time ?	Yes 1 No 2	--> 240
239. When you went for the MR, had you already decided to have an IUD or had doctor/provider advised you to have an IUD ?	Doctor advised 1 It was my decision 2 Other _____ 3 (Specify)	
240. At the time of the IUD insertion, the old was your youngest child ?	☐☐ Months	
241. How far is the _____ (recorded clinic or _____ clinic from place of insertion) your house ?	☐☐ Miles	
242. Did anyone accompany you to the clinic/_____ ? (place)	Yes 1 No 2 Insertion was done at home 3	--> 244

	RESPONSE	SKIP
243. Who did accompany you to the clinic/there ? **(PROBE, MULTIPLE ANSWERS)**	FP worker 1 TBA/Dai 2 Relative/neighbor/friend 3 Child 4 Other _____ (Specify) 5	
244. Did anyone from the clinic tell you about how long the coil/C-T remains effective in preventing pregnancy ?	Yes 1 No 2	
245. How long the coil/C-T remains effective ?	☐☐ Years Don't know 7	
246. Who told you that ?	Doctor/FWV/counsellor 1 FP worker 2 TBA/dai 3 Agent 4 IUD user 5 Mass media 6 Other _____ (Specify) 7	
247. Did any one in the clinic tell you that you should come back to the clinic to have a check-up some days after the insertion ?	Yes 1 No 2	--> 249
248. How many days after the IUD(Coil/C-T) insertion were you advised to come back for the check-up ? **(MULTIPLE ANSWERS)**	Within 15 days of insertion 1 After 15 days but within a month of insertion 2 Whenever there is a problem 3 At expiry of the term 4 Other _____ (Specify) 5	
249. Did anyone tell you how to feel the thread of IUD ?	Yes 1 No 2	
250. Have you felt for the thread of IUD since insertion ?	Yes 1 No 2	

	RESPONSE	SKIP
251. Did your husband complain that he could feel the thread ?	Yes 1 No 2	
252. Did any one tell you that after the IUD(Coil/C-T) insertion you may have some problem or inconvenience ?	Yes 1 No 2	--> 254
253. What did they tell you ? **(PROBE, MULTIPLE ANSWERS)**	Pain in lower abdomen 1 Slightly more menstrual bleeding 2 Spotting/ irregular menstruation 3 Expulsion of IUD 4 Perforation of uterus 5 Ectopic pregnancy 6 Other _____ 7 (Specify)	
254. Did any one tell you what you should do if you face any problem ?	Yes 1 No 2	--> 256
255. What did they tell you ? **(PROBE, MULTIPLE ANSWERS)**	Report to clinic 1 Contact the Field Worker 2 Contact a doctor 3 Other _____ 4 (Specify)	
256. Did you receive money for accepting this IUD (Coil/C-T) ?	Yes 1 No 2	--> 258
257. How much money did you receive ?	[ ][ ] Taka	-->260
258. Why did not you receive any money ? **(SINGLE ANSWER)**	Unavailability of fund 1 No money is given 2 Don't know 3 Other _____ 4 (Specify)	

	RESPONSE		SKIP
259. What were you told about receiving the money ? **(SINGLE ANSWER)**	Requested to receive later	1	
	No money will be paid	2	
	Nothing was told	3	
	Other _____ (Specify)	4	
260. Have you experienced any particular problem or inconvenience as a result of using the IUD ?	Yes	1	
	No	2	--> 270
261. What was the major problem or inconvenience ? **(SINGLE ANSWER)**	Heavy menstrual bleeding	01	
	Irregular menstruation/spotting	02	
	Foul smelling (white) discharge	03	
	Infection/ itching	04	
	Pain in lower abdomen	05	
	Pain in lower abdomen with fever	06	
	Discomfort during intercourse	07	
	Missing thread	08	
	Perforation of the uterus	09	
	Other _____ (Specify)	10	
262. What were the other problems or inconveniences ? **(MULTIPLE ANSWERS)**	Heavy menstrual bleeding	01	
	Irregular menstruation/spotting	02	
	Foul smelling (white) discharge	03	
	Infection/ itching	04	
	Pain in lower abdomen	05	
	Pain in lower abdomen with fever	06	
	Discomfort during intercourse	07	
	Missing thread	08	
	Perforation of the uterus	09	
	Other _____ (Specify)	10	
	No other problem	11	

	RESPONSE	SKIP
263. How many days after the IUD insertion did this problem start ? **(INTERVIEWER: RECORD ANSWER FOR THE SEVEREST PROBLEM/INCONVENIENCE)**	☐☐ Days after	
264. Did you discuss the problem or inconvenience with any FP worker or clinician ?	Yes 1 No 2	 --> 267
265. Whom did you discuss with ? **(MULTIPLE ANSWERS)**	FWV/Doctor 1 FWA 2 Dai/TBA 3 Other _____ (Specify) 4	
266. What did the person do for you or advise you ? **(MULTIPLE ANSWERS)**	Advised to remove the IUD/ removed the IU 1 Advised to go to the clinic 2 Took the client to the clinic 3 Prescribed medicine 4 Informed that initial problems and discomforts will disappear and advised to retain the IUD 5 Advised to refrain from intercourse for a few days 6 Advised to take good food/cold drinks 7 No advice/action 8 Other _____ (Specify) 9	

	RESPONSE	SKIP
267. Did the problem or inconvenience stop you doing your normal duties ? **IF YES**, For how many times ? And in each time for how many days ? **(IF NO, ENTER 00)**	Days 1st time ☐☐ 2nd time ☐☐ 3rd time ☐☐ 4th time ☐☐	
268. Has the problem or inconvenience been resolved ?	Severest problem resolved 1 --> 270 Severest problem not resolved 2 Severest problem resolved but another problem continuing 3	
269. For how many days during the last two months did it stop you doing your normal duties ? **(IF NO, ENTER 00)**	☐☐ Days	
270. Did you ever visit a clinic for counselling or treatment after accepting the IUD (Coil/C-T) ?	Yes 1 No 2 --> 278	
271. How many times did you visit the clinic/place ?	Times ☐	

272. You have mentioned that you have visited the clinic for _____ times. Now I would like to ask you a few questions on each of your visits to the clinic. First, please tell me about your first visit.

INTERVIEWER:PLEASE RECORD ALL RESPONSES IN TABLE 2.2 FOR ALL THE VISITS THE RESPONDENT MADE.

TABLE 2.2:

Questions	1st visit	2nd visit	3rd visit
273. After how many days of insertion did you 1st/ 2nd/3rd visit the clinic ?	☐☐ days	☐☐ days	☐☐ days
274. Did you visit the same clinic or a different clinic ?	Same clinic 1 (Skip to 276) Another clinic 2	Same clinic 1 (Skip to 276) Another clinic 2	Same clinic 1 (Skip to 276) Another clinic 2
275. Why didn't you visit the same clinic ? **(MULTIPLE ANSWERS)**	Long distance 1 Absence of accompaniment 2 Another FWC situated nearby 3 Doctor/FWV wellknown 4 Dislike for clinic staff 5 Other _____ 6 (Specify)	Long distance 1 Absence of accompaniment 2 Another FWC situated nearby 3 Doctor/FWV wellknown 4 Dislike for clinic staff 5 Other _____ 6 (Specify)	Long distance 1 Absence of accompaniment 2 Another FWC situated nearby 3 Doctor/FWV wellknown 4 Dislike for clinic staff 5 Other _____ 6 (Specify)
276. What was the main reason for your visiting the clinic for the 1st/2nd/ 3rd time ? **(SINGLE ANSWER)**	Removal of IUD 1 Side-effect/ complication 2 Checkup 3 Other _____ 4 (Specify)	Removal of IUD 1 Side-effect/ complication 2 Checkup 3 Other _____ 4 (Specify)	Removal of IUD 1 Side-effect/ complication 2 Checkup 3 Other _____ 4 (Specify)
277. What action/advise was received by you from the clinic ? **(SINGLE ANSWER)**	Removed IUD 1 Supplied medicine/ counselled/ advised 2 Checkup 3 Other _____ 4 (Specify)	Removed IUD 1 Supplied medicine/ counselled/ advised 2 Checkup 3 Other _____ 4 (Specify)	Removed IUD 1 Supplied medicine/ counselled/ advised 2 Checkup 3 Other _____ 4 (Specify)

INTERVIEWER: IF VISITED ONLY ONCE, SKIP TO 278; IF VISITED TWICE, ASK 273-277 ABOUT THE 2ND VISIT AND SKIP TO 278;IF VISITED THRICE ASK 273-277 ABOUT THE 3RD VISIT AND PROCEED TO 278.

	RESPONSE	SKIP
278. After the IUD insertion, did any one come to your house to pay you followup visit ? **(IF YES)** Who was that person ?	FP worker 1 Some one else came _____ 2 (Specify) No one visited 3 --> 280	
279. After how many days of insertion were you first visited by any worker ?	☐☐ Days after	
280. Are you using this IUD (Coil/C-T) till now ? **(INTERVIEWER: PROBE FOR EXPULSION/ REMOVAL, IF NOT CURRENTLY USING)**	Now using 1 --> 291 Fallen out 2 --> 287 Removed 3	
281. What is the main reason for removing the IUD ? **(PROBE AND CODE ONLY MAIN REASON)**	Heavy menstrual bleeding/and/or cramp 01 Irregular menstruation/spotting 02 Foul smelling (white) discharge 03 Infection/itching 04 Pain in lower abdomen 05 Pain in lower abdomen with fever 06 Objection by husband/discomfort during intercourse 07 Desire for children 08 For health grounds (not related to IUD) 09 Other _____ 10 (Specify)	
282. Where did you go to get it removed ?	Govt. Hospital/ Clinic 1 NGO clinic 2 Private clinic/ doctor 3 Client's/Relative's house 4 Provider's house 5 Other _____ 6 (specify)	

	RESPONSE	SKIP
283. Is it the same place/person where this IUD was inserted ?	Yes 1 No 2	--> 285
284. Why did not you go for removal to the same clinic from where you had the IUD inserted ?	Long distance 1 Difficult communication/expensive 2 Poor treatment by the clinic staff 3 Refusal of clinic staff to remove IUD 4 Perceived unwillingness of the clinic staff to removal 5 Other _____ (Specify) 6	
285. Was there any problem in getting the IUD removed ?	Yes 1 No 2	--> 287
286. What was the main problem in getting the IUD removed ? Verbatim: _____		
287. For how many months did you use the IUD (Coil/C-T) before it fell out/ it was removed ? **(INTERVIEWER: CODE IN WEEKS IF IT IS LESS THAN A MONTH OTHERWISE CODE IN MONTHS)**	☐ Weeks OR ☐☐ Months	
288. Did you use another IUD (Coil/C-T) or any other method after expulsion/ removal of this IUD (Coil/C-T) ?	None 1 Another IUD 2 Other method 3 Currently pregnant 4	-->290 -->291 -->291
289. What was that method ? **(INTERVIEWER: CODE FIRST ONE IF USED MORE THAN ONE)**	Pill 01 Condom 02 Foam etc. 03 Injection 04 (IUD) -- Tubectomy 06 Vasectomy 07 MR 08 Other _____ (Specify) 09	-->291

	RESPONSE		SKIP
290. Why didn't you use any other FP method ?	Desires a child	1	
	Husband dislikes FP	2	
	Husband lives elsewhere	3	
	For health reason	4	
	Other _____ (Specify)	5	
291. To what extent are you satisfied with the services you received in connection with having the IUD insertion ? Would you say, you are highly satisfied, satisfied, somewhat satisfied, or not at all satisfied ?	Highly satisfied	1	
	Satisfied	2	
	Somewhat satisfied	3	
	Not at all satisfied	4	
292. To what extent are you satisfied with the services subsequent to the acceptance of the IUD ? Would you say, you are highly satisfied, satisfied, somewhat satisfied, or not at all satisfied ?	Highly satisfied	1	
	Satisfied	2	
	Somewhat satisfied	3	
	Not at all satisfied	4	
293. Do you think this service can be improved further ?	Yes	1	
	No	2	-->295
294. How it can be improved ? **(PROBE, MULTIPLE ANSWERS)**	Arrangement for followup	1	
	Appropriate counselling	2	
	Cordiality and attention by clinic staff	3	
	Arrangement for treatment of side-effects/ complications	4	
	Supply of medicine for treatment of side-effects/ complications	5	
	Measures to reduce complications	6	
	Making spot payment/ enhancement of transport cost	7	
	Insertion in client's house/ maintaining secracy	8	
	Other _____ (Specify)	9	

	RESPONSE	SKIP
295. Did you advise any one to accept the IUD (Coil/C-T) ?	Yes 1 No 2	--> 298
296. Would you advise anyone to accept IUD ?	Yes 1 No 2	--> 298
297. Why don't you want to advise any one to accept IUD ? Verbatim: _____ _____ _____		

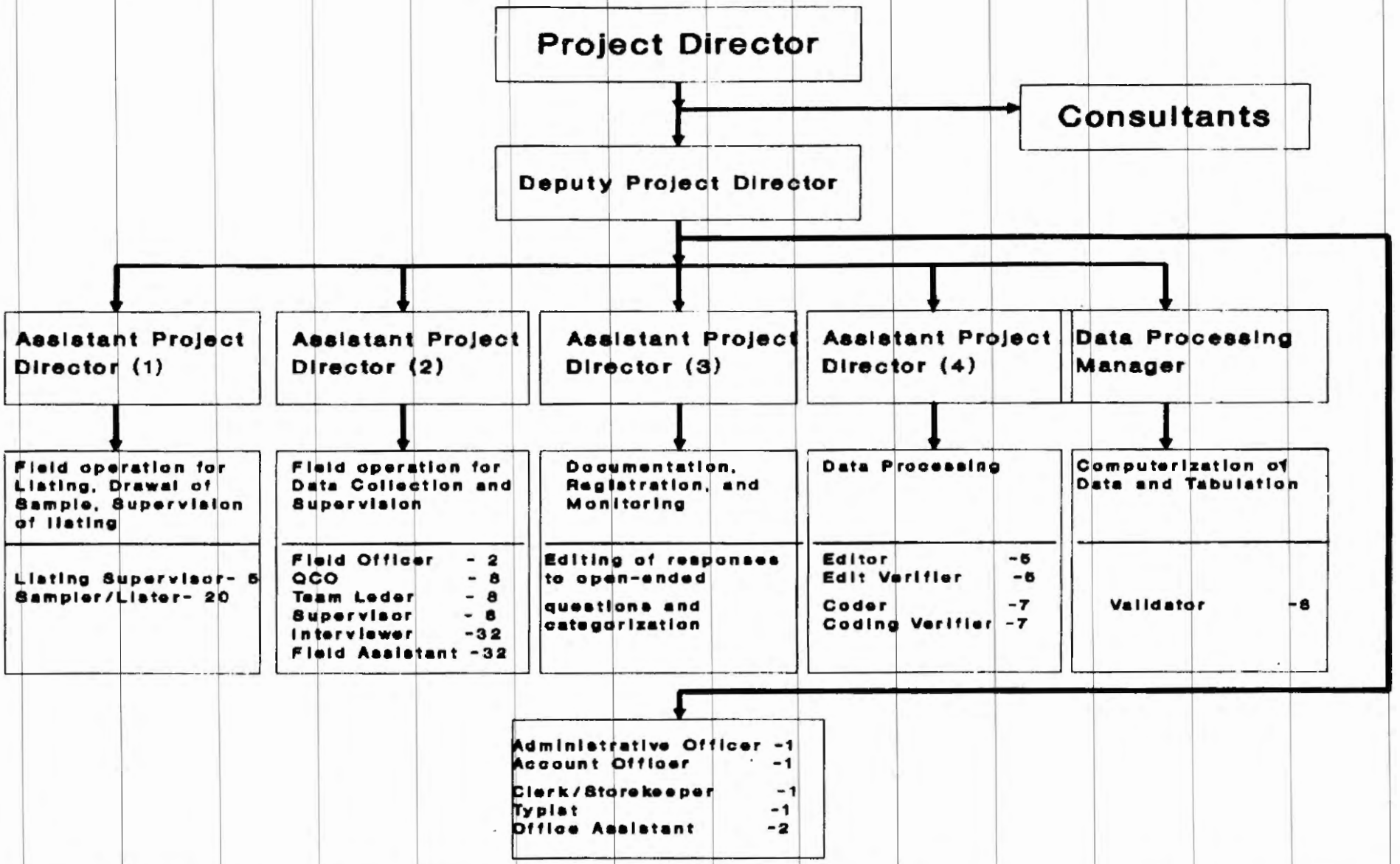
298. **INTERVIEWER: BEFORE LEAVING THE RESPONDENT, CHECK THE KEY QUESTIONS, THANK THE RESPONDENT, AND TERMINATE INTERVIEW.**

Time Ended: _____

APPENDIX C

ORGANIZATIONAL ARRANGEMENT

ORGANIZATIONAL CHART



APPENDIX D

LIST OF EVALUATION STAFF

LIST OF EVALUATION STAFF

Key Personnel

Mr. G. M. Kamal
Dr. Ashrafuddin Ahmed
Mr. Nurul Islam
Mr. A. P. M. Shafiur Rahman
Mr. Zakir Hossain
Ms. Rezina Sultana
Ms. Tauhida Nasrin
Ms. Nurun Nahar

Field Officer

Mr. Afiluddin Biswas
Mr. Mainul Islam

Quality Control Officer

Mr. Abdullah Al Mahmud
Mr. Humayun Kabir Chowdhury
Mr. Taslimuddin Ahmed
Mr. Syed A. R. M. Aminul Haque
Ms. Sonali Sarker
Ms. Rabeya Khan
Ms. Shormin Akhter
Ms. Monowara Pervin

Team Leader

Mr. Sultan Md. Joynal Abedin
Mr. Abdus Salam Bhuiyan
Mr. Ruhul Amin
Mr. S. M. Salamatullah
Mr. Altaf Hossain
Mr. Nazrul Islam
Mr. Mozakker Hossain
Mr. Reazul Haque
Mr. Mostafizur Rahman

Supervisor:

Ms. Mahfuza Begum
Ms. Bansree Gain
Ms. Syeda Asma Shireen
Ms. Sofia Mahbub
Ms. Kazi Azmun Nahar
Ms. Nazrina Latif
Ms. Rowgan Jahan Chowdhury

Supervisor (contd.)

Ms. Bibi Joynab
Ms. Rubina Ferdousi
Ms. Delara Sultana
Ms. Ferdous Ara Begum
Ms. Khodeza Begum
Ms. Mahmuda Begum

Interviewer

Ms. Bibi Jaynab
Ms. Rehena Redwan
Ms. Rubina Ferdousi
Ms. Delara Sultana
Ms. Soheli Rahman
Ms. Ferdous Ara Begum
Ms. Hosneara
Ms. Mahmuda Begum
Ms. Rahima Akhter
Ms. Papia Rani Saha Roy
Ms. Nasrin Jahan
Ms. Ferdousi Akhter
Ms. Rehena Begum
Ms. Taznin Akhter
Ms. Hosne Ara Beauty
Ms. Suriaya Khatun
Ms. Sayeda Begum
Ms. Razia Khatun
Ms. Aysa Sarker
Ms. Kanon Bala
Ms. Begum Meher Afzun
Ms. Nasrin Sultana
Ms. Khodeza Begum
Ms. Mahmuda Begum
Ms. Roji Akhter
Ms. Mahmuda Khatun
Ms. Hamida Akhter
Ms. Salina Akhter
Ms. Monoara Khan
Ms. Nargis Banu
Ms. Lina Rani Shaha
Ms. Salma Khan
Ms. Tahmina Begum
Ms. Mamtaz Begum
Ms. Naznin Rahman
Ms. Sharmin Akhter
Ms. Chandra Tarafder

Interviewer (Contd.)

Ms. Shahanaj Parveen
Ms. Sayla Nasreen
Ms. Nayla Nasreen
Ms. Jamila Khatun
Ms. Shahin Sultana
Ms. Abeda Aziz
Ms. Papia Rani Datta
Ms. Sayda Monowara Khatun

Secretarial Staff

Mr. Kh. Reaz Hossain
Mr. Abu Taher
Ms. Nuron Nahar
Ms. Shaheen Akhter
Mr. Md. Abdur Rahim
Mr. Ali Haider
Mr. Shah Alam

Field Assistant

Mr. Khandakar Mizanur Rahman
Mr. Khandakar Ataur Rahman
Mr. Mir Rakibul Islam
Mr. Nazmul Hasan
Mr. A. B. Siddique
Mr. Masud
Mr. Khan Moniruzzaman
Mr. Sk. Abdus Sabur
Mr. Md. Rubayet Hossain
Mr. Md. Humayan Kabir Sikder
Mr. Md. Abdul Malek
Mr. Shamsul Haque Talukder
Mr. Shahabuddin Ahmed
Mr. Anowar Hossain
Mr. Md. Abu Taher
Mr. Kh. Shamsher Haider
Mr. Ataur Rahman
Mr. Abdul Awal
Mr. Md. Nuruddin Ahmed
Mr. Md. Humayan Kabir
Mr. Jasimuddin Ahmed
Mr. Molla Jafor Ali
Mr. Syed Akram Hossain
Mr. Md. Idrish Miah
Mr. Md. Ali Kaiser
Mr. Kh. Kamal Ataturk

Field Assistant (Contd.)

Mr. Ashuq Kumar Hawlader
Mr. Altaf Hossain
Mr. Md. Wazed Mia
Mr. Md. Mijanur Rahman
Mr. Profulla Chandra Roy
Mr. Shah Alam
Mr. Obaidul Islam
Mr. K. M. Tahiduzzaman
Mr. Nazmul Huq
Mr. Md. Abu Taher Mia
Mr. Md. Rezaul Karim
Mr. Aslam Mia

APPENDIX E

DIFFERENCE IN REPORTING BY UPAZILA

Stratum: BDG-Rural

Sl. No.	Name of Upazilas	IUD performance in 1990		Difference (+) / (-)	
		MIS printout	Clinic records	Number	Percent
01.	Birganj	644	649	(-) 5	(-) 0.78
02.	Boda	1118	1106	(+) 12	(+) 1.1
03.	Gangachara	2125	1917	(+)208	(+) 9.8
04.	Mithapukur	2714	2657	(+) 57	(+) 2.1
05.	Bhurungamari	818	838	(-) 20	(-) 2.4
06.	Gobindoganj	2493	2493	(+) 0	(+) 0
07.	Sadullahpur	1641	1496	(+)145	(+) 8.8
08.	Patgram	415	379	(+) 36	(+) 8.7
09.	Akkelpur	408	408	(+) 0	(+) 0
10.	Sapahar	253	257	(-) 4	(-) 1.6
11.	Bagmara	790	780	(+) 10	(+) 1.3
12.	Sujanagar	539	535	(+) 4	(+) 0.7
13.	Belkuchi	852	798	(+) 54	(+) 6.3
14.	Alamdanga	929	929	(+) 0	(+) 0
15.	Jhikargachha	1136	1110	(+) 26	(+) 2.3
16.	Abhaynagar	1162	1176	(-) 14	(-) 1.2
17.	Rupsa	607	507	(+)100	(+)16.5
18.	Mangla	509	430	(+) 79	(+)15.5
19.	Amtali	1166	1336	(-)170	(-)14.6
20.	Uzirpur	607	593	(+) 14	(+) 2.3
21.	Banaripara	694	694	(+) 0	(+) 0
22.	Nazirpur	1165	1165	(+) 0	(+) 0
23.	Muksudpur	1527	1693	(-)166	(-)10.9
24.	Kalkini	1664	1615	(+) 49	(+) 2.9
25.	Bhanga	1013	999	(+) 14	(+) 1.4
26.	Dhamrai	749	731	(+) 18	(+) 2.4
27.	Sherajdikhan	419	273	(+)146	(+)34.8
28.	Monohardi	886	858	(+) 28	(+) 3.2
29.	Harirampur	647	479	(+)168	(+)26.0
30.	Madhupur	460	467	(-) 7	(+) 1.5
31.	Bakshiganj	383	377	(+) 6	(+) 1.6
32.	Bhaluka	1059	1019	(+) 40	(+) 3.8
33.	Haluaghat	750	827	(-) 77	(-)10.3
34.	Madan	459	334	(+)125	(+)27.2
35.	Biswanath	237	227	(+) 10	(+) 4.2
36.	Barlekha	758	929	(-)171	(-)22.6
37.	Jagannathpur	757	673	(+) 84	(+)11.1
38.	Burichang	247	225	(+) 22	(+) 8.9
39.	Matlab	755	290	(+)465	(+)61.6
40.	Raipur	209	209	(+) 0	(+) 0
41.	Mirshari	1104	1079	(+) 25	(+) 2.3
42.	Chandnaish	979	931	(+) 48	(+) 4.9
43.	Patiya	1104	1159	(-) 55	(-) 5.0
Total		38951	37647	+1304	+ 3.3

Stratum: BDG-Urban

Sl. No.	Name of Upazilas	IUD performance in 1990		Difference (+) / (-)	
		MIS printout	Clinic records	Number	Percent
01.	Dinajpur Kotwali	684	465	(+)219	(+)32.0
02.	Rangpur Kotwali	2653	2166	(+)487	(+)18.4
03.	Lalmonirhat	519	490	(+) 29	(+) 5.6
04.	Pabna Sadar	989	735	(+)254	(+)25.7
05.	Narail	1063	1086	(-) 23	(-) 2.2
06.	Moheshpur	1039	901	(+)138	(+)13.3
07.	Khulna Sadar	2053	723	(+)1330	(+)64.8
08.	Patuakhali	1458	1108	(+)350	(+)24.0
09.	Pirojpur	1500	1528	(-) 28	(-) 1.9
10.	Faridpur Kotwali	709	575	(+)134	(+)18.9
11.	Tejgaon	5318	3819	(+)1499	(+)28.2
12.	Mirpur	4913	3549	(+)1364	(+)27.8
13.	Tangail	1190	642	(+)548	(+)46.1
14.	Kishoreganj	458	352	(+)106	(+)23.1
15.	Sreemangal	881	682	(+)199	(+)22.6
16.	Feni	752	872	(-)120	(-)16.0
17.	Double Mooring	3348	2358	(+)990	(+)29.6
Total		29527	22051	+7476	+25.3

Stratum: NGO

Sl. No.	Name of Upazilas	IUD performance in 1990		Difference (+) / (-)	
		MIS printout	Clinic records	Number	Percent
01	Sadullahpur	225	348	(-)123	(-)54.7
02	Gurudashpur	202	275	(-) 73	(-)36.1
03	Daulatpur/Digholia	222	236	(-) 14	(-) 6.3
04	Mirpur	2050	2713	(-)663	(-)32.3
05	Motijheel	3112	3137	(-) 25	(-) 0.8
06	Sutrapur	1523	1102	(+)421	(+)27.6
07	Gulshan	1144	1695	(-)551	(-)48.2
08	Korwali	1338	769	(+)569	(-)42.5
09	Ramna	1480	2630	(-)1150	(-)77.7
10	Lalbag	1028	2479	(-)1451	(-)141.1
11	Dhamrai	1493	1630	(-)137	(-) 9.2
12	Narshingdi	149	141	(+) 8	(+) 5.4
13	Kendua	72	-	(+) 72	(+)100.0
14	Double Mooring	751	1782	(-)1031	(-)137.3
Total		14789	18937	- 4148	- 28.0