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IUD ANNUAL EVALUATION 1989

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G. M. Kamal
Executive Director

CONTENTS

		Page
ACKNOWLEDGMENTS		i
LIST OF TABLES		iv
LIST OF FIGURES		v
GLOSSARY		vi
EXECUTIVE SUMMARY		viii
Chapter 1	INTRODUCTION	
1.1.	Background	1
1.2.	Cost reimbursement	3
1.3.	Objectives	4
Chapter 2	METHODOLOGY AND IMPLEMENTATION	
2.1.	Sample size (client survey)	6
2.2.	Sample design (client survey)	7
2.2.1.	First stage sampling: selection of upazilas	7
2.3.	Sampling frame of IUD clients	8
2.4.	Second stage: selection of clients	10
2.5.	Selection of service provider sample	10
2.6.	Data collection instruments	11
2.7.	Implementation	11
2.7.1.	Field work procedure	11
2.7.2.	Procedure followed to locate and interview clients	12
2.7.3.	Procedures followed in the case of denial of insertion by selected clients	13
2.7.4.	Time schedule	13
Chapter 3	VERIFICATION OF IUD PERFORMANCE	
3.1.	Performance verification	14
3.1.1.	Verification of MIS performance figures	14
3.1.2.	Verification of reported IUD clients	16
3.1.2.1.	Results of survey verification	17
3.1.2.2.	Comparison of results of survey verification between 1988 and 1989	17
3.1.2.3.	Contact and verification rates by selected characteristics	22
3.2.	Interpretation of contact and verification results	25
3.2.1.	Estimation of verified and unverified cases	27
3.2.2.	Standard errors and confidence limits	29
3.3.	Payment verification	29
3.3.1.	Receipt of client's transportation costs	29
3.3.2.	Receipt of service provider's fee	30
3.3.2.1.	Proportion of service provider's fee not yet received	31

	Page	
Chapter 4	PROFILE OF IUD ACCEPTORS AND PROVIDERS	32
4.1.	Profile of IUD acceptors	32
4.1.1.	Socio-economic profile of IUD acceptors	33
4.1.2.	Demographic profile of IUD acceptors	35
4.1.3.	Profile of IUD acceptors in terms of knowledge and use of other family planning methods	39
4.2.	Profile of service providers	39
4.2.1.	Socio-economic profile of service providers	41
4.2.2.	Profile of service providers in terms of training and refresher training obtained	43
4.2.3.	Profile of service providers in terms of their level of knowledge of the IUD	43
Chapter 5	PRE-INSERTION SERVICES	45
5.1.	Decision making process	49
5.2.	Nature of counselling	49
Chapter 6	INSERTION SERVICES	54
6.1.	Possession of functional equipment	55
6.2.	Steps followed in performing an IUD insertion	57
6.3.	Record keeping	58
6.4.	Availability of IUD money	58
6.5.	Problems in rendering IUD services	58
Chapter 7	POST-INSERTION EXPERIENCE	61
7.1.	Follow-up	62
7.2.	Side-effects	63
7.3.	Status of use of IUD	64
7.4.	Retention rate for the IUD	67
7.5.	Main reasons for removal	68
7.6.	Satisfaction with services	68
	REFERENCES	80
	APPENDICES	
	APPENDIX A: CLIENT QUESTIONNAIRE	82
	APPENDIX B: UPAZILA-WISE DIFFERENCE IN PERFORMANCE BETWEEN MIS REPORTS AND CLINIC RECORDS	104
	APPENDIX C: ORGANIZATIONAL SET-UP	108
	APPENDIX D: LIST OF EVALUATION STAFF	110

LIST OF TABLES

	Page
Table 3.1	Differences in the performance figures between the MIS reports and the clinic records 16
Table 3.2a	Details of non-responses 18
Table 3.2b	Comparison of contact and verification rates by 1988 and 1989 evaluations 18
Table 3.2c	Difference in verifiable IUD performance between the calendar years 1988 and 1989 21
Table 3.2d	IUD performance as per MIS report and contact and verification rates by months for 1988 and 1989 21
Table 3.3a	Contact and verification rates by strata and by bonafide NGO and non-bonafide NGO 22
Table 3.3b	Contact and response rates of clients by selected characteristics 23
Table 3.4	Status of receipt of client's transportation costs 30
Table 3.5	Status of receipt of service provider's fee 31
Table 4.1a	Socio-economic profile of IUD acceptors 33
Table 4.1b	Demographic profile of IUD acceptors 34
Table 4.1c	Profile of IUD acceptors in terms of knowledge and use of other methods 37
Table 4.1d	Comparison of selected characteristics of IUD acceptors with current users of any method of 1989 CPS and 1989 BFS 38
Table 4.2	Socio-economic profile of service providers 39
Table 4.3	Profile of service providers in terms of training and refresher training obtained 42
Table 4.4	Profile of service providers in terms of their level of knowledge concerning contra-indications, side-effects, and effective duration of the IUD 44
Table 5.1	Decision making process about IUD 47
Table 5.2	Nature of counselling 51
Table 6.1	Reported possession of IUD manual and equipment for IUD insertion available to the provider 55
Table 6.2	Reported steps followed by providers in performing IUD insertions and health precautions 56
Table 6.3	Registers maintained by the providers for IUD insertions 58
Table 6.4	Availability of IUD money and measures taken when there is no money available 59
Table 6.5	Type of problems faced in rendering the IUD services 60

	Page	
Table 7.1	Post-insertion experience	69
Table 7.2	Whether re-visited clinic, by distance from clinic	74
Table 7.3	Nature of advice received by source of advice (restricted to those who sought advice about problem)	74
Table 7.4	Main reason for removal, by length of use (for those with removal)	74
Table 7.5	Status of use, by experience of problems, amount of counselling (summary score), and satisfaction with services	75
Table 7.6	Satisfaction with services, by experience of problems and whether visited clinic/visited at home	76
Table 7.7	Percentages who are highly satisfied or satisfied with services, by type of clinic and amount of counselling (Summary Score)	76
Table 7.8	Outcome of pregnancies occurred after the IUD insertion	76
Table 7.9	Differentials in the rate of complications by quality of IUD services	77
Table 7.10	Differentials in the retention rate for the IUD by quality of IUD services	78
Table 7.11	Life table analysis by individual characteristics of clients	79
Table 7.12	Place of removal of IUDs by satisfaction with services (for those with removal)	79

LIST OF FIGURES

	Page	
Figure 1.1	IUD insertions during 1974-75 to 1989-90	2
Figure 2.1	Map of Bangladesh showing sample upazilas	9
Figure 2.2	Procedure followed to reduce non-responses	13
Figure 3.1	Contact and verification levels by time interval between insertion and interview (1988 evaluation)	19
Figure 3.2	IUD performance in 1989 as per clinic records showing proportions verified and unverified by months	20
Figure 3.3	Verifiable IUD performance by month for the calendar years 1988 and 1989	20
Figure 3.4	Relationship between IUD performance and proportion of cases verified	24
Figure 3.5	Percent verified by number of upazilas	24
Figure 3.6	Estimation of verified and unverified IUD cases	28
Figure 7.1	Post-insertion follow-up	61

GLOSSARY

ACPR	Associates for Community and Population Research
BAPSA	Bangladesh Association for Prevention of Septic Abortion
BDG	Bangladesh Government
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
FP	Family Planning
FWA	Family Welfare Assistant
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
MOHFW	Ministry of Health and Family Welfare
MR	Menstrual Regulation
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
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
UHFWC	Upazila Health and Family Welfare Center
UP	Union Parisad
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

1 Purpose

This report presents the findings of the second in a series of three IUD Annual Evaluations. The first evaluation was conducted for the calendar year 1988 and this one is for 1989. 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.

2 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 71 upazilas were selected--17 from BDG urban, 39 from BDG rural, and 15 from the NGO stratum. Lists of all clients recorded as having IUD insertions in 1989 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 4,951 reported IUD clients were selected, out of which 3634 were located and 3608 of these successfully interviewed. An attempt was made to interview all the 716 service providers in the selected upazilas; of these a total of 626 were successfully interviewed.

For data collection two structured questionnaires were used--the Client Questionnaire and the Provider Questionnaire. In addition, several forms and formats were used for verification of clinic records.

3 Verification of performance and payment

3.1 Performance verification

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.

3.1.1 Verification of performance figures

The IUD performance figures as per clinic records were one percent lower than the MIS reported figures. However, this small net difference is the result of large self-cancelling differences at the stratum level. The MIS reported performance figure was 18 percent higher than the estimates based on clinic records for the BDG urban stratum, but 24 percent lower for the NGO stratum. This marked difference is likely to be the result of the different standards for making advances for IUD money. In some districts the Deputy Directors make advances directly to NGOs, while in others the NGOs receive the IUD money from the UFPO. NGOs who receive the IUD money directly from the District Deputy Director do not usually submit their monthly performance reports to the UFPO. Thus, the performance of these NGOs are not included in the upazila report. This non-inclusion causes underreporting of NGO performance since MIS compiles its reports directly from the upazila monthly returns.

The IUD money is not disbursed on the basis of MIS performance figures; 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.

Recommendation: As recommended in the 1988 evaluation report, in order to streamline the reporting system, all clinics--BDG, NGO, and other multi-sectorial programs--should receive their IUD money from the concerned UFPO and submit their reports to the UFPO, and the disbursement of funds at all levels should be tied to the MIS reported performance figures.

3.1.2 Verification of reported IUD clients

Clinic records were verified by tracing and interviewing all selected women recorded as IUD clients in 1989. Clients hailing from outside selected upazilas or who had migrated were followed up at their current address. About one-fourth (26.6 percent) of the sample clients could not be located primarily because their address either did not exist or no such person ever lived there. Incomplete address was the next important reason for non-location of clients. Among those who were located, only 0.7 percent could not be interviewed because they were not available; 63.7 percent had the reference IUD, 3.9 percent had a non-reference IUD and the remaining 5.3 percent had never had one.

Compared to the 1988 results, the proportion of clients who had had the reference IUD was higher in 1989 by 12.3 percentage points. This difference was due to a large difference between the performances in the first and the second half of 1989. The proportion who had the reference IUD was 58.0 percent in the first half, while it was 69.1 percent in the second half of 1989. It is likely that the onset of the field work of the 1988 evaluation from May 22, 1988 had some influence on this difference. It is important to note that although the IUD performance declined from 1988 to 1989 by 14.7 percent, the verifiable IUD performance rather increased by 1.1 percent.

3.1.3 Estimation of verifiable cases

Following a reasonable procedure for estimation, 69.1 percent of the reported IUD cases were estimated as verified. At the 95% level of confidence, the lower limit of this estimation is 65.8 percent and the upper limit 72.4 percent of the MIS reported performance. The comparable figures for the 1988 evaluation were 56.9 percent and 61.1 percent respectively.

Detailed analyses of the data revealed that, as observed in the 1988 evaluation, several non-bonafide NGOs in the Dhaka city area (having no donor funding) and about one-fifth of the upazilas--primarily those reporting high performance of IUD insertions--account for most of the proportion unverified. It is important to note that the number of upazilas having lower proportion of verified cases decreased substantially in 1989 compared to 1988. Out of the 68 selected upazilas, the number of upazilas having less than 60 percent cases verified was 39 upazilas in 1988, while it was only 16 upazilas in 1989. This finding indicates that the proportion of unverified cases was largely due to the performances of a handful of upazilas.

Recommendation: In order to improve upon the veracity of reported IUD performance, the non-bonafide NGOs and the few upazilas showing lack of accountability should be closely monitored.

3.2 Payment verification

3.2.1 Clients' transportation costs

Fifty five percent of the verified cases were reimbursed for their transportation costs. At the 95 percent level of confidence, the lower limit for the proportion of clients having received reimbursement for transportation costs was 50.5 percent and the upper limit 59.3 percent. The comparable figures for the 1988 evaluation were relatively higher at 62.6 percent and 68.0 percent respectively. The reason for non-receipt of transportation costs is mainly non-availability of the money with the providers. About a quarter of the providers reported that they did not have any IUD money with them. Of those having no IUD money at their disposal, 43 percent had no idea as to when they would receive the money. In contrast, in the 1988 evaluation, most of the providers were expecting the money within one or two weeks.

Recommendation: In order to ensure immediate payment to IUD clients, advance IUD money should be made available to all clinics.

3.2.2 Service providers' fee

Two percent of the service providers in both the BDG rural and urban strata and 32 percent in the NGO stratum said that they do not receive any IUD insertion fee. Of those who stated that they receive an insertion fee, 69 percent had received full payment for the insertions performed in 1989. The comparable figure for the 1988 evaluation was 62 percent. The service providers who reported that the providers' fee is not paid to them are unlikely to receive any fee, but those who received partial payment are likely to receive the remaining amount of their claim. Therefore, estimation of the proportion of service providers who had not yet received their fees was not attempted.

4 Profile of acceptors and service providers

4.1 Profile of acceptors

Compared to the current users of family planning (1989 BFS and 1989 CPS), IUD acceptors are generally younger in age, more educated, and have lower parity.

Knowledge of any contraceptive method, apart from the IUD, and its source of supply/service is universal among IUD acceptors. Three-fourths of the IUD acceptors had previously used contraceptives--mostly the oral pill and the condom--and are highly motivated to control their fertility. Nearly a quarter switched over from other methods and 13 percent received a post-MR IUD. In the NGO stratum, 31 percent of the IUD acceptors had had an MR prior to having an IUD. The results of both the 1989 CPS and the 1989 BFS show that knowledge of the IUD is relatively lower among married women of reproductive age compared to knowledge of the oral pill and tubectomy. Knowledge and popularity of the IUD is much higher among educated women. This may indicate that there may be a latent demand for IUD services among less educated women.

Recommendation: Service providers in the BDG clinics should be guided to provide appropriate counselling to all MR clients to persuade them to accept a post-MR IUD. Information on the IUD should be more widely disseminated in order to promote IUD acceptance.

4.2 Profile of service providers

About 95 percent of the service providers are FWVs and 4 percent are doctors. On an average, providers are 32 years of age, have been serving in family planning for about 9 years, and have been posted in their current clinic for about two-and-a-half years. Three-fifths of the providers did not receive any refresher training on IUD insertions. Although there are misconceptions among service providers about some aspects related to an IUD insertion, most of them have appropriate knowledge of contraindications, side-effects, and effective duration of the IUD. About one-tenth of the providers in NGO clinics did not receive any formal training in IUD insertions. This may be because paramedics suitable for IUD insertions are mostly trained by the government family planning program and, upon successful completion of their training, most of them obtain jobs in the government family planning program.

Recommendation: MOHFW may consider allowing NGOs to have paramedics trained through the government training institutes, such as FWVTIs.

5 Pre-insertion services

5.1 Persons with whom discussed

FP workers, husbands, and other IUD users were the most frequently mentioned persons with whom the acceptors discussed acceptance of the IUD prior to insertion.

5.2 Accompaniment to clinic

Nearly four-fifths of the acceptors went with someone to the clinic at the time they had an IUD inserted. Accompaniment to the clinic by FP workers and Dai/TBAs has been reduced by 10 and 3 percentage points respectively from 1988 to 1989. This might reflect the effect of withdrawal of the referral fee. However, the withdrawal of the referral fee does not appear to have had any effect on the number of actual IUD insertions performed. It has nevertheless resulted in the decreased recording of the name of referrers in the clinic records.

Recommendation: All clinics should be advised to record the names of referrers since locating clients when necessary becomes difficult without identification of the referrer.

5.3 Counselling

All but 4 percent of the acceptors were counselled on the length of effectiveness of the IUD, and about four-fifths on the need for a follow-up visit, what the acceptor should do should she experience any problem or side-effect, and the need to feel for the thread. However, information on side-effects was provided to no more than 60 percent. Instructions on counselling differ from one manual to another supplied to service providers and field workers.

Recommendation: Instructions on counselling need to be standardized in order to eliminate differences in different manuals as well as to provide clear-cut guidance to the service providers and field workers.

6 Insertion services

6.1 Availability of equipment

As was found in the 1988 evaluation, there are significant shortages of essential equipment in the clinics. One-third of the clinics do not have an IUD insertion table and one-fourth do not have any

sterilizer or stove to sterilize their instruments. The supply of consumable items like savlon/dettol and cotton wool has improved considerably between 1988 and 1989.

Recommendation: In order to ensure a minimum standard for IUD insertions, essential equipment should be supplied to all clinics. Clinics having no IUD insertion table and sterilizer/stove should be supplied with these items on a top priority basis.

6.2 Aseptic precautions

One-fifth of the service providers stated that they use only antiseptic solutions (savlon/dettol) to sterilize their instruments. Unless High Level Disinfectants (HLDs) are used, which are not in supply in the IUD program, these simple antiseptic solutions do not serve the purpose of sterilization. As such, use of savlon/dettol for sterilization is clearly inadequate.

Recommendation: Service providers should be provided with appropriate training on how to maintain sterile conditions for IUD insertions.

6.3 Record keeping

Records of IUD clients' attendance are maintained in most clinics, but records of follow-up, removal, re-insertion, and complications are not properly maintained. Certificate books were maintained by 65 percent of clinics in 1989 as compared to 85 percent in 1988. This was largely due to lack of supply of certificate books. In some clinics recording of the complete address of clients was perhaps ignored to disguise fraudulent cases.

Recommendation: IUD registers and certificate books should be supplied to all clinics and recording of the complete address of all clients should be enforced.

7 Post insertion services

7.1 Follow-up

One-fifth of the acceptors neither returned to the clinic nor were visited by any FP worker following insertion of the IUD. Nearly three-fifths of the acceptors were visited at home, nearly one-half returned to the clinic, and about a quarter were followed-up both at the clinic and at home. The proportion of acceptors visited at their household was

slightly higher in 1989 (58 percent) than in 1988 (53 percent). Level of satisfaction was found to be positively associated with home visits.

There were differences in the instructions given on follow-up in the manuals supplied to field personnel at different times, indicating that a clear-cut official policy on follow-up is yet to be developed.

Recommendation: A clear-cut official policy on follow-up procedures should be developed and uniformity of instructions in the manuals should be ensured.

7.2 Side-effects

Two-thirds of the acceptors had suffered from some problems or side-effects, and one-tenth reported functional impairment due to side-effects. The most frequently mentioned side-effects were heavy menstrual bleeding and pain in the lower abdomen. One-third of those having problems/side-effects had not had the problem resolved at the time of interview. Compared to the findings of the 1988 evaluation the proportion having functional impairment was lower in 1989, while the proportion having had their problems unresolved was higher in 1989. This might be attributable to the longer time interval between the date of insertion and interview for 1988 compared to the 1989 evaluation.

7.3 Retention rate for the IUD

The cumulative retention rate at the end of the first year was 65 percent and at 14 months, 60 percent. The retention rates for the IUD are almost identical for 1988 and 1989. This rate is broadly similar to the retention rate for the IUD in other countries in this region and that found in earlier studies in Bangladesh. However the annual retention rate as found in this study is 17 percentage points lower than that observed in special project areas such as the ICDDR,B MCH-FP project in Matlab.

Recommendation: A refresher training program for all service providers may be organised in phases in order to ensure standardized practices for assessment of contra-indications, counselling, sterilization of instruments, follow-up, and management of side-effects and complications. This would enhance the quality of IUD services and may ultimately contribute to increasing the retention rate.

Chapter 1

INTRODUCTION

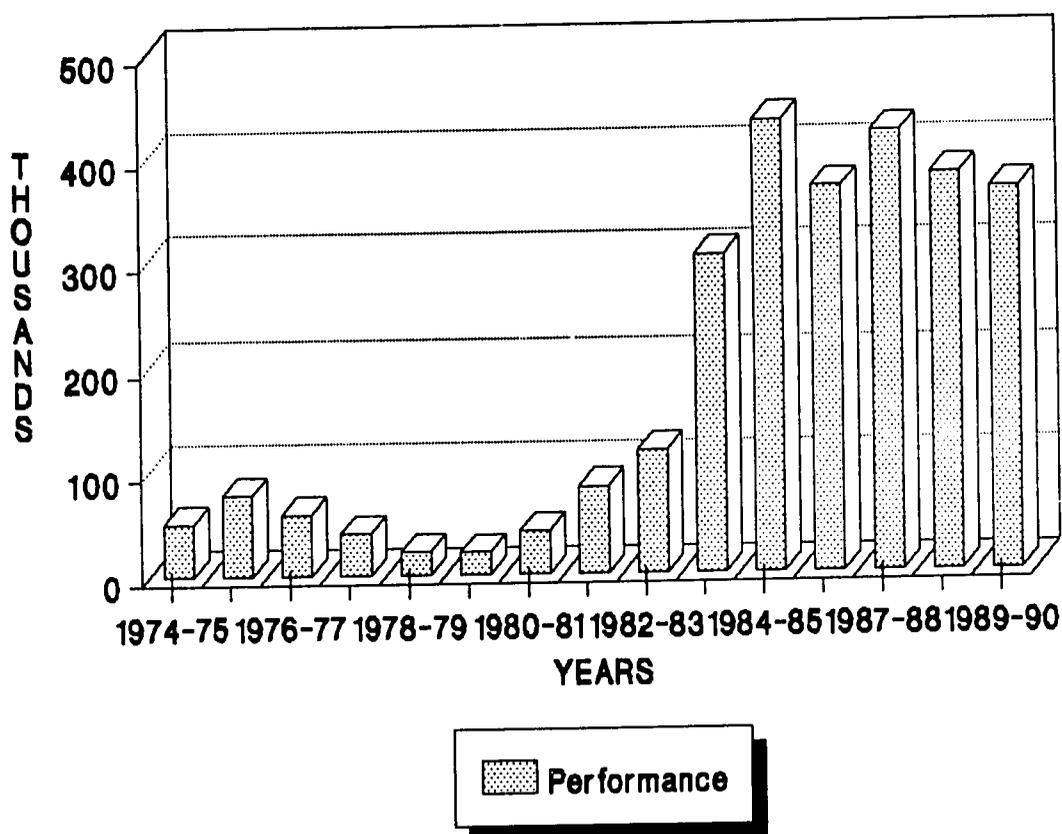
1.1. Background:

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 clients' transportation cost, Tk.5.00 for field worker (helper) compensation for non-routine services, and Tk.5.00 for physicians and FWVs (paramedic) 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 the TCu-200 and the compensation payments, 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 performance may be observed since 1987-88 (Figure 1.1). The field worker (including Dais) compensation was withdrawn from November 1988.

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 1.7 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 the 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.

Figure-1.1: IUD insertions during 1974-75 to 1989-90.



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 as estimated for the national program is much lower than that observed for acceptors in special program areas. For example, a

representative sample found that 67.3 percent women were still using the IUD at the end of twelve months, while the corresponding figure in a special program area was 82.3 percent. Attrition is higher in the first three months as compared to 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 due to anomalies in reporting. About two-fifths of IUD cases recorded in the clinic records could not be traced and verified. 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 follow-up 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, but such a procedure is clearly inadequate since instruments are only properly sterilized if they are boiled or autoclaved. The cumulative retention rate at the end of the first year was 63 percent and at 18 months 50 percent (Kamal, et al., 1990).

1.2. 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".

1.3. Objectives:

This report presents the findings of the second 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

Data for the evaluation were collected from the following sources:

- i) survey of IUD acceptors;
- ii) survey of service providers; and
- iii) verification of clinic records.

2.1. 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. However, based on the findings of the 1988 evaluation, the NGO stratum was divided into two sub-strata --Dhaka city and other areas. This was considered desirable because of the relatively low rate of locating clients of city-based small clinics having no bonafide funding sources. The strata were defined as follows:

Urban BDG stratum:

Clients reportedly having IUD insertions from urban BDG clinics and hospitals during the calendar year 1989.

Rural BDG stratum:

Clients reportedly having IUD insertions from rural BDG clinics and hospitals during the calendar year 1989.

NGO stratum:

Clients reportedly having IUD insertions from the NGO clinics and hospitals of both rural and urban areas during the calendar year 1989.

NGO sub-strata:

Dhaka city:

Clients reportedly having IUD insertions from the NGO clinics and hospitals located in the Dhaka city area.

Other areas:

Clients reportedly having IUD insertions from the NGO clinics and hospitals located in areas other than Dhaka city area.

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.

2.2. 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 1989 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.

2.2.1. 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 1989 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 organized 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 1989. 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 21 BDG urban upazilas, 39 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

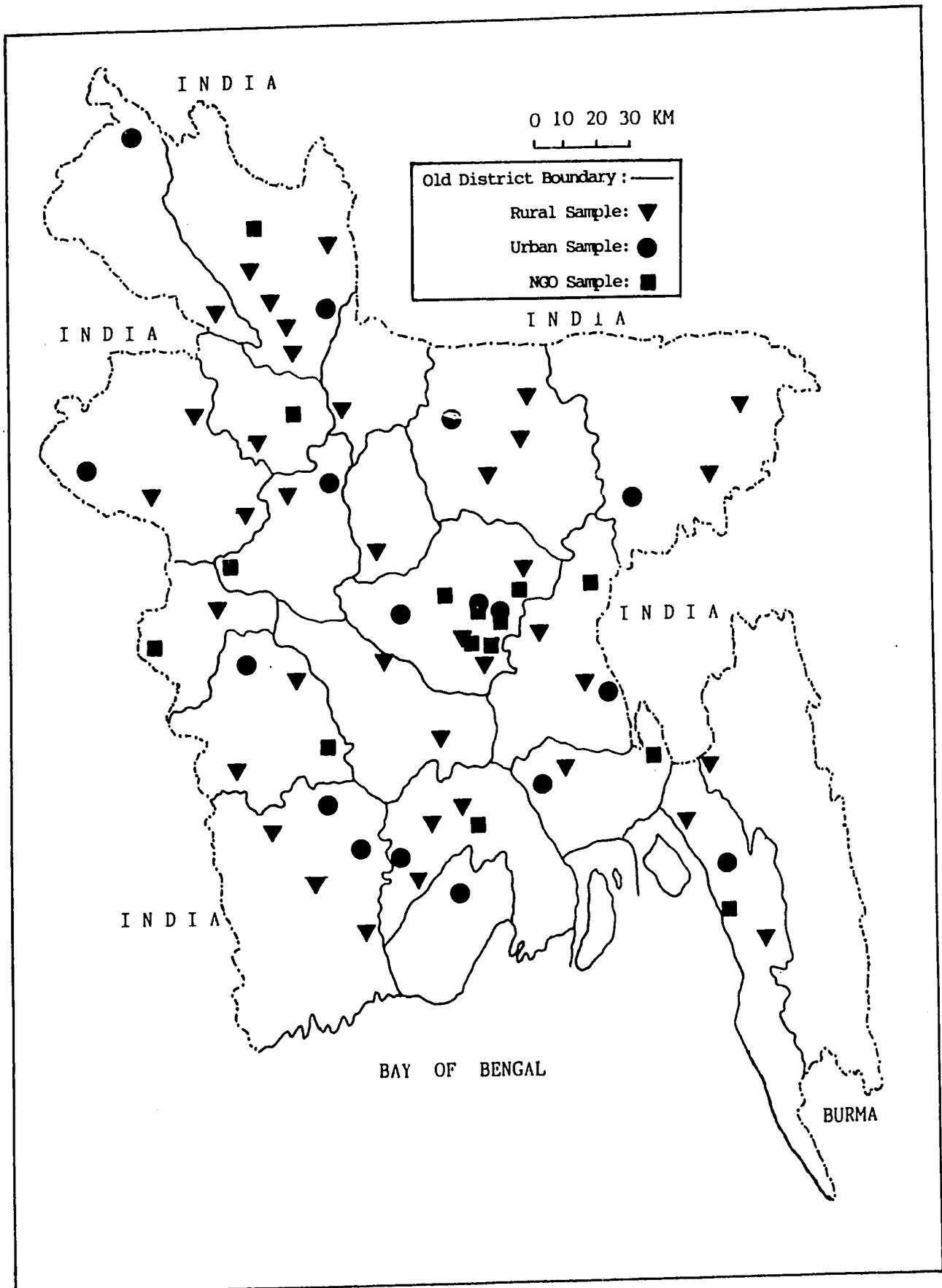
The average number of clients who were to be selected from each upazila was 65 for BDG urban stratum, 76 for BDG rural stratum, and 30 for NGO stratum. However, these numbers differed in the actual selection because of variations in the reported performance and the clinic records. Thus, the mean number of clients actually selected per upazila was 54 for BDG urban, with a range of 37 to 74; for BDG rural 76, with a range of 66 to 99; and for NGO 39, with a range of 01 to 110.

A map of Bangladesh showing the scatter of sample upazilas is presented in Figure 2.1.

2.3. Sampling frame of IUD clients:

The sampling frame for selection of clients was prepared by listing all clients who had an IUD insertion in 1989 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.

Figure 2.1: Map of Bangladesh showing sample upazilas.



A set of five forms was used for the listing operation. Upon arrival at the selected upazila the lister collected the names of all clinics, BDG and NGO, 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 all IUD clients recorded in the clinic register for the calendar year 1989. The total 1989 performance of each clinic was noted by the lister in Form 3 and the total 1989 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 practical problems, listing of IUD clients was not possible in 16 clinics. In ten clinics the service providers were either on leave or not available, and in two clinics the registers were either lost or were not available with the newly-posted service providers. In one clinic the register was seized for verification by the district level officials and was unavailable at the time of the listing operation. One NGO clinic had closed and two NGO clinics refused to show their registers. Out of these 16 clinics, the performance figures were not available for three NGO clinics and two BDG clinics. The clients from these five clinics could not be included in the sampling frame. For the remaining clinics, the performance figures were available but the IUD registers were not available. Performances of these 11 clinics were included in drawing the sample. When any of these non-listed clients was drawn in the sample, a substitute sample was drawn from within the same upazila. In this way 544 clients could not be listed for which 17 clients were selected as substitute sample. This small number is unlikely to affect the main results.

2.4. Second stage: selection of clients:

All clients listed in the 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.

2.5. 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 716 service providers were selected; of these 626 were successfully interviewed--303 from BDG rural, 230 from BDG urban, and 93 from the NGO stratum.

2.6. Data collection instruments:

The following data collection instruments were used for the evaluation:

1. Questionnaire for IUD clients (Appendix A).
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.

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. The organizational set-up for the evaluation is to be found in Appendix C, while the list of evaluation staff is 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 are genuinely assessed.

Quality control:

Quality control (QC) procedures were implemented to ensure that the field teams were carrying out their responsibilities.

There were four quality control 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 for locating 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 vigorously attempted 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 1989 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:

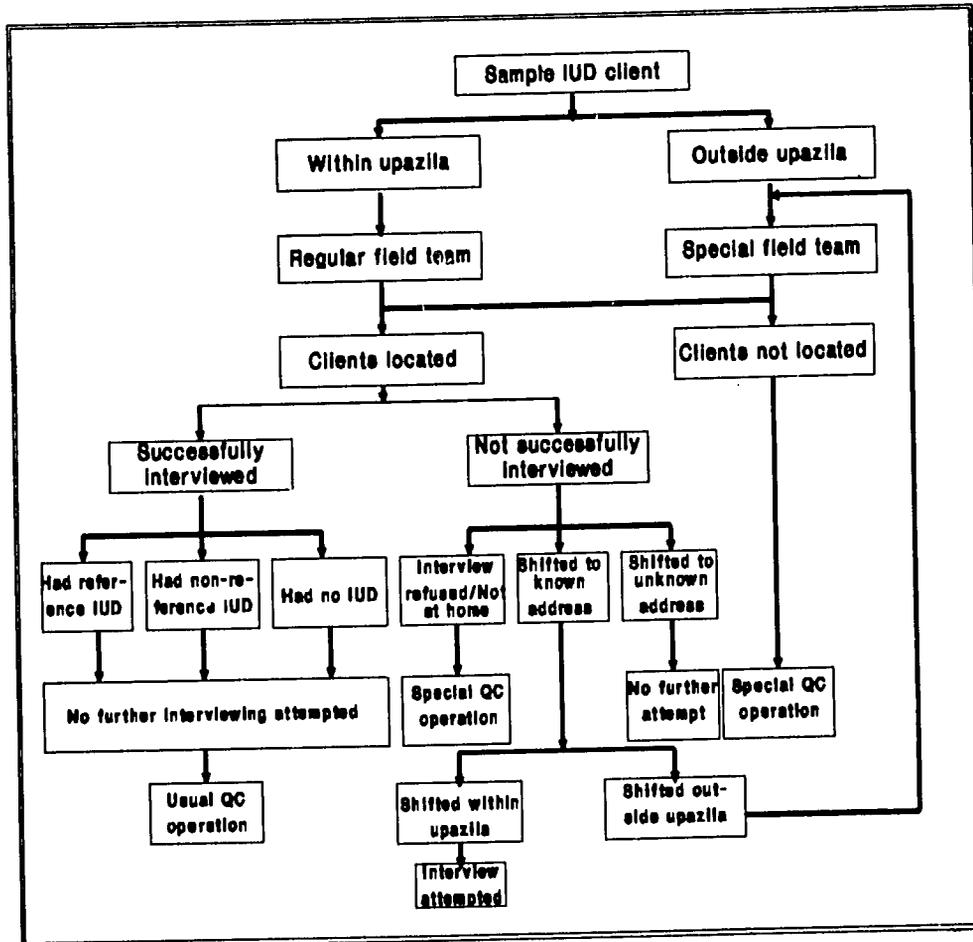
In all instances when a selected respondent denied having ever had an IUD insertion, the female supervisor re-interviewed the respondent. A second re-interview was conducted, on a sub-sample basis, by the QCOs.

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

2.7.4. Time schedule:

The activities for the 1989 evaluation started on January 01, 1990. The field work for listing continued from January 16, 1990 to March 14, 1990, while that for data collection from February 05, 1990 to June 02, 1990. The draft report was submitted to the USAID on November 08, 1990 and the revised draft on January 15, 1991.

Figure 2.2: Procedure followed to reduce non-responses.



Chapter 3

VERIFICATION OF IUD PERFORMANCE

Estimations of the actual IUD performance during calendar year 1989 and the proportion receiving the payments related to IUD insertions were made 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, district, and MIS. With the exception of only two upazilas, the reports did not match across the different levels. The major reasons for the differences in reporting are as follows:

- a. Reports are not regularly submitted by all clinics. UFPOs do not maintain any worksheet for compilation of reports. As a result, the UFPOs fail to correctly 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. Due 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.

Presentation of NGO performance figures for the calendar year 1989 appeared in two different formats in the MIS printout. For the January-June period NGO performances were shown by district and for the July-December period by upazila, making it difficult to segregate the performance by upazila for the January-June period. Therefore, the location of each NGO within a district was identified by upazila and the performance for the January-June period was allocated to upazilas on the assumption that all clients were drawn from the same upazila in which the NGO was located.

Differences in the performance figures between the MIS reports and the clinic records are shown in Table 3.1. As is evident, the IUD performance figures as per clinic records were one percent lower than the MIS reported figures. Thus, for the year 1989 the IUD performance figures according to clinic records may be estimated at 325,883 instead of 329,175 as given in the MIS reports. This small net difference is the result of larger self-cancelling differences at the stratum level. The MIS reported performance figure was 18 percent higher than estimates based on clinic records for the BDG urban stratum, but 24 percent lower for the NGO stratum. It is also very important to note that although at the national level the overall difference in reporting was small, there were wide variations among individual upazilas. For example, in the NGO stratum the performance figures contained in the MIS report were 97 percent higher for one upazila, and 266 percent lower for another upazila. In the BDG stratum, the MIS figures were 42 percent higher in one upazila and 19 percent lower in another. In the BDG rural stratum, the MIS report was 17 percent higher in one upazila and 30 percent lower in another. Upazila-wise differences are presented in Appendix B.

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

Table 3.1: Differences in performance figures between the MIS reports and clinic records.

Stratum	IUD Performance in 1989 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	58.9 (193820)	58.9 (2945)	60.0 (2969)	(-) 0.8 (-) (24)
BDG-Urban	27.3 (89832)	27.3 (1365)	22.7 (1126)	(+) 17.5 (+) (235)
NGO	13.8 (45523)	13.8 (690)	17.3 (856)	(-) 24.0 (-) (166)
Total	100.0 329175	100.0 5000	100.0 4951	(+) 1.0 (+) (49)

as referred or performed, these cases are counted twice. Another reason for this difference is likely to be the result of the different financial disbursement procedures for the IUD money. As also mentioned in the 1988 evaluation report, in some districts the Deputy Directors make advances directly to NGOs, while in others the NGOs receive the IUD money from the UFPOs. NGOs who receive 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 are not included in the upazila report. This non-inclusion causes underreporting of NGO performance, since MIS compiles its reports from upazila monthly returns. However, the general conclusion is that the figures submitted to the MIS are probably not falsified deliberately but 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.

3.1.2. Verification of reported IUD clients:

Clinic records were verified by tracing and interviewing all selected women recorded as IUD clients in 1989. Clients hailing from outside selected upazilas or who had migrated were followed-up at their current address.

3.1.2.1. Results of survey verification:

A total of 4951 IUD clients were sampled--2969 from BDG-rural, 1126 from BDG urban, and 856 from the NGO stratum (349 from NGOs in Dhaka city and 507 from NGOs in other areas). At the overall level, 73.4 percent of the clients were located and 72.9 percent successfully interviewed. Thus, only 0.7 percent of the cases located or 0.5 percent of the total cases 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 63.7 percent. Among the remaining 9.2 percent, 3.9 percent had a non-reference IUD and 5.3 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 68.3 percent for BDG rural and 61.1 percent for BDG urban, while the corresponding proportion for the NGO stratum was only 51.1 percent (Table 3.2a).

The gap between the proportion of clients located and the proportion verified as having the reference IUD is larger in the BDG rural and BDG urban strata than in the NGO stratum. In the BDG rural and BDG urban stratum about 10 percent of the clients located reported that they had never accepted an IUD or had a non-reference IUD (i.e. an IUD insertion that does not match the one recorded in the register). The comparable figure in the NGO stratum was only 3.0 percent.

About one-fourth (26.6 percent) of the sample clients could not be located, primarily because the address did not exist or no such person ever lived there (18.7 percent). Five percent of the clients could not be located due to incomplete address. A small proportion of 2.5 percent of the clients could not be located because they had migrated to unknown addresses. Among the different strata, there are variations in the reasons for non-location of clients. The proportion that could not be located due to 'incomplete address' or 'migration to unknown address' is much lower in BDG rural (2.3 percent) compared to BDG urban (11.4 percent) and NGO (21.1 percent).

3.1.2.2. Comparison of results of survey verification between 1988 and 1989:

A comparison of the contact and verification rates between the 1988 and 1989 evaluations shows that the proportion of clients located and the proportion having the reference IUD are higher in 1989 than in 1988. For example, the proportion of clients located was 73.4 percent in 1989, while it was lower at 67.6 percent in 1988. Similarly, the proportion that could be verified as having the reference IUD was 63.7 percent in 1989, while it was much lower at 51.4 percent in 1988 (Table 3.2b). The reason for this difference between the 1988 and 1989 evaluations is primarily attributable to the difference in the

Table 3.2a: Details of non-responses.

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
A. Client located:	79.6	71.6	54.6	73.4
Successfully interviewed:				
- Had reference IUD	68.3	61.1	51.1	63.7
- Had non-reference IUD	4.9	3.9	0.8	3.9
- Never had IUD	6.0	5.8	2.1	5.3
Not successfully interviewed:				
- Client not available	0.4	0.8	0.6	0.5
B. Client not located:	20.4	28.4	45.4	26.6
Address does not exist/ no such person ever lived there	17.9	16.8	24.2	18.7
Incomplete address	0.9	7.1	17.5	5.2
Migrated to unknown address	1.4	4.3	3.6	2.5
Other	0.2	0.2	0.1	0.2
Total	100	100	100	100
N	2969	1126	856	4951

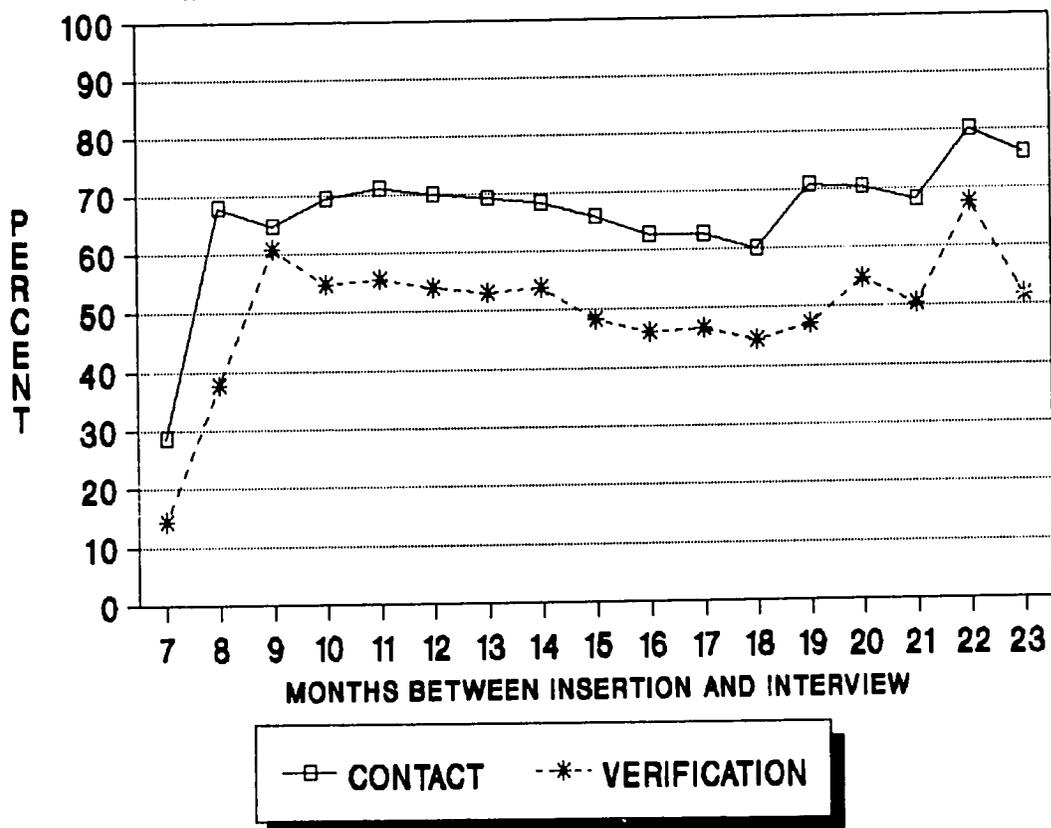
rates between the period from January to May (first-half) and that from June to December (second-half) of the year 1989. For example, the proportion of clients having the reference IUD was 56.7 percent in the first half, while it was much higher, 68.3 percent in the second-half of 1989. This difference is statistically significant at $p < 0.01$. It may be noted that there was no difference between the first and second half of 1988. Thus the 1989 pattern is unlikely to be the result of seasonality. Nor does it appear to be caused by the time interval between insertion and interview. As shown in Figure 3.1, the contact and verification levels in 1988 show no clear relationship to this interval.

Table 3.2b: Comparison of contact and verification rates by 1988 and 1989 evaluations.

Contact and verification	1988			1989		
	(Jan-May)	(Jun-Dec)	(Jan-Dec)	(Jan-May)	(Jun-Dec)	(Jan-Dec)
	(Percent)					
Clients located	68.8	66.7	67.6	67.0	77.7	73.4
Clients successfully interviewed	66.1	64.9	65.4	66.5	77.2	72.9
Clients having the reference IUD	51.4	51.4	51.4	56.7*	68.3*	63.7

* The difference in the proportion of clients having the reference IUD between the first and the second half of 1989 is statistically significant at $p < 0.01$.

Figure 3.1: Contact and verification levels by time interval between insertion and interview (1988 evaluation).



Now the question arises why such a significant difference exists in these rates between the first and 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 sensitized the family planning field officials to be more careful about their performances.

Trends in IUD performance over 1988 and 1989 may now be re-examined in the light of the improvement in verification levels. Shown in Figure 3.2 is the monthly number of insertions as recorded by the MIS. Also shown is the estimated number of verifiable insertions. While the MIS set of data indicate a slight decline for 1989, the estimated number of verifiable insertions shows a slight increase. This reversal provides a good clarification of the difficulties of interpreting routine program statistics when the quality of reporting is unstable.

A further important conclusion emerges from Figure 3.3. The withdrawal of the referral fee from November 1988 does not appear to have had an adverse effect on verifiable IUD performance. Although, according to MIS figures, IUD performance declined from 1988 to 1989 by 14.7 percent, verifiable IUD performance rather increased from 1988 to 1989 by 1.1 percent (Table 3.2c).

Figure 3.2: IUD performance in 1989 as per clinic records showing proportions verified and unverified by months.

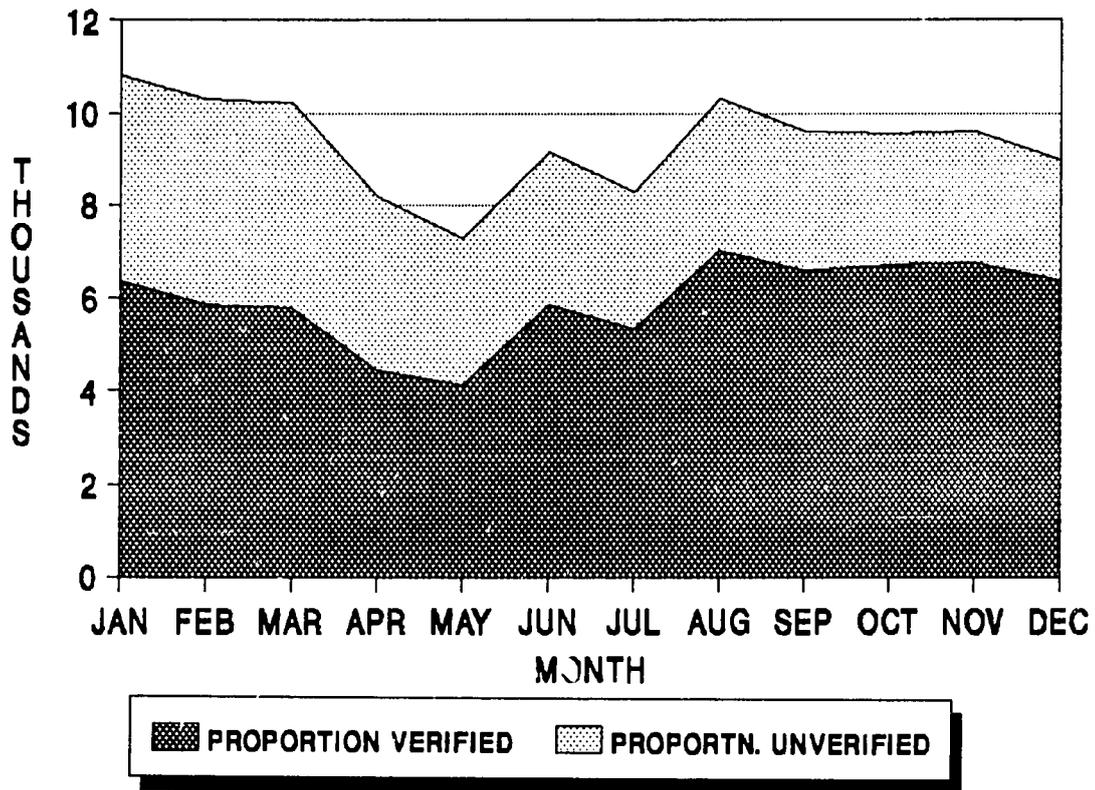


Figure 3.3: Verifiable IUD performance by month for the calendar years 1988 and 1989.

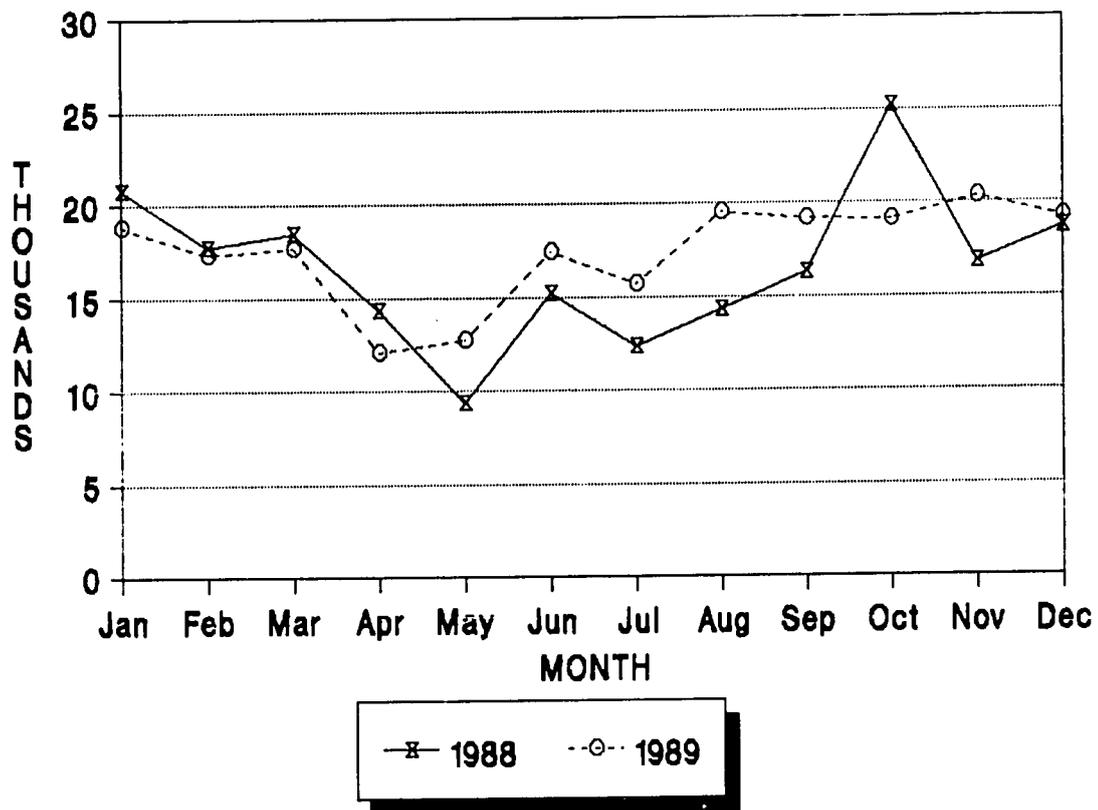


Table 3.2c: Difference in verifiable IUD performance between the calendar years 1988 and 1989.

Calendar year	MIS performance	Percent verifiable (upper limit)	Verifiable IUD performance
1988	385,764	61.1	235,702
1989	329,175	72.4	238,323
Number	*(-) 56,657		**(+) 2,621
Percent	*(-) 14.7		**(+) 1.1

* Decrease
** Increase

But it is of interest to note that performance peaks in October 1988. The government order issued on October 01, 1988 about the impending withdrawal of the referral fee may have influenced the FP field officials to make a special effort to avail themselves of the referral fees for the last time. A close examination of the 1988 evaluation data shows that the proportion of verifiable clients did not fall in October (Table 3.2d). Thus the October peak is genuine and not the result of increased falsification. There may also have been a backlog effect. In most months perhaps some IUD insertions are not reported until the following month. But in October, 1988 this backlog was cleared up because of the change in referral fees.

Table 3.2d: IUD performance as per MIS report and contact and verification rates by months for 1988 and 1989.

Months	1988			1989		
	Located	Success-fully inter-viewed	Had refer-ence IUD	Located	Success-fully inter-viewed	Had refer-ence IUD
January	73.7	72.2	56.8	69.0	68.8	58.7
February	70.5	67.7	55.4	66.9	66.7	56.9
March	72.6	69.1	53.6	66.7	66.5	56.5
April	66.0	62.9	49.4	63.4	63.1	54.1
May	57.7	54.7	38.3	67.8	66.1	56.6
June	62.3	60.1	45.1	73.4	73.2	64.0
July	57.3	55.9	43.8	75.7	75.1	67.0
August	64.1	62.6	50.5	77.5	76.7	68.1
September	72.3	70.3	53.8	76.7	76.5	68.7
October	71.0	68.4	54.4	79.8	79.6	70.3
November	67.8	66.3	55.8	80.4	79.5	69.5
December	71.8	70.5	56.7	80.3	79.8	70.8
All	67.6	65.4	51.4	73.4	72.9	63.7

3.1.2.3. Contact and verification rates by selected characteristics:

In order to ascertain why reported IUD clients could not be verified, contact and verification rates are more closely examined here by selected characteristics, such as, bonafide versus non-bonafide NGO, division, type of location, and number of insertions reported in 1989 (Table 3.3a and 3.3b).

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 (a) no source of donor funding; (b) inadequate facilities/staff to perform IUD insertions; and (c) less than 20 percent cases verified are termed 'non-bonafide NGOs'; the other NGOs are termed 'bonafide NGOs'.

Table 3.3a shows that the proportion of clients located and the proportion having the reference IUD are 69.3 percent and 66.2 percent respectively for the bonafide NGOs, while the corresponding figures for the non-bonafide NGOs are only 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 organisation from the bonafide NGOs. Similar findings for the non-bonafide NGOs in Dhaka city were also obtained in the 1988 evaluation. The proportion of clients located and the proportion having the reference IUD as estimated in the 1988 evaluation for the non-bonafide NGOs in Dhaka city were only 11.1 percent and 6.5 percent respectively.

Table 3.3a: Contact and verification rates by strata and by bonafide NGO and non-bonafide NGO.

Stratum	Number of clients selected	Located	Success-fully interviewed	Had reference IUD
		(Percent)		
BDG Rural	2969	79.6	79.2	68.3
BDG Urban	1126	71.6	70.8	61.1
NGO (All)	856	54.6	54.0	51.1
Bonafide	651	69.3	69.0	66.2
Non-bonafide	205	7.8	6.3	2.9

Divisions/administrative regions:

Contact and verification rates are relatively low in Dhaka division compared to the remaining three divisions in the country. For example, the proportion of clients who could be

verified as having the reference IUD was unusually low at 41.4 percent in the Dhaka division, while it ranged from between 73.2 percent and 74.6 percent among the remaining three divisions. Although the observed lower rate was found true for all the three strata in the Dhaka division, it was more pronounced for the BDG urban and the NGO strata. As mentioned earlier, the NGO stratum has been heavily affected by the strikingly lower rates for the non-bonafide NGOs in Dhaka city.

Type of location:

Similar to the findings of the 1988 evaluation, Dhaka city had the lowest rates of contact and verification. This was true for both the BDG urban and NGO strata. For example, the proportion of clients having the reference IUD was 73.0 percent for the other urban areas, while it was only 19.2 percent for the Dhaka city area (Table 3.3b). As mentioned earlier, the strikingly low rate as observed in the Dhaka city area is due to the abnormally low rate obtained for the non-bonafide NGOs in Dhaka city. These findings thus clearly suggest that the BDG urban and non-bonafide NGO clinics in Dhaka city are less careful in guarding against possible falsification and fraudulence.

Number of insertions reported in 1989:

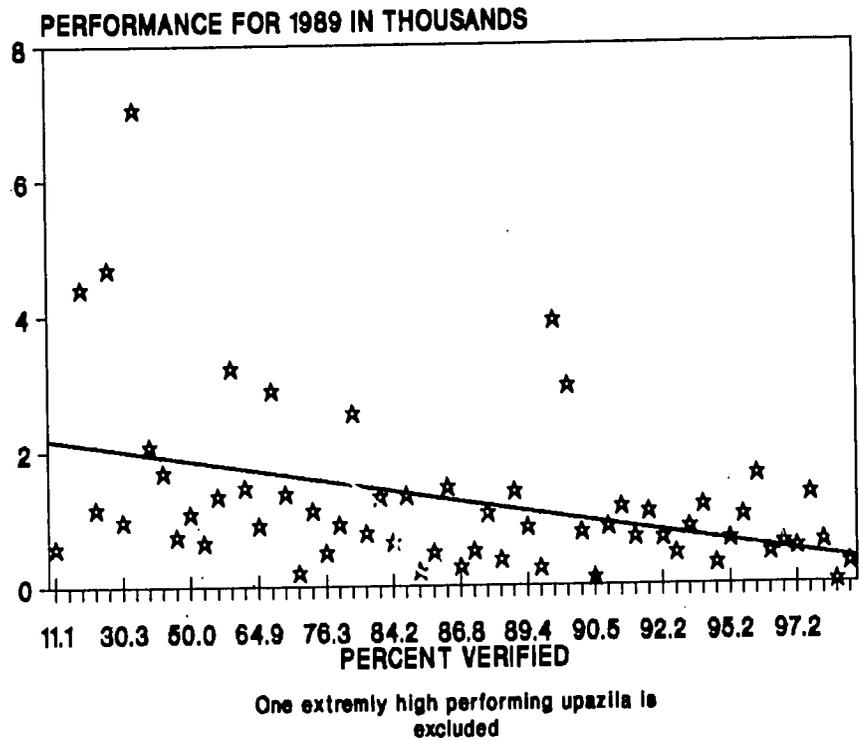
There is an inverse relationship between reported performance and proportion verified, that is, the higher the reported performance, the lower the proportion verified (Table 3.3b). For example, the proportion having the reference IUD was 75.0 percent for upazilas having performance of less than 1,000 insertions and 66.1 percent for those having performance between 1,000 and 2,000, while it was much lower at 31.9 percent for those having performance of more than 2,000 IUD insertions. However, Figure 3.4 shows that the inverse relationship is not true for all upazilas, indicating that some upazilas which may have high performance still have a high proportion of verifiable clients.

Table 3.3b: Contact and response rates of clients by selected characteristics.

	BDG						NGO			All		
	Rural			Urban			Located	Success-fully viewed	Had reference IUD	Located	Success-fully viewed	Had reference IUD
a. Division:												
Chittagong	85.2	84.9	77.9	86.5	86.5	70.1	73.8	73.8	68.8	83.7	83.5	74.6
Dhaka	67.0	66.6	53.7	40.3	38.8	30.0	31.9	30.8	28.6	51.0	50.2	41.4
Khulna	85.1	84.3	75.1	78.7	77.8	70.1	88.3	88.3	85.7	83.6	82.8	74.4
Rajshahi	82.1	82.0	68.6	90.3	89.9	83.8	84.8	84.8	81.6	84.0	83.8	73.2
b. Type of location:												
Dhaka City	-	-	-	27.4	25.7	16.0	23.2	21.8	19.2	24.9	23.4	17.9
Other urban	-	-	-	83.3	82.7	73.1	76.1	76.1	73.0	80.7	80.3	73.1
Rural	79.6	79.2	68.3	-	-	-	-	-	-	79.6	79.2	68.3
c. Number of insertions reported in 1989 by sample upazilas:												
< 1000 (42)*	84.3	83.5	74.7	86.6	85.9	75.5	76.9	76.9	75.6	84.1	83.6	75.0
1000-2000(20)	75.6	75.3	61.9	78.4	78.1	69.7	82.0	82.0	77.9	77.1	76.9	66.1
2000 > (9)	62.5	62.5	47.1	27.4	25.7	16.0	33.3	32.2	30.4	41.4	40.5	31.9

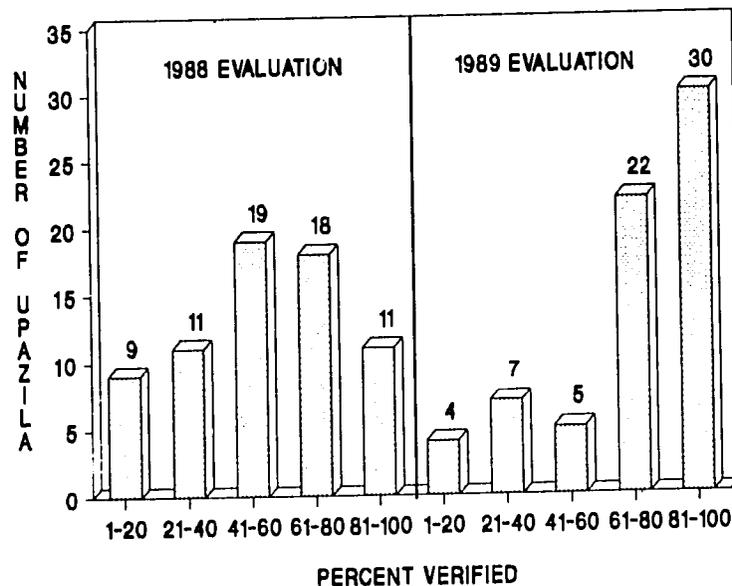
* Number of upazilas.

Figure 3.4: Relationship between IUD performance and proportion of cases verified.



It is important to note that the number of upazilas having a lower proportion of verified cases decreased substantially in 1989 compared to 1988 (Figure 3.5). The total number of upazilas selected was 68 for each of the evaluations--1988 and 1989. Out of the 68 upazilas, the number of upazilas having less than 60 percent of the clients verified was 39 upazilas (57.4 percent) in 1988, while it was only 16 upazilas (23.5 percent) in 1989. This means that the number of upazilas having 60 percent or more cases verifiable was as low as 29 upazilas (42.6 percent) in 1988, while it was as high as 52 upazilas (76.5 percent) in 1989. This finding also indicates that the proportion of unverified cases was largely due to the performances of a handful of upazilas.

Figure 3.5: Percent verified by number of upazila.



3.2. Interpretation of contact and verification results.

The purpose of this section is to reach the most reasonable estimate of the numbers of genuine and falsified IUD cases in 1989. The estimation of genuine/false cases may be arrived at through different methods. Two such methods are presented below:

Types of responses	Ways to verify	
	Method 1	Method 2
A. Client located:		
Successfully interviewed:		
- Had reference IUD	Genuine	Genuine
- Had non-reference IUD	False	False
- Never had IUD	False	False
Not successfully interviewed:	Proportionate to successfully interviewed clients	Proportionate to successfully interviewed clients
B. Client not located:		
- Address does not exist/no such person ever lived there	False	False
- Incomplete address	False	50% presumed genuine 50% presumed false
- Migrated to unknown address	Proportionate to successfully interviewed clients	Proportionate to successfully interviewed clients
C. Not attempted:	Proportionate to successfully interviewed clients	Proportionate to successfully interviewed clients

Under Method 1, the proportion of genuine cases will be lower than under Method 2. However, in order to have a liberal estimate of the proportion of cases verified, Method 2 is followed.

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 verified. 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 1989 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 unverified.

(3) Located, interviewed, never had IUD:

These respondents denied ever having had an IUD insertion. As described earlier, female supervisors re-interviewed all such cases. There remains the possibility that a small fraction of these respondents actually had a 1989 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 unverified.

(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 verifiable 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 unverified. 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 unverified.

(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 non-bonafide NGOs in Dhaka) strongly suggests that the majority of these cases are false. The 50:50 allocation of this group to verified and unverified outcomes is somewhat arbitrary and gives a conservative or minimum estimate of falsification. All clients having incomplete address should ideally be treated as unverified, since the field officers had 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 verified would have been the same as was found in the successfully interviewed cases.

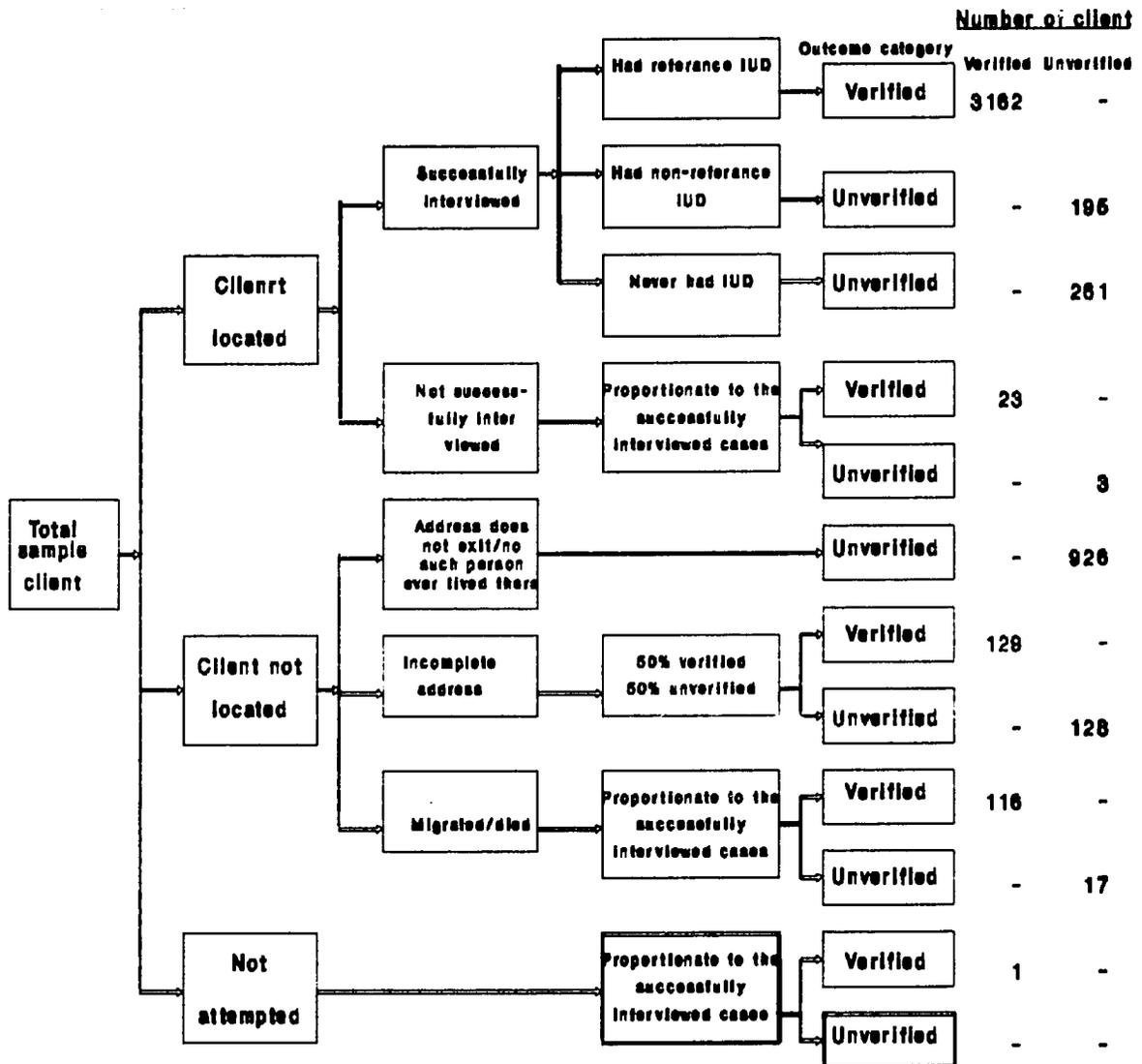
This description of the survey outcomes and their interpretation shows that there is a small degree of uncertainty and judgment involved in the estimation. However, the final estimated level of verification would not be greatly affected by any other reasonable judgment. Only extreme and unrealistic assumptions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

3.2.1. Estimation of verified and unverified cases:

Figure 3.6 shows that the national estimation of the proportion of genuine IUD cases is 69.1 percent. The proportion of verified cases is highest for BDG rural (70.5 percent), intermediate for BDG urban (69.4 percent), and lowest for the NGO stratum (63.7 percent) (not shown in the figure). As mentioned earlier, the rate estimated for the NGO stratum has been heavily affected by the strikingly lower rate estimated for the NGO sub-stratum for Dhaka city (43.8 percent). The rate estimated for the NGO sub-stratum for other areas is as high as 77.3 percent (not shown in Figure 3.6).

Figure 3.6: Estimation of verified and unverified IUD cases.

National



95% Confidence interval for verified cases:
 Upper limit= 72.4%
 Lower limit= 65.8%

Total	3421	1530
Percentage	69.1	30.9

3.2.2. Standard errors and confidence limits:

The standard error of the estimate has been calculated adopting the following procedure:

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

Where,

P = Proportion verified = 0.691
n = Sample size = 4951
Deff. = Design Effect of 2.5 to make allowance for the loss of sampling precision because of the clustered sample design

$$\text{s.e.} = \sqrt{\left(\frac{0.691 \times 0.309}{4951} \right) \times 2.5} = 0.0164125$$

b. 95% Confidence interval

$$\begin{aligned} &= p \pm Z_a \times \text{s.e.} \\ &= 0.691 \pm 2 \times 0.0164125 \\ &= 0.691 \pm 0.032825 \end{aligned}$$

Upper limit = 72.4% and lower limit = 65.8%

Thus, at the 95 percent level of confidence the upper limit for the number of IUD cases performed during 1989 in Bangladesh is 72.4 percent of the figure reported by the MIS unit, while the lower limit is 65.8 percent of this figure. The comparable figures for the 1988 evaluation were 61.1 percent and 56.9 percent respectively.

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:

Slightly over half of the acceptors (55 percent) were reimbursed for their transportation costs; 51 percent received the prescribed amount of Tk. 15.00, while 4 percent received less than Tk. 15.00. The remaining acceptors (45 percent) did not receive any money (Table 3.4).

At the 95 percent level of confidence the upper limit for the proportion having received reimbursement for transportation costs was 59.3 percent and the lower limit 50.5 percent. The comparable figures for the 1988 evaluation were 68.2 percent and 62.6 percent respectively.

Table 3.4: Status of receipt of client's transportation costs.

	BDG		NGO	All
	Rural	Urban		
	(Percent)			
None	48	39	43	45
< 15 Taka	3	3	5	4
15 Taka	49	57	52	51
> 15 Taka	0	1	0	0
Don't know	0	-	-	0
Total	100	100	100	100
Mean Taka: overall	7.7	9.0	8.4	8.1
Mean Taka for those who received any money	14.8	14.8	14.6	14.9
N	2027	688	437	3152

Confidence interval for money received:

Upper limit: 59.3%
Lower limit: 50.5%

3.3.2. Receipt of service provider's fee:

Ninety eight percent of the service providers in both the BDG rural and the BDG urban strata reported that they receive fees @ Tk.5.00 for each IUD insertion, while the corresponding figure for the NGO stratum was lower at 68 percent (Table 3.5a). Thus, about one-third (32 percent) of the NGO service providers do not receive any insertion fee. Some NGOs stopped making payments to providers.

Service providers who stated that they receive the provider's fee were asked whether they received full payments for the insertions they performed in 1989. Table 3.5b shows that 69 percent of the service providers received full payments. The comparable figure for the 1988 evaluation was 62 percent. The service providers who mentioned that the 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 3.5: Status of receipt of service provider's fee.

	BDG		NGO	All
	Rural	Urban		
a. Amount receive as provider's fee: (Percent)				
None	2	2	32	6
< 5 Taka	-	-	-	0
5 Taka	98	98	68	94
> 5 Taka	-	-	-	-
Total	100	100	100	100
Mean taka	5.0	5.0	5.0	5.0
N	303	230	93	626
b. Whether received full payment:				
Yes	64	75	70	69
No	29	19	16	24
Service provider was not posted at present clinic in 1989	7	6	14	7
Total	100	100	100	100
N	296	225	63	584

3.3.2.1. 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 report the actual number of IUD insertions performed by them in 1989 and the amount of money not yet received;
- b. some service providers who were working in the selected clinics in 1989 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 PROVIDERS, AND HELPERS

The profile of the IUD acceptors and the providers are presented separately in Tables 4.1 and 4.2.

4.1. Profile of IUD acceptors:

This profile of the IUD acceptors includes selected socio-economic and demographic characteristics as well as knowledge and use of other contraceptive methods.

4.1.1. Socio-economic profile of IUD acceptors:

Education: Slightly over half of the IUD acceptors (54 percent) have attended school. The equivalent figure for all currently married women of reproductive age (MWRA) for the whole country is 31 percent as estimated in the 1989 BFS (Huq, et al. 1990) and 36 percent in the 1989 CPS (Mitra, et al. 1990). Husbands of IUD acceptors are relatively more educated than their wives. The proportion of husbands of IUD acceptors who have attended school is 66 percent. Compared to current users of any method, IUD acceptors are more educated. For example, among current users of any method the proportion having ever attended school was 45 percent (1989 CPS) or 40 percent (1989 BFS).

Religion: Of the IUD acceptors surveyed, 85 percent were Muslim and 15 percent Hindu. This religious composition is almost identical 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).

Employment: Slightly over a quarter of the IUD acceptors (28 percent) were gainfully employed at the time of interview. The level of employment is much higher among IUD acceptors than among current users of any method (18 percent) according to the 1989 CPS, and among ever married women (14 percent) according to the 1989 BFS. This difference partly reflects the higher educational background of IUD acceptors.

It is important to note that in the 1988 IUD evaluation, the proportion of IUD acceptors currently employed was 24 percent. It is not possible to ascertain whether the increase from the 1988 to 1989 evaluation in the proportion currently employed is

due to increasing female employment among the population as a whole, or due to a growing popularity of this method among working women, or whether it is just a chance fluctuation.

Table 4.1a: Socio-economic profile of IUD acceptors.

	BDG		NGO	All
	Rural	Urban		
Education:	(Percent)			
No Education	50	44	31	46
Primary	36	33	30	35
Secondary	14	22	36	18
Higher Secondary and above	0	1	3	1
Total	100	100	100	100
Husband's education:				
No Education	38	32	24	35
Primary	26	22	17	24
Secondary	33	39	44	36
Higher Secondary and above	3	7	15	5
Don't know	0	0	-	0
Total	100	100	100	100
Religion:				
Islam	85	86	84	85
Hinduism	14	13	14	14
Christianity	0	0	1	0
Buddhism	1	0	1	1
Other	0	-	-	0
Total	100	100	100	100
Employment:				
Never	66	66	70	66
Previously employed	5	7	6	6
Currently employed	29	27	24	28
N	2027	688	437	3152

4.1.2. Demographic profile of IUD acceptors:

Marital status: Except for one percent, all of the IUD acceptors were currently married at the time of interview. The one percent 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.

Age: The mean age of the acceptors at the time of interview was 26.2 years. About 88 percent of the acceptors were below the age of 35 years; 57 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 four years lower than that of the current users surveyed in the 1989 CPS.

Number of living children: The mean number of living children at the time of interview was 2.8. This number is almost identical to the mean total desired family size of 2.9 reported by all MWRAs in the 1989 BFS. The mean number of living children among the current users of any method was 3.4 according to the 1989 CPS and 3.1 according to the 1989 BFS, indicating that the IUD acceptors are drawn from among lower parity women as compared to users of any method.

Interval between last pregnancy termination and reference insertion: Nearly two-thirds (39 percent) of the acceptors had their IUD insertion within one year of termination of their last pregnancy and slightly over a quarter (28 percent) between 12-23 months. The mean interval between the last pregnancy termination and reference insertion was 22.5 months. 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/Hug et al., 1990). Early post-partum insertion may thus result in double protection.

Desire for more children: About three-fifths of the acceptors (60 percent) did not want any more children, while nearly one-third (31 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.

There is virtually no difference in these findings between the 1988 and 1989 evaluations.

Table 4.1b: Demographic profile of IUD acceptors.

	BDG		NGO	All
	Rural	Urban		
Marital status:	(Percent)			
Currently married	99	99	99	99
Other	1	1	1	1
Total	100	100	100	100

	BDG		NGO	All
	Rural	Urban		
Age:				
< 20	15	17	12	15
20-24	30	35	31	31
25-29	26	23	28	26
30-34	17	14	18	16
35-39	8	8	6	8
40-44	3	2	4	3
45+	1	1	1	1
Total	100	100	100	100
Mean age	26.2	25.7	26.6	26.2

Number of living children:				
0	1	1	1	1
1	21	24	23	22
2	27	31	29	28
3	21	20	23	21
4	13	13	12	13
5+	17	11	12	15
Total	100	100	100	100
Mean	2.9	2.6	2.7	2.8
N	2027	688	437	3152

Interval between last pregnancy termination and reference insertion:				
0-6 months	23	28	30	25
7-11 "	16	14	10	15
12-23 "	29	28	22	28
24-35 "	14	13	12	13
36-47 "	8	6	8	7
48-59 "	3	4	6	4
60+ "	8	7	12	8
D.K.	0	-	-	0

Total	100	100	100	100
N	1770	582	292	2648
Mean months	22.5	21.3	24.7	22.4

Desire for more children:				
Within one year	2	2	2	2
One or two year's time	6	6	6	6
After long gap	30	34	28	30
Uncertain about time	1	1	2	2
No more or undecided	60	57	52	60
Total	100	100	100	100
N	688	2027	437	3152

4.1.3. Profile of IUD acceptors in terms of 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) (Table 4.1c). 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. However, it is important to note that knowledge about the IUD is much higher (72-100 percent varying by level of education) among women having ever attended school than among those having never attended (58 percent) (1985 CPS/Mitra, 1987). The lower level of knowledge about the IUD among women having never attended school may indicate that there may be a latent demand for IUD services among uneducated or less educated women.

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). 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.

Ever use of methods other than IUD: Of the IUD acceptors, 75 percent have used at least one method besides the IUD. Nearly three-fifths (56 percent) had used the pill and one-third (32 percent) the condom. The most important conclusion to be drawn from these results is that the IUD is not typically the first method used. Most IUD acceptors have prior experience of contraception. It may be inferred that IUD clients are rather highly motivated to control their fertility.

FP method used during one month prior to IUD acceptance: Nearly one-half (47 percent) of the IUD acceptors surveyed said that they had used some contraceptive method in the month prior to insertion of the reference IUD. The methods most commonly mentioned as having been used were the pill (16 percent) and MR (15 percent), followed by the condom (6 percent) and the IUD (4 percent). This means that prior to using the reference IUD, 4 percent of the acceptors were using another IUD.

It should be noted here that during the 1988 evaluation it was observed that 5 percent of the IUD acceptors reported having had an MR within the month prior to insertion of the IUD. In the 1989 evaluation, the IUD acceptors surveyed were asked specifically whether they had had an MR prior to insertion of the IUD; 13 percent replied in the affirmative. Of these, 7 percent reported that they had done so on their own initiative and the other 6 percent on advice from the physician/provider (Table 5.1g).

It is important to note that in the NGO stratum one-third of the IUD acceptors (33 percent) had an MR prior to having the IUD insertion. The fact that providers in NGO clinics frequently counsel MR clients to have an IUD after an MR may contribute to the relatively high rate of post-MR IUD acceptance. One study on follow-up of MR clients found that 82.3 percent were currently using contraceptives approximately after a year from the date of having had the MR; the most frequently mentioned methods of

current use were the IUD (36.6 percent), the oral pill (21.2 percent), tubectomy (9.7 percent), and the condom (8.1 percent) (Begum, et, al. 1986). The findings of a higher percentage of NGO clients receiving an IUD after an MR may indicate that there is better contraceptive counselling for MR clients by NGOs and that there may be a potential to substantially increase IUD acceptance through more effective counselling of MR clients in BDG facilities.

As will be shown in a later chapter, there is very little difference in the rates of complications for the IUD between those having had an IUD insertion following an MR and those having had an insertion at another time. Insertion of an IUD immediately following a first-trimester induced abortion or spontaneous abortion does not increase rates of pregnancy, expulsion, infection, or removal for pain or bleeding (WHO, 1987). Some controversy exists, however, with regard to post-abortion IUD insertion into an infected or possibly infected uterus. In a large international study, the Population Council concluded that IUDs inserted in women who had illegal abortions did not increase post-abortion hospitalization rates or fever compared to those without an IUD (Tatum, 1972 in Liskin, 1980). An important advantage of immediate post-abortion insertion of IUDs is the provision of immediate protection against a repeat unwanted pregnancy (Liskin, 1980). Moreover, women are much more likely to use a contraceptive method after an abortion than before. Approximately 6 percent of the women will conceive within just four to six weeks post-abortion without contraception (Porter, 1978). Therefore, the GOB providers may also be guided to advise MR clients to have post-MR IUD insertions.

Table 4.1c: Profile of IUD acceptors in terms of knowledge and use of other methods.

	BDG		NGO	All
	Rural	Urban		
Knowledge of specific methods: (percent)				
Pill	100	100	100	100
Condom	93	95	98	94
Foam	34	43	56	39
Injection	97	98	99	98
Female sterilization	100	100	100	100
Male sterilization	90	91	89	90
Knowledge of any source for specific methods:				
Pill	99	99	100	99
Condom	90	92	95	91
Foam	28	38	48	33
Injection	93	95	94	93
Female sterilization	98	99	96	98
Male sterilization	84	86	80	84

	BDG		NGO	All
	Rural	Urban		
Ever use of specified methods:				
Pill	53	58	69	56
Condom	26	38	47	32
Foam	5	9	11	7
Injection	7	11	14	9
Female sterilization	2	3	1	2
Male sterilization	1	1	1	1
Other	10	12	11	10
Ever used at least one method, apart from IUD:				
Yes	70	78	90	75
No	30	22	10	25
Total	100	100	100	100
N	2027	688	437	3152
FP method used during one month prior to IUD acceptance:				
Pill	16	16	20	16
Condom	5	8	8	6
Foam etc.	0	0	0	0
Injection	1	2	3	1
IUD	4	5	1	4
Vasectomy	-	-	-	-
MR	12	15	33	15
Other	3	3	3	3
No method	59	51	32	53
Total	100	100	100	100
N	2027	688	437	3152

Table 4.1d: Comparison of Selected Characteristics of IUD acceptors with current users of any method of 1989 CPS and 1989 BFS.

Characteristics	1989 IUD	1989 CPS	1989 BFS
		(Percent)	
Attended school	54	45	31
Currently employed	28	18	14
Mean age	26	30	31
Mean no. of living children	2.8	3.1	3.4

4.2. Profile of service providers:

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

4.2.1. Socio-economic profile of service providers:

Age: The average age of the service providers is 32 years. Nearly three-fourths (72 percent) of the providers were below age 30 years and another one-fifth between 30 and 34 years of age (Table 4.2a).

Marital status: About 90 percent of the service providers are currently married. Six percent are unmarried.

Designation: At the overall level about 95 percent of the providers are paramedics, mostly FWVs, and 4 percent are doctors. However, in the NGO clinics one-fifth (20 percent) are doctors, one-fourth (27 percent) are FWVs, and two-fifths (43 percent) are paramedics other than FWVs such as Lady Health Visitors (LHVs) and Lady Family Planning Visitors (LFPVs). It is important to note that one-tenth of the providers in the NGO clinics have not received formal training in IUD insertions.

Length of service: On an average, the service providers have worked in family planning for about 9 years. The length of service is slightly lower for providers in NGO clinics (7 years) than for those in government clinics (10 years).

The providers have been posted, on average, for about two-and-a-half years in the current clinic. About a quarter (27 percent) have been working in the current clinic for less than a year and nearly two-fifths for 2 to 3 years. About a quarter of the NGO providers (27 percent), however, have been working in the current clinic for more than 6 years.

Table 4.2: Socio-economic profile of service providers.

Characteristics	BDG		NGO	All
	Rural	Urban		
a. Age:	(Percent)			
< 20	4	5	15	6
20-24	28	23	30	26
25-29	44	38	30	40
30-34	19	23	15	20
35-39	4	7	9	6
40-44	1	2	1	2
45-49	-	2	-	2
Total	100	100	100	100
N	303	230	93	626
Mean	31.7	32.8	30.6	31.9

Characteristics	BDG		NGO	All
	Rural	Urban		
b. Marital status:				
Currently married	92	90	79	89
Unmarried	4	4	18	6
Widowed	3	4	3	4
Divorced/separated	1	1	-	1
Total	100	100	100	100
c. Designation:				
Medical Officer/Doctor	1	2	20	4
FWV/LHV/LFPV	98	98	27	88
Senior Staff Nurse/Staff Nurse/Paramedics	1	0	43	7
Clinical staff/Aya/Midwife	-	-	9	1
Other	-	-	1	0
Total	100	100	100	100
d. Length of service (years):				
0	-	-	11	2
1	4	6	15	7
2-3	4	4	8	5
4-5	13	8	11	11
6-7	10	7	10	8
8-9	10	17	10	12
10+	59	58	35	55
Total	100	100	100	100
N	303	230	93	626
Mean years	9.5	10.3	6.9	9.4
e. Length of service in the current clinics (years):				
0	25	27	36	27
1	5	4	15	5
2-3	38	44	11	38
4-5	16	13	12	14
6+	16	12	27	16
Total	100	100	100	100
N	303	230	93	626
Mean years	2.6	2.3	3.1	2.6

4.2.2: Profile of service providers in terms of training and refresher training obtained:

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 the training, and whether they had received any refresher training. At the overall level, 88 percent of the providers received their training from FWV training institutes. Most of the providers in the BDG clinics received their training from the BDG training institutions such as the Family Welfare Visitor Training Institutes (FWVTIs), and Mother and Child Welfare Centers (MCWCs), Mother and Child Health Training Institute (MCHTI). However, the places of training for the providers of NGO clinics varied widely (Table 4.3a). About one-half (44 percent) of the service providers in NGO clinics obtained training from the FWVTIs and MCHTI and one-fourth (25 percent) from NGO clinics, while about one-sixth were trained at the Medical Colleges.

Ninety-two percent of the service providers performed IUD insertions during their training (Table 4.3b). The average number of IUD insertions performed during the training period was 26 (Table 4.3c). Over one-third (36 percent) of the providers performed less than 10 IUD insertions during training, while nearly one-third (28 percent) performed more than 20 insertions. This may indicate that for practice insertions IUD clients need to be evenly distributed among the trainees.

About 8 percent of the providers reported that they had not performed any IUD insertion during the training period. Nearly half (48 percent) of the providers who had not performed any IUD insertions during training stated that this was because of the shortage of IUD clients during training (Table 4.3d). 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 28 percent of the providers who had not performed IUD insertions during training. To maintain the quality of service, it is important to ensure that all trainees perform a minimum number of IUD insertions during their training.

Refresher training: The service providers were asked whether they had received any refresher training on the delivery of IUD services. Three-fifths (61 percent) of the providers stated that they had not received any refresher training (Table 4.3e). Refresher training is essential in order to ensure quality of services, particularly when new IUD devices are introduced. In particular, service providers in clinics in remote areas who perform few insertions may forget the insertion techniques acquired long before and therefore need retraining. Moreover, the providers in these clinics may have a greater need to be reminded of the necessity of aseptic precautions than providers who receive more regular supervision.

Table 4.3: Profile of service providers in terms of training and refresher training obtained.

	BDG		NGO	All
	Rural	Urban		
(Percent)				
a. Institution/centers from where training received:				
FWVTI/TCRI/LHVT/MCHTI	99	91	44	88
Medical college	-	2	16	3
MCWC	0	4	-	2
Model FP Clinics/MFSTC	0	1	4	1
Nursing training centre	-	0	1	0
NGO clinics	-	-	25	4
Other	-	1	4	1
No training received	0	0	6	1
Total	100	100	100	100
N	303	230	93	626
b. Percentages who inserted IUD during training:	95	91	83	92
N	229	303	92	624
c. Number of IUD insertions performed during training:				
< 10	39	35	30	36
10-20	34	37	37	36
21 +	27	28	33	28
Total	100	100	100	100
N	256	208	76	570
Mean	22.5	26.9	34.7	25.7
d. Reasons for not performing:				
Shortage of IUD clients	63	38	40	48
Lack of confidence in inserting IUD	-	14	7	6
IUD insertions were not required during LHV training	12	43	27	28
IUD insertion observed only	25	5	7	12
Other	-	-	20	6
Total	100	100	100	100
N	16	21	15	52
e. Whether refresher training was received				
Yes	39	36	42	39
No	61	64	58	61
Total	100	100	100	100
N	302	229	76	570

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

The level of knowledge of the 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 under which an IUD cannot be inserted. Only unprompted responses were recorded. The results reveal that many conditions which are not real contra-indications were cited as contra-indications. However, the most frequently mentioned contra-indications are 'heavy menstrual bleeding', 'white discharge', 'pregnancy', 'fibroid/tumor in uterus', 'pain in lower abdomen', 'severe anemia', and 'pelvic inflammatory diseases' (Table 4.4a).

Side-effects: The most frequently mentioned side-effects were, 'excessive menstrual bleeding' and 'pain in lower abdomen', 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', 'infection in uterus', and 'husband's discomfort during intercourse' (Table 4.4b).

Effective duration of the IUD: The IUD currently supplied in the Bangladesh national program is the CT-380A; this was preceded by the CT-200. It appears that most of the providers are using the CT-380A, but some are still using the CT-200. 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 six years.

Most of the service providers (98 percent) stated that the effective duration of the IUD was three to four years (Table 4.4c).

The providers were also asked whether they knew of anyone who had an IUD in-situ after the effective duration; one-sixth (17 percent) of the providers answered in the affirmative. In another study it was estimated that about 4.2 percent of IUD users had the IUD in-situ even after the expiry of the effective duration (Akhter, et al., 1988). Now, with the introduction of the FWA Register, FWAs should be able to identify the users of expired IUDs and should be instructed to bring these clients to a clinic for removal.

Table 4.4: Profile of service providers in terms of their level of knowledge concerning contra-indications, side-effects, and effective duration of the IUD.

Topics	BDG		NGO	All
	Rural	Urban		
(Percent)				
a. Contra-indications:				
Tender cervix	89	91	88	90
White discharge	68	67	58	67
Heavy menstrual bleeding	73	70	70	72
Fibroid/tumor in uterus	66	60	43	60
Pain in lower abdomen	45	35	41	40
No previous birth	47	36	41	42
Pregnancy	70	60	57	64
Severe anemia	43	46	28	42
High blood pressure	33	27	29	30
Diabetic	23	23	21	21
Inter-menstrual/post coital bleeding	32	30	44	33
History of recent septic abortion	9	11	12	10
Severe dysmenorrhea	18	11	19	16
Pelvic inflammatory diseases	36	40	54	40
History of ectopic pregnancy	8	5	16	8
History of Caesarean section	5	4	11	7
Other	9	9	16	10
b. Side-effects:				
Excessive menstrual bleeding	88	89	87	88
Pain in lower abdomen	87	88	83	86
Foul smelling/white discharge	70	75	66	71
Irregular menstrual bleeding/ spotting	69	67	67	68
Infection in uterus	27	22	31	26
Displacement of the IUD/ missing thread	58	53	63	57
Ectopic pregnancy/pregnancy	32	28	36	31
Perforation of uterus	39	34	34	36
Expulsion of the IUD	48	37	36	42
Husband's discomfort during intercourse	12	5	16	10
Other	2	-	2	1
c. Effective duration of the IUD:				
0 - 2 years	0	1	-	1
3 - 4 years	100	98	91	98
5 years and above	-	1	9	1
Total	100	100	100	100
Mean	3.8	4.0	4.0	3.9
d. Whether know any client having IUD in-situ after the effective duration:				
Yes	19	13	25	17
No	81	87	71	82
Clinic functioning less than 3 years	0	0	4	1
Total	100	100	100	100
N	303	230	93	626

Chapter 5

PRE-INSERTION SERVICES

The decision making process related to the acceptance of the IUD has been fully discussed in the 1988 evaluation report. 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. This chapter presents key indicators of the decision making process and of counselling from the 1989 evaluation.

5.1. Decision making process:

Persons with whom discussed: All the acceptors, except one percent, reported having discussed the acceptance of the IUD with someone prior to the insertion. Most frequently mentioned persons with whom discussed are FP workers (82 percent), husbands (72 percent) and other IUD users (56 percent) (Table 5.1a). Although only 72 percent of the acceptors spontaneously mentioned that they had discussed this issue with their husbands, 92 percent of these acceptors said that their husbands knew that they had accepted an IUD (Table 5.1b). The remaining 8 percent whose husbands were ignorant of their wives having accepted an IUD were not asked why their husbands had not been brought into the decision. The proportion of acceptors who spontaneously mentioned that they had discussed the IUD with another IUD user was 56 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 5.1c). This finding emphasises the importance of satisfied users as a potential source of information and encouragement for acceptance of the method. Twenty-five percent of the acceptors did not know any other IUD users, while 12 percent of them did not discuss the matter even though they knew an IUD user.

Accompaniment and distance to clinic: Nearly four-fifths (78 percent) of the acceptors went with someone to the clinic at the time they had an IUD insertion (Table 5.1d). Only 12 percent reported that they had gone alone and another 10 percent stated that they had the insertion in their home. Nearly one-half (47 percent) were accompanied by a relative or neighbor, while 30 percent travelled to the clinic with a FP worker. Nearly two-fifths (37 percent) reported having taken their children with them to the clinic. It is important to note that accompaniment to the clinic by FP workers and Dais/TBAs has been reduced by 10 and 3 percentage points respectively from 1988 to 1989. This may reflect the effect of withdrawal of the referral fee.

For all acceptors who had the 1989 reference IUD inserted in a clinic, the mean distance between the clinic and the IUD acceptor's home is 2.8 miles (Table 5.1e). The mean distance is higher for acceptors who had the insertion at an NGO clinic (3.5 miles) than for those using BDG urban (2.5 miles) and BDG rural clinics (2.8 miles). Nearly one-fifth (17 percent) of the acceptors reported having travelled five or more miles, the proportion being highest for NGO clinics (24 percent) compared to BDG rural (16 percent) and BDG urban clinics (14 percent). These distances are considerably shorter than those reported by tubectomy clients in the Compensation Payments Study (urban 12 miles, rural 6 miles), a difference that reflects the fact that many IUDs are inserted at UHFWCs 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' (88 percent), 'disadvantages of other methods' (77 percent) and 'motivation by others' (79 percent) (Table 5.1f). There was little variation between strata in terms of the proportions mentioning the different reasons. However, the proportion mentioning 'motivation by others' was relatively lower in the NGO stratum (61 percent), compared to the BDG rural (88 percent) and BDG urban (80 percent) strata.

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 1988 evaluation. However, the existence of a minority (9 percent) who cited lack of prior knowledge of other methods as a reason for IUD acceptance is puzzling in view of the almost universal awareness of alternative modern methods and their supply sources. A similar finding was also observed in the 1988 evaluation. This may refer to the lack of detailed knowledge of other FP methods.

Reasons for having the IUD immediately after having had an MR: Table 5.1g shows that 13 percent of the IUD acceptors had the IUD insertion immediately after having had an MR; over half of them (7 percent) had the insertion at their own request while the remainder (6 percent) had it on the advice of the service provider. There are wide differences in the prevalence of post-MR insertions between the different strata; nearly one-third (31 percent) of the acceptors in the NGO stratum had the IUD immediately after having an MR compared to 10 percent in the BDG rural and 13 percent in the BDG urban strata.

Type of referrer: Table 5.1(h) shows the distribution of acceptors according to the type of referrer as recorded in the clinic register. FP workers were the referrers for four-fifths (80 percent) of the acceptors, while 9 percent were referred by 'self/relative/friend/neighbor' and 3 percent by 'clinic staff'. For 4 percent of the clients no record was available as to who referred them. This may be the result of the withdrawal of the

referral fees. However, recording of referrers' names and addresses is important in order to trace clients for follow-up. As expected, the majority of the acceptors in the BDG clinics were referred by BDG FP workers and in the NGO clinics by NGO FP workers, but in other regards there were differences between strata. In the NGO stratum over a quarter (30 percent) of the clients were referred by 'self/relative/ friend/neighbor', while the corresponding proportions in the BDG rural and BDG urban strata were much lower (6 and 5 percent respectively). It is important to note that compared to the findings of the 1988 evaluation the role of Dais has been very nominal in 1989; only 2 percent of the clients were reportedly referred by Dais in 1989 compared to 13 percent in 1988. This may reflect the decreasing interest of Dais in referring IUD clients due to withdrawal of referral fees. On the other hand, it may also reflect the fact that identity of the referrer is no longer important because there is no referral fee. In the sterilization program, the number of cases referred by Dais also apparently fell when referral fees were standardized (NIPORT, 1989).

Table 5.1: Decision making process about IUD.

	BDG		NGO	All
	Rural	Urban		
(Percent)				
a. Persons with whom discussed:				
No one	1	1	3	1
Husband	73	72	71	72
Relative	14	12	12	13
Friend/neighbour	7	8	11	8
FP worker	81	86	76	82
Dai/TBA	3	4	1	3
IUD user	57	54	58	56
Other	1	1	1	1
b. Whether husband knows that his wife had the IUD:				
Husband knows	92	91	95	92
Husband doesn't know	8	9	5	8
Total	100	100	100	100
c. Discussion with IUD users:				
No IUD users known	24	27	22	25
IUD user known, but not discussed	12	13	10	12
Discussed with IUD users	64	60	68	63
Total	100	100	100	100

	BDG		NGO	All
	Rural	Urban		
d. Accompaniment to clinic:				
Insertion done at home	11	8	7	10
No one	12	13	11	12
FP worker	30	31	24	30
TBA/Dai	2	4	1	3
Relative/neighbour	46	46	56	47
Child	37	37	35	37
Other	1	0	2	1
e. Distance to clinic in miles:				
0	21	26	21	22
1	22	31	22	24
2	18	14	16	17
3	15	10	11	13
4	8	5	6	7
5+	16	14	24	17
Total	100	100	100	100
Mean	2.8	2.5	3.5	2.8
Median	2.0	1.0	2.0	2.0
f. Reasons for choosing IUD:				
Effectiveness/ advantages of IUD	89	89	79	88
Disadvantages of other methods	76	80	76	77
Motivation by doctor/ FP worker/IUD user/ friends/relative	80	88	61	79
Lack of prior knowledge of other FP methods	11	7	5	9
Advised by service providers after MR	4	5	18	6
Other	3	7	1	3
g. Reasons for having the IUD immediately after having MR:				
MR not done	90	87	69	87
Own decision	6	8	13	7
Service Providers advise	4	5	17	6
Other	0	0	1	0
Total	100	100	100	100
N	2027	688	437	3152

	BDG		NGO	All
	Rural	Urban		
h. Type of referrer:				
BDG FP field worker	82	76	1	69
NGO FP field worker	3	7	54	11
Registered Dai	3	2	-	2
Registered Agent	0	-	-	0
Self/relative/neighbour	6	5	30	9
Clinic personnel	2	2	7	3
No record	3	7	6	4
Other	1	1	1	1
Total	100	100	100	100
N	2027	688	437	3152

5.2. Nature of counselling:

Counselling may be defined as "face to face communication in which one person helps another to make decisions and to act on them" (Gallen, 1987). Counselling of IUD clients is primarily done 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 counsellor should provide support before, during, and after the insertion. This is very well possible 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) side-effects;
- d) response to problems; and
- e) need to feel the thread of the IUD.

Table 5.2. shows that all but 4 percent of the acceptors were counselled on the length of effectiveness of the IUD and that 80 percent were advised to report in case of problems. About three-quarters of the acceptors were counselled on the remaining topics, except for information on side-effects. Only 60 percent of the clients recalled advice about possible side-effects. In the 1988 evaluation no question on the need to feel the thread was asked. In terms of the other aspects of counselling there are little differences between 1988 and 1989.

Source of counselling: The main sources of counselling were the doctor/FWV/counsellor (84 percent) and FP workers (53 percent). IUD users were also a source of such information for 40 percent of the acceptors (Table 5.2b). The role of the Dais as a source of information was reduced from 8 percent in 1988 to only 3 percent in 1989.

Perceived length of effectiveness of the IUD: For those IUD acceptors who were counselled, the mean perceived length of effectiveness of the IUD was 3.6 years. For 47 percent of acceptors, the perceived length of effectiveness was 3 years, and for 42 percent, 4 years (Table 5.2c). The proportion of acceptors mentioning the length of effectiveness as 3 years was higher (71 percent) in 1988 compared to 1989, indicating that a larger number of providers may be informing their clients that the effective duration of the IUD is 4 years rather than 3 years.

Need for follow-up visit: Nearly a quarter (23 percent) of the acceptors were not advised to report to the clinic for a follow-up visit (Table 5.2a). Nearly half (48 percent) were asked to visit the clinic in case of a problem, while 14 percent were advised to return within 15 days and 12 percent within 16 to 30 days. Between the different strata there were significant differences in counselling on the need for a follow-up visit. The proportion of clients counselled on the need for a follow-up visit was higher for NGO clinics than for BDG urban or BDG rural clinics.

The ideal practice for follow-up 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 follow-up 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-up within one or two months of insertion; if there is no problem no more follow-up is necessary within a year; the acceptor should be informed that if there is any problem she should report to the 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 a clinic within four years (IEM Unit, 1987).

Counselling about side-effects: Two-fifths (40 percent) of the acceptors were not informed of any possible side-effects due to insertion of the IUD. The possible side-effects that were mentioned during counselling were: heavier menstrual bleeding (43 percent); abdominal pain (40 percent); and spotting (12 percent) (Table 5.2e).

Counselling about response to problems: Two-fifths (42 percent) of the acceptors were not counselled on what to do in case of any problem; one-half (50 percent) were advised to report to the clinic, while one-tenth were advised to contact the field worker (Table 5.2f).

Need to feel for the thread: Slightly over a quarter (28 percent) of the acceptors were not counselled on the need to feel for the thread (Table 5.2g). However, 84 percent of the acceptors reported having checked the thread. And 15 percent mentioned that their husbands were complaining of discomfort due to the presence of the thread.

Score on counselling: In order to assess the level of counselling and differences between the strata, a scoring plan was developed giving a score of '1' for each of the five topics covered in counselling. By totalling the score for each individual acceptor, the level of counselling was ascertained. It appears from Table 5.2h that about one-half of the acceptors (51 percent) had been counselled on all these issues. The mean score on counselling was 3.6. There are no pronounced variations across strata in the score of counselling between the 1988 and 1989 evaluations.

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									
	<3	4	5	6	7	8	9	10	11	12+
mean score	3.3	3.7	3.6	3.7	3.6	3.6	3.7	3.5	3.6	3.6

Table 5.2: Nature of counselling.

	BDG		NGO	All
	Rural	Urban		
a. Major topics on which counselled:	(Percent)			
Length of effectiveness	96	97	93	96
Need for follow-up visit	73	82	91	77
Information on side-effects	59	61	62	60
Response to problems	79	84	88	81
Need to feel the thread	72	76	66	72

	BDG		NGO	All
	Rural	Urban		
b. Source of counselling on effective duration of IUD:				
None	4	3	7	4
Doctor/FWV/counsellor	84	87	78	84
FP worker	53	54	51	53
TBA/Dai	3	3	1	3
Agent	0	-	-	0
IUD user	39	40	41	40
Other	2	1	3	2
N	2027	688	437	3152
c. For counselled clients: perceived length of effectiveness (in years):				
1	0	-	0	0
2	1	1	1	2
3	46	47	3	47
4	45	42	53	42
5+	8	10	33	9
D.K.	0	-	10	0
Total	100	100	100	100
N	1950	669	437	3026
Mean	3.6	3.6	3.5	3.6
d. Counselling about need for follow-up visit:				
No counselling	28*	18*	9 *	23
Within 15 days	13	13	24	14
16-30 days	8	12	32	12
For problem	49	54	32	48
At expiry of term	1	0	-	1
Other	1	3	3	2
Total	100	100	100	100
e. Counselling about side-effects:				
No counselling	41**	39**	38**	40
% mentioning:				
Pain in lower abdomen	38	44	42	40
Heavier menstruation	42	43	49	43
Spotting	11	13	13	12
Expulsion	6	5	3	6
Perforation	1	1	1	1
Ectopic pregnancy	0	-	0	0
Other	6	8	11	7

* The difference between BDG Urban and NGO, and BDG Rural and NGO are statistically significant at $P < .01$.

** The difference between BDG Urban and NGO, and BDG Rural and NGO are statistically significant at $P < .05$.

	BDG		NGO	All
	Rural	Urban		
f. Counselling about response to problems:				
No counselling	44	40	40	42
% mentioning:				
Report to clinic	48	53	54	50
Contact field worker	11	9	7	10
Contact doctor	1	2	2	1
Other	0	0	1	0
g. Counselling about need to feel for the thread:				
No counselling	28	24	34	28
% mentioning:				
Checked the thread	84	87	77	84
h. Amount of counselling:				
Summary score**				
0	1	1	1	1
1	10	6	6	9
2	16	14	19	16
3	18	20	15	18
4	12	11	14	12
5	42	48	46	44
Total	100	100	100	100
Mean score	3.6	3.8	3.7	3.6
N	2027	688	437	3152

** 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 6

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.

6.1. Possession of functional equipment:

The quality of IUD insertions depends in large part on the availability of appropriate equipment and supplies. Service providers were asked whether they had any IUD manual as well as the required equipment for providing IUD services. One-fifth (21 percent) of the service providers did not have any IUD manual in their possession (Table 6.1a).

All but 2 to 3 percent of the service providers reported that they had a sponge holder, speculum, uterine sound, scissors, artery forceps, and gloves (Table 6.1b). About 10 percent of the providers did not have a kidney tray or savlon/dettol, and nearly one-fifth did not have any vassellum (Tenaculum). It is important to note that one-third of the service providers did not have an IUD insertion table and a quarter did not have a stove/sterilizer for sterilizing their instruments. NGO clinics were much better equipped than the BDG clinics. It is observed that the availability of consumable items such as savlon/dettol has increased from 76 percent in 1988 to 90 percent in 1989; this finding may reflect the several orders issued by the DG/DFP in 1989 to the effect that medicines and supplies given for sterilization could be used for Menstrual Regulation and IUD cases as well (MR Newsletter, June, 1990). There has also been a slight improvement in the availability of IUD insertion tables and stoves/sterilizer to boil instruments. For example, in 1988, an IUD insertion table was available in 62 percent of the clinics and stove/sterilizer in 68 percent, while the corresponding figures for 1989 are 67 percent and 75 percent respectively. However, the non-availability of at least a stove for boiling instruments in one-third of the clinics and an insertion table in one-fourth as found in the 1989 evaluation nevertheless undermines the quality of IUD services.

Table 6.1: Reported possession of IUD manual and equipment for IUD insertion available to the provider.

Possession of IUD manual and equipment	BDG		NGO	All
	Rural	Urban		
a. Type of manual: (Percent)				
None	15	23	33	21
C-T 380 manual	55	47	51	52
IUD Manual	39	39	23	37
Other	1	2	-	1
b. Equipment:				
Sponge holder	97	95	98	96
Speculum	97	97	98	97
Valsellum (Tenaculum)	77	80	99	82
Uterine sound	96	96	99	96
Scissors	96	96	100	97
Artery Forceps	95	98	100	97
Kidney Tray	86	92	100	90
Bowl for cotton	66	74	97	73
Gloves	97	98	100	98
Copper-T	97	99	99	98
Savlon/Dettol	88	91	99	90
Stove/Cooker/Heater/ Sterilizer/Autoclave	69	74	100	75
IUD insertion table	59	66	94	67
N	303	230	93	626

6.2. Steps followed in performing an IUD insertion:

The service providers were asked to describe the steps they follow in performing an IUD insertion. As may be seen from Table 6.2a, over 90 percent of the providers adhere to the following steps: clinical registration, selection of client, preparation of instruments, putting on gloves, per vaginal (P.V) examination, insertion of the IUD and post-insertion counselling. Pre-counselling and feeling the thread are also mentioned by just under 90 percent of all providers, but this proportion is lower at NGO clinics perhaps because of the inclusion of the large number of non-bonafide NGO clinics in the sample.

There exists a pronounced variation in these findings between the 1988 and 1989 evaluations. Higher proportions of providers mentioned having followed the listed steps in 1988 than in 1989. In both the evaluations the providers were asked, when relevant, the reason why they did not follow a step. In such cases the providers tend to correct themselves and say that they follow the particular step. In the 1988 evaluation the field

interviewers corrected the answers, but in 1989 they were instructed not to do so. Thus, the difference between the 1988 and 1989 results reflects a change in the survey procedures rather than a genuine change in provision of services.

Service providers were asked whether they use hand gloves. About 96 percent stated that they use hand gloves regularly, and most of the remainder use gloves sometimes (Table 6.2b). Providers were also asked about 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, using antiseptic solution, and both boiling and using antiseptic solution. One-fifth of the service providers said that they use antiseptic solution to sterilize their instruments (Table 6.2c). As antiseptic solution alone does not sterilize instruments, use of metal instruments without boiling or autoclaving is a possible source of infection.

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. Three-quarters (74 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 6.2d). The former method is preferable because it permits very little chance of contamination.

Table 6.2: Reported steps followed by providers in performing IUD insertions and in maintaining aseptic precautions.

Steps followed/aseptic precautions	BDG		NGO	All
	Rural	Urban		
	(Percent)			
a. Steps followed:				
Clinical registration	99	99	98	99
Pre-counselling	95	89	70	89
Selection of the client/ case history/assessment of contra-indications	100	100	100	100
Preparation of instruments	97	95	82	94
Putting on gloves	94	94	94	94
Bimanual/P.V. examination	97	98	100	98
Post-insertion counselling	97	97	89	96
Feeling the thread	93	89	69	88
Payment	96	96	73	92
Other	96	93	82	93

Steps followed/aseptic precautions	BDG		NGO	All
	Rural	Urban		
b. Use of hand gloves:				
Always	94	97	99	96
Sometimes	6	2	1	4
Never	0	0	-	-
c. Sterilization process:				
Use autoclave	3	8	11	10
Use sterilizer	3	5	7	7
Boil in water	48	48	23	45
Boil and use antiseptic solution	19	19	27	18
Use antiseptic solution	26	20	38	20
d. Process of pushing the C-T into the inserter:				
Push the C-T keeping it inside the plastic cover	68	78	85	74
Push the C-T removing it from the plastic cover using gloves	25	21	15	22
Push the C-T removing it from the plastic cover without gloves	5	1	-	3
IUD not available in the clinic	2	-	-	1
Total	100	100	100	100
N	303	230	93	626

6.3. Record keeping:

In the IUD program, the clinics providing IUD services are supposed to maintain certificate books and a payment register. Usually, payment of the provider's fee is made on the basis of a certificate confirming insertion of each IUD. The client attendance register and payment register are maintained by most of the service providers, but records of re-insertions, follow-ups, removals, and complications are not properly maintained (Table 6.3). In the 1988 evaluation it was found that certificate books were being maintained by 85 percent of the providers, but in the 1989 evaluation no more than 65 percent of the providers interviewed were doing so. Because providers were not asked why they did not maintain a specific register/record, the data did not provide any insight into this marked difference between the two evaluations. Later, through personal contacts, it was learned from the Central Warehouse Director, District Deputy Directors, and Upazila FP Officers that the certificate books are in short-supply due to delays in printing. Similar to the findings of the 1988 evaluation, the greatest shortcoming in the record keeping system was the failure to record the complete addresses of IUD clients.

Table 6.3: Registers maintained by the providers for IUD insertions.

Name of register	BDG		NGO	All
	Rural	Urban		
	(Percent)			
Client attendance register	98	100	98	99
Rejection register	32	25	45	31
Removal register	53	52	73	56
Follow-up register	36	51	69	47
Complications register	18	23	33	22
Payment register	78	82	77	79
Certificate Book	70	75	23	65
N	303	230	93	626

6.4. Availability of IUD money:

Nearly a quarter (23 percent) of the service providers did not have any advance IUD money at their disposal (Table 6.4a). Those who had any advance had on average Tk.399. The providers having no cash at hand were asked how soon they were expecting the advance money. Nearly two-fifths (38 percent) were expecting the money within a week, while over two-fifths (43 percent) did not have any idea as to when they would receive the money (Table 6.4b). When advance IUD money is not available, the service providers nevertheless make payments and obtain reimbursement later (46 percent) or advise their clients that they will receive payment later (44 percent), or do the insertion without payment to the client (7 percent) (Table 6.4c). It is important to note that in the 1988 evaluation two-thirds (66 percent) of the providers were expecting the money within a week and the remainder within a month. The uncertainty of such a large proportion of clinics regarding receipt of the money as observed in the 1989 evaluation may jeopardize payment of transportation costs to IUD clients.

6.5. Problems in rendering IUD services:

The service providers were asked about the common problems they face in rendering IUD services. Nearly a quarter (23 percent) reported having no problems (Table 6.5). About 46 percent of NGO service providers reported having no problems as compared to 26 percent for BDG urban and 16 percent for BDG rural service providers. The important problems which service providers face are 'shortage of equipment and supplies' (45 percent), 'shortage of medicine' (23 percent), and 'shortage of funds/irregular flow of funds' (19 percent). 'Shortage of accommodation in unions having no UHFWC' was mentioned by 16 percent of service providers. 'Objection by husbands/religious

taboos' was also mentioned by about one-third (35 percent) of service providers. About one-fifth (21 percent) of the service providers mentioned that they face difficulty in 'management of side-effects/complications'. It is important to note that compared to the findings of the 1988 evaluation, a much higher proportion of service providers interviewed in 1989 mentioned problems. Logistical shortages, especially funds for IUD insertions, may be responsible for this trend.

Table 6.4: Availability of IUD money and measures taken when money is unavailable.

	BDG		NGO	All
	Rural	Urban		
a. Amount in hand at present: (Percent)				
Payment made by UFPO/staff	2	5	52	10
No payment is made/provider did not receive money from office	1	1	12	3
None	31	18	14	23
1-50	7	7	1	6
51-100	6	8	2	6
101-150	8	10	2	8
151-200	8	8	6	8
201-250	5	4	-	4
251-500	15	22	5	16
501 +	17	18	7	16
Total	100	100	100	100
N	303	230	93	626
Mean for those having any money (Taka)	373.6	436.8	367.3	399.2
b. Estimated duration within which money may be received by the providers: (Limited to those not having any cash)				
0-7 days	31	55	31	38
8-14 days	6	5	-	5
15-21 days	11	-	-	7
21-30 days	9	2	-	6
30 + days	1	-	-	1
Don't know	42	38	69	43
Total	100	100	100	100
N	93	40	13	146
Mean (days)	12.0	5.2	1.0	9.4

	BDG		NGO	All
	Rural	Urban		
c. Measures taken when there is no cash at hand:				
Payment made by UFPO/staff	2	5	52	10
No payment is made/provider did not receive money from office	1	1	12	3
Providers make payment and obtain re-imbursement claim later	45	58	22	46
Advise clients to receive payment later	58	37	16	44
If clients want, insertion is done without payment	8	7	-	7
Stop inserting IUD	5	1	-	3
Other	-	-	2	1
N	303	230	93	626

Table 6.5: Problems faced in rendering IUD services.

Problems	BDG		NGO	All
	Rural	Urban		
		(Percent)		
No problem	16	26	46*	23
Shortage of equipment and supply	56	50	-	45
Shortage of medicine	30	20	5	23
Shortage of fund/irregular flow of fund	25	15	7	19
Shortage of IUD	3	1	4	2
Objection by the husband/religious taboos	40	29	33	35
Shortage of accommodation in unions having no UHFWC	17	21	-	16
Errosion of cervix/prolaped uterus	11	5	12	9
Difficulty in management of side-effects/complications	23	17	22	21
No TA for followup/attending satellite clinic	3	1	-	2
Other	6	5	15	7
N	303	230	93	626

* The difference between BDG Urban and NGO, and BDG Rural and NGO are statistically significant at $P < .01$.

Chapter 7

POST-INSERTION EXPERIENCE

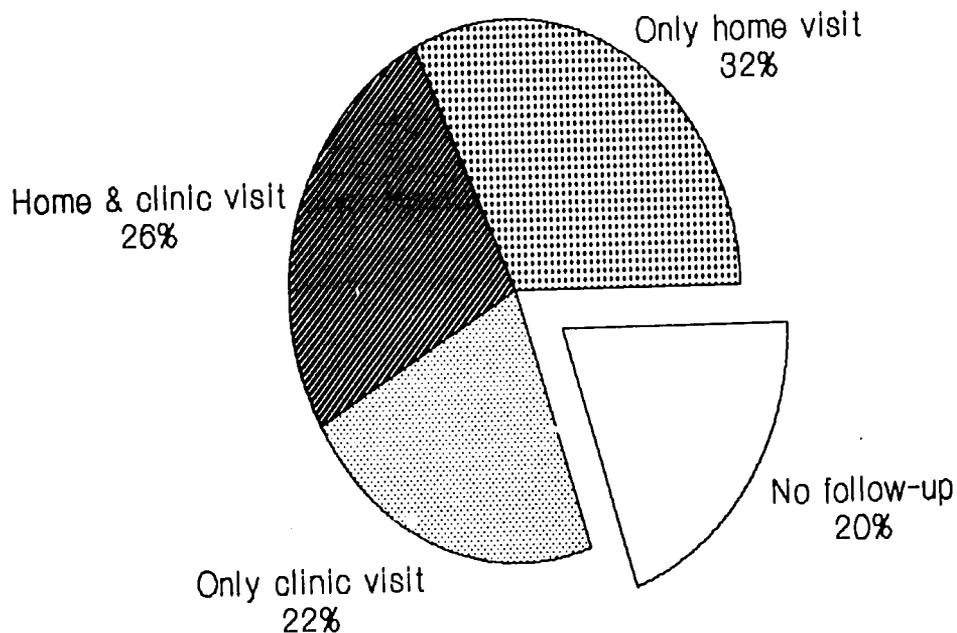
This chapter contains information on post-insertion follow-up visits, experience of problems or side-effects, sources and nature of advice regarding side-effects, status of IUD use, retention rate for the IUD, reasons for removal, and satisfaction with IUD services.

7.1. Follow-up:

IUD acceptors were asked whether they revisited the clinic for any treatment or counselling after the IUD insertion. Four-fifths of the IUD acceptors reported that they had a follow-up; either they themselves returned to the clinic or were visited at home (Table 7.1a). The remaining one-fifth neither returned to the clinic nor were visited at their household following the IUD insertion. One-fourth of the acceptors (26 percent) had a follow-up both at the clinic and in the household. Twenty-two percent visited the clinic and 32 percent were visited at their household (Figure 7.1). The proportion followed-up was highest in BDG urban (86 percent), intermediate in NGO (82 percent), and lowest in BDG rural (78 percent).

Half of the acceptors (52 percent) did not go to the clinic for a follow-up visit (Table 7.1b). Slightly over one-third (37 percent) returned to the clinic within two months of the insertion. The remaining 11 percent reported to the clinic after two months. The median interval between insertion and return to clinic for those who went to the clinic for a follow-up visit was one month.

Figure 7.1: Post-insertion follow-up.



Between the strata, the proportion returning for a follow-up visit was higher for NGO and BDG urban clinics (55 percent) than BDG rural clinics (45 percent). Table 7.2 shows that distance does influence the probability of a return visit to the clinic. The percentage returning falls from 60 percent for those living within a mile of the clinic to 42 percent for those living five or more miles away.

Table 7.1c shows that nearly three-fifths (58 percent) of the acceptors received a follow-up visit in their household. Almost all of these visits were paid within two months of insertion and almost all the home visits were made by FP workers (Table 7.1d). The median interval between insertion and home visit was ten days.

The proportion visited at their household in 1988 was slightly lower at 53 percent. However, the median interval between insertion and home visit was seven days as observed in the 1988 evaluation. A clear-cut official policy on follow-up procedures was not readily available; as discussed in Section 5.2 there are differences according to the different manuals supplied to the providers which need to be standardized.

7.2 Side-effects:

One-third of the acceptors (33 percent) reported having experienced no problems or side-effects (Table 7.1e). Nearly two-fifths of all acceptors (38 percent) mentioned suffering from heavy menstrual bleeding and another one-third (31 percent) mentioned pain in the lower abdomen. Seventeen percent of the acceptors reported having foul smelling, white discharge and 14 percent had irregular menstruation or spotting. About one-tenth of the acceptors (12 percent) reported discomfort during intercourse. The median number of days following the insertion when the acceptors had the severest problems was 25 days (Table 7.1f).

Table 7.1g shows that among those having experienced side-effects, one-tenth (11 percent) suffered from functional impairment associated with the problem. The median number of days for which the acceptors could not carry on with their normal work was six days.

Among those IUD acceptors experiencing problems, one-fifth (21 percent) did not seek any advice (Table 7.1h). One-half (51 percent) went to a FWV/doctor, while two-fifths (43 percent) approached a FP worker. For those who sought advice, 44 percent were prescribed medicine and 27 percent were informed that the initial problems and discomforts would disappear and were advised to retain the IUD. Thirteen percent were advised to have the IUD removed. About one-tenth (12 percent) were advised to go to the clinic or were taken to the clinic (Table 7.1i). At the time of interview the problems had not been resolved for one-third (32 percent) of those experiencing problems (Table 7.1j).

Table 7.3 presents the type of advice given to acceptors by the source of such advice. The nature of advice given to IUD acceptors who sought help was almost uniform among the medical and paramedical personnel, i.e., doctor, FWV, or FWA. The nature of advice given by 'Others' was different from the general pattern. 'Dai/TBA', or 'Others' tended to advise removal of IUDs more frequently than doctors or paramedics. However, only a very small proportion of acceptors sought advice from 'Dai/TBA' or 'Others'.

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. This linkage is not a precise matching. The design of the survey does not permit the identification of the provider who inserted the device into a particular client. However the two data sets can be linked at the clinic level. In this way, clinic conditions, such as availability of equipment, and provider characteristics, such as sterilization procedures, can be related to the subsequent experience of clients of that particular clinic. It should be noted that it was not always possible to interview a provider at a selected clinic for a variety of reasons, for example, absence due to leave, transfer to non-sample upazilas, etc. It was not possible to link provider data to a total of 391 clients.

The results are shown in Table 7.9. The percentages of respondents who reported side-effects or who experienced functional impairment do not vary significantly by these indicators of the quality of clinic services. To some extent, 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. For example, 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 these procedures in their day-to-day work.

The results also undoubtedly reflect the fact that the vast majority of side-effects experienced by IUD acceptors have nothing to do with the standards of clinical care.

7.3. Status of use of IUD:

Nearly three-fourths of the acceptors (71 percent) were using the reference IUD at the time of interview, a quarter (25 percent) had had it removed, and the remaining 4 percent reported that their IUD had been expelled. Only 0.4 percent had become pregnant with the IUD in-situ (Table 7.1k). The proportion of acceptors using the reference IUD at the time of interview was higher (71 percent) in the 1989 evaluation compared to the 1988 evaluation (53 percent). The reason for this difference is that the field work for the 1988 evaluation started from July 1989, while that for the 1989 evaluation began in February, 1990. Thus

the average interval between insertion and interview was shorter in 1989 than the 1988 evaluation.

Use status at the time of the survey is related to the experience of problems, amount of counselling, and stated satisfaction with services. Two-thirds of the acceptors reporting side-effects with functional impairment had had the device removed, compared to one-third of those with side-effects, but no functional impairment, and only one-tenth of those who reported no side-effects (Table 7.5a). Of potentially greater interest is the finding that the amount of counselling is inversely related to the likelihood of removal. The percentage who had the device removed falls from about 39 percent among women who received no counselling to 28 percent among those who received counselling on all five aspects (Table 7.5b).

The level of satisfaction with services is found to be inversely related to removal. The proportion of continuing users declined from 81 percent for those who were highly satisfied to 41 percent for those who were not at all satisfied (Table 7.5c). These results strongly suggest that the quality of services 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.

Pregnancies occurring after IUD insertion: Among those who had had the IUD removed, 1 percent or ten cases became pregnant--nine cases conceived with the IUD in-situ and one case became pregnant after the removal of the IUD (Table 7.8).

7.4. Retention rate for the IUD:

To calculate continuation rates of IUD use--or proportions still using at specified durations after insertion--life table analysis was used. This procedure takes into account the variable 'observation period'. Thus some respondents were interviewed only two or three months after the 1989 insertion, while others were interviewed 16 or more months after insertion. Life table techniques permit the inclusion in the analysis of women up until the end of their observation period.

The results are shown in Table 7.11. Two months after insertion, 89 percent of women are still using the IUD. The proportion falls to 77 percent after six months. The twelve-month retention rate is 65 percent and the estimate after fourteen months is 60 percent. These results are broadly similar to findings from other countries in this region. The IUD study conducted by BFRP observed similar rates of retention (Akhter et al., 1988). However, special project areas, such as the ICDDR,B's MCH-FP project area in Matlab, had higher rates of IUD retention--82 percent at the end of 12 months (Rob, 1987).

Comparison of the retention rate between 1988 and 1989:

Comparison of the results presented below shows that the retention rates for the IUD are almost identical for 1988 and 1989.

<u>Months</u>	<u>1988</u>	<u>1989</u>
2	.91	.89
4	.82	.82
6	.78	.77
8	.72	.73
10	.67	.68
12	.63	.65
14	.58	.60

The analysis of retention rates is further explored in Table 7.10. In an attempt 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.

The overall impression is that few of these factors influence the retention rate in a significant or substantial way. The largest difference concerns the number of insertions performed in 1989. The retention rate for clients who used a clinic where 50 or less insertions were done in 1989 is lower than the rate for clients who used a clinic where more insertions were done. Interpretation is difficult. It is possible that providers who perform few insertions per year are relatively unskillful and that this lack of skill influences side-effects and client satisfaction. But it is more likely that high performing clinics are located in areas where the IUD has become a popular method. The example of many other users in the same locality may encourage a new IUD acceptor to continue with the method, despite side-effects.

Analysis was also performed to examine variations in retention rates according to the individual characteristics of clients (Table 7.11). The following variables were selected:

- age
- number of living children
- desire for another child
- method used in the month prior to insertion
- ever use 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. While it is true that women with less than two children experience rather low continuation rates, no other appreciable differences were observed. Similarly, it was expected that earlier use of contraceptive methods, and resort to MR immediately prior to insertion, would be associated with a high level of retention because a history of contraception implies a sustained motivation to regulate fertility. In fact, the results of the 1989 survey show the reverse. The cumulative retention rate at 12 months is considerably higher for women who had never before used any contraceptive method than for experienced contraceptors (78 versus 61 percent). The explanation for this result must be speculative. It is possible that women who have tried and abandoned other methods in the past are in general less tolerant of discomfort and side-effects, and are likely therefore to find the IUD unsatisfactory.

Educational level and work status do not appear to influence propensity to persist in use of the IUD. It was noted in an earlier chapter that IUD acceptors tend to be better educated than the general adult female population as well as users of other methods. Nevertheless, an appreciable number of clients interviewed in the 1989 evaluation had never gone to school. It is reassuring to note that these women are just as willing and able to persist in retaining the device as more educated women.

Two factors are highly correlated with retention levels. Women who report that they are not satisfied or only somewhat satisfied with the services that they received are less likely to continue with the method than women reporting greater satisfaction. As noted earlier, however, this finding is difficult to interpret. Experience of side-effects, in particular side-effects that impair normal functioning, is a major determinant of continuation. After 12 months, only 30 per cent of women who reported functional impairment are still using the IUD. In contrast, 89 per cent of clients who reported no side-effects are still using after 12 months.

The findings of the evaluation may seem to suggest that errors in insertion technique are not a determining factor in IUD continuation. While it is obviously important to continue to upgrade medical skills and quality of insertion services, these improvements may not be likely to produce much change in continuation rates. On the other hand, there are important non-medical skills such as counselling and follow-up which, if strengthened, would increase the level of satisfaction and thereby contribute to the rate of continuation. Women who receive good counselling will experience the same amount of

side-effects, but will tolerate them better and be less likely to discontinue the method. There is a tendency on the part of both trainers and providers to attach more importance to the bio-medical than to the psychological aspects. Providers are usually very eager and receptive to learning new medical techniques but rarely identify counselling and follow-up as an important training need. Thus, IUD continuation can be improved through greater training and emphasis on counselling and follow-up.

7.5. Main reasons for removal:

Acceptors who had removed their IUD were asked about the main reason for the removal. Table 7.1m shows that there is a wide range of reasons for removal of the IUD. Nearly one-half (45 percent) had the IUD removed because of 'heavy menstrual bleeding and/or cramps'. About a quarter (24 percent) had it removed because of a number of reasons likely to be caused by infection such as, 'pain in lower abdomen', 'infection/itching', 'foul smelling, white discharge'. Six percent had the removal because of 'irregular menstruation/spotting'; 7 percent because of 'objection by husband/discomfort during intercourse', while another 3 percent because of desire for another child. The reasons for removal as observed in 1989 are very different from those in 1988. In the 1988 evaluation, multiple reasons were collected, while in 1989 only the main reason for removal was identified. Thus, the difference does not reflect any real change but is caused by the difference in survey methodology between 1988 and 1989.

Table 7.4 shows that there are minor variations in the reported reasons for removal by duration of use. Early removals are particularly associated with infection (itching) and pain in the lower abdomen and heavy menstrual bleeding.

Slightly over one-half of the acceptors (56 percent) had the IUD removed at the clinic, while two-fifths (39 percent) had it removed in their own house or in a relative's house (Table 7.1n). This result suggests that many IUDs are removed by non-clinical personnel. There is little variation by stratum. For BDG rural clinics the proportion having the IUDs removed at the client's/relative's house is relatively higher (42 percent) compared to that for BDG urban (34 percent) and NGO clinics (36 percent). Slightly over one-half (53 percent) of the total acceptors who had the IUD removed did so at the same center where it was inserted (Table 7.1o). Of those having had the IUD removed or expelled, only 2 percent had had a re-insertion (Table 7.1p).

There is a clear-cut relationship between satisfaction with services and place of removal (Table 7.12). The proportion of women who had the removal done by the same person (place) where it was inserted falls from 62 percent among the highly satisfied group to 47 percent among those who were not at all satisfied. Nevertheless the fact remains that a large

minority (38 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.

At the time of the interview only 13 percent of the IUD acceptors were not using any contraceptive (Table 7.1q). Nearly three-fourths (71 percent) were using the IUD and the remaining 16 percent were using other methods, primarily the oral pill (9 percent). The proportion of acceptors not using any contraceptive at the time of interview was 25 percent in the 1988 evaluation as compared to 13 percent in the 1989 evaluation. This difference was primarily because of the time lag between insertion and the interview in the two evaluations--the 1988 interviews were conducted after 15 months from the date of insertion, while the 1989 interviews took place after 9 months. Because of this difference in the time lag the proportion of acceptors using the IUD was higher in the 1989 evaluation (71 percent) than in the 1988 evaluation (54 percent). Thus, among those who had had their IUD removed, the proportion who were not using any contraceptive was 55 percent in the 1988 evaluation compared to 45 percent in the 1989 evaluation. The actual difference in the proportion of non-users is therefore of 10 percentage points. This difference is also likely to be attributable to the time lag, since with the lapse of time, those IUD acceptors who were contracepting for spacing purposes may have discontinued use of any contraceptive due to desire for a child. It is not possible, with the available data, to ascertain whether this improvement in 1989 in the current use of contraceptives was due to improvements in the program.

7.6. Satisfaction with services:

Acceptors were asked whether they were satisfied with the IUD services they had received at the time of insertion and in subsequent follow-up. Slightly over one-half of the acceptors (58 percent) were either satisfied or highly satisfied, and about one-third (32 percent) were somewhat satisfied. One-tenth of the acceptors were not at all satisfied (Table 7.1r). Compared to the 1988 evaluation findings the level of satisfaction was lower in 1989--71 percent of the acceptors were either satisfied or highly satisfied in 1988 in contrast to 58 percent in 1989.

Another indicator of satisfaction was taken by asking the acceptors whether they had recommended the IUD to others. Nearly three-fifths (59 percent) mentioned that they had already recommended the IUD to others and a quarter (24 percent) said that they would do so. The remaining 17 percent said they would not recommend the IUD to others (Table 7.1s). In 1988, clients surveyed were asked only if they had recommended the IUD to anyone. Fifty-three percent replied in the affirmative in 1988 as opposed to 59 percent in 1989.

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 (Table 7.5c). Similarly, the experience of side-effects is related, in the expected manner, with satisfaction (Table 7.6a). A much more important finding is that individuals who received a home visit are very much more likely to express satisfaction than those who did not receive a home visit (Table 7.6b). The amount of counselling was found to be positively associated with level of satisfaction (Table 7.7). The level of satisfaction rises to 66 percent among respondents who were counselled on all the five items from 45 percent among those who were counselled on only one item. This result has obvious practical implications for the future improvement of IUD services.

Table 7.1: Post-insertion experience.

	BDG		NGO	All
	Rural	Urban		
(Percent)				
a. Status of follow-up:				
Not followed-up	22	14	18	20
Followed-up	78	86	82	80
At clinic	20	23	30	22
At home	34	31	27	32
Both at clinic and at home	24	32	25	26
Total	100	100	100	100
b. Timing of re-visit to clinic:				
No revisit	55	45	45	52
0	-	0	-	0
1-6 days	4	5	5	4
7-13 days	8	8	4	8
14-20 days	6	6	17	7
21-27 days	1	1	2	1
28-60 days	16	19	18	17
60+ days	10	15	9	11
Total	100	100	100	100
(median no. of days for those ever re-visited)	30.0	30.0	30.0	30.0
c. Timing of home visit:				
No visit	42	37	48	42
0	1	2	1	1
1-6 days	15	17	9	14
7-13 days	15	14	11	15
14-20 days	7	7	11	8
21-27 days	0	1	1	1
28-60 days	15	17	16	15
60+ days	5	4	3	4
Total	100	100	100	100
(median no. of days for those ever visited)	10.0	10.0	15.0	10.0

	BDG		NGO	All
	Rural	Urban		
d. Identity of home visitor:				
FP worker	57	61	51	57
Other	1	2	1	1
None	42	37	48	42
Total	100	100	100	100
e. Problems/side-effects experienced:				
None	34	31	32	33
Heavy menstrual bleeding	39	39	37	38
Pain in lower abdomen	30	34	30	31
Foul smelling, white discharge	16	18	20	17
Irregular menstruation/spotting	13	15	12	14
Infection/itching	3	4	6	4
Pain in lower abdomen with fever	6	6	6	6
Discomfort during intercourse	11	11	13	12
Missing thread	1	1	1	1
Perforation of the uterus	0	-	-	0
Other	4	4	5	4
f. Timing of (severest) problem:				
No problem	34	30	31	33
0	5	9	12	7
1-6 days after insertion	14	11	13	13
7-13 days "	7	6	6	7
14-20 days "	6	5	8	6
21-27 days "	1	2	1	1
28-60 days "	24	27	20	24
60+ days "	9	10	9	9
Total	100	100	100	100
(median for those with problem)	26	30	15	25
N	2027	688	437	3152
g. Duration of functional impairment caused by problem (restricted to those with problem):				
No impairment	89	90	87*	89
1-2 days	1	2	3	1
3-4 days	3	2	3	3
5-6 days	2	1	2	2
7-13 days	3	2	2	3
14-20 days	1	2	2	1
21-27 days	0	0	0	0
28-60 days	1	1	1	1
60+ days	0	0	0	0
Total	100	100	100	100
(median number of days)	6.0	6.0	5.0	6.0
N	1347	475	297	2119

* The difference between BDG Urban and NGO, and BDG Rural and NGO are statistically significant at $P < .01$.

		BDG		NGO	All
		Rural	Urban		
(Percent)					
h.	Source of advice for problem (restricted to those with problem):				
	No advice sought	23	16	22	21
	FWV/Doctor	47	62	55	51
	FP worker	43	45	39	43
	Dai/TBA	2	2	1	2
	Other	1	0	1	1
	N	1347	475	297	2119
i.	Nature of advice given (restricted to those with advice):				
	Prescribed medicine	43	48	40	44
	Informed that initial problems and discomforts will disappear and advised to retain the IUD	26	30	26	27
	Advised to remove the IUD/removed the IUD	13	15	14	13
	Advised to go to the clinic/Took the client to the clinic	12	15	14	12
	Advised to refrain from intercourse for a few days	1	1	1	1
	Advised to take good food/cold drinks	2	1	2	2
	No advice/action	1	1	1	1
	Other	1	1	2	1
	N	1714	611	373	2698
j.	Whether problem has been resolved (for those with problem):				
	Yes	66	74	71	68
	No	34	26	29	32
	Total	100	100	100	100
	N	1347	475	297	2119
k.	Status of use of IUD (first segment):				
	Expelled	4	4	3	4
	Pregnancy in-situ	0	0	0	0
	Removed	24	30	26	25
	Still using	72	66	71	71
	Total	100	100	100	100

	EDG		NGO	All
	Rural	Urban		
(Percent)				
l. Cumulative proportions still using at the start of specified intervals, calculated by life table methods:				
2 months	.89	.90	.87	.89
4 months	.83	.79	.80	.82
6 months	.79	.74	.74	.77
8 months	.74	.70	.72	.73
10 months	.70	.64	.66	.68
12 months	.67	.60	.63	.65
14 months	.62	.57	.60	.60
m. Main reasons for removal (For those with removal):				
Heavy menstrual bleeding and/or cramps	45	43	51	45
Pain in lower abdomen	10	8	6	9
Pain in lower abdomen with fever	4	3	3	4
Infection/itching	3	5	5	4
Foul smelling, white discharge	7	7	5	7
Irregular menstruation/spotting	6	7	4	6
Objection by husband/discomfort during intercourse	6	9	7	7
Desire for another child	3	4	2	3
On health grounds (not related to IUD)	1	2	4	2
Other	14	12	13	13
Total	100	100	100	100
n. Place of removal (restricted to those with removal):				
Govt. hospital/clinic	52	56	18	49
NGO clinic	1	2	41	7
Private clinic/doctor	1	2	3	1
Client's/relative's house	42	34	36	39
Provider's house	3	4	1	3
Other	1	2	1	1
Total	100	100	100	100

	BDG		NGO	All
	Rural	Urban		
(Percent)				
o. Whether IUD was removed from the same center it was inserted:				
Yes	55	57	41	53
No	45	43	59	47
Total	100	100	100	100
N	490	205	114	809
p. Whether re-insertion was performed (for those with removal, expulsion):				
Yes	1	3	2	2
No	99	97	98	98
Total	100	100	100	100
N	567	232	129	928
q. Contraceptive use status at the time of survey:				
IUD (first segment)	72	66	71	71
IUD (second or later segment)	0	1	1	0
Sterilization	1	1	0	1
Pill	8	11	10	9
Condom	2	3	4	2
Injection	2	3	2	2
Foam/Jelly, etc.	0	-	0	0
Other	1	2	3	2
No method	14	13	9	13
Total	100	100	100	100
r. Satisfaction with services:				
Highly satisfied	18	22	25	20
Satisfied	39	38	40	38
Somewhat satisfied	32	32	28	32
Not at all satisfied	11	8	7	10
Total	100	100	100	100
s. Whether IUD was recommended to others:				
Recommended	59	59	61	59
Will recommend	24	25	23	24
Will not recommend	17	16	16	17
Total	100	100	100	100
N	2027	688	437	3152

Table 7.2: Whether re-visited clinic, by distance from clinic.

Distance in miles	Visited clinic		Total	N
	Yes	No		
0	60	40	100	694
1	49	51	100	758
2	49	51	100	529
3	38	62	100	414
4	39	61	100	225
5 +	42	58	100	530
Don't know	-	100	100	2
All	48	52	100	3152

Table 7.3 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 retake IUD	Refra in inter-cour-	Good from food	No advice	Other	
FWV/doctor	24	18	74	45	1	3	1	2	1089
FWA	19	29	71	43	1	3	2	2	916
Dai/TBA	43	33	53	40	-	-	3	-	40
Other	43	29	50	43	-	-	-	-	14
All	21	21	71	43	1	3	1	2	1665

Table 7.4: 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 smell-ing discharge	Infection/itching	Pain in lower abdomen	Pain in lower abdomen with fever	Objec-tion by husband/ discomfort during intercourse	Desire for children	For health grounds (not related to IUD)	Other	
0	46	3	6	4	10	6	6	2	1	16	160
1	53	6	8	2	6	2	8	1	1	14	124
2	50	11	4	2	11	4	11	3	-	5	97
3-5	50	5	11	4	8	1	6	2	1	13	211
6+	36	7	5	6	12	5	6	7	4	14	217

Table 7.5: 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		
a. Experience of problem:				
Yes, and functional impairment	66*	34*	100	235
Yes, but no functional impairment	36*	64*	100	1884
No problem	10*	90*	100	1033
All	29	71	100	3152
b. Amount of counselling (summary score):				
0	39**	61**	100	33
1	33**	67**	100	278
2	29**	71**	100	513
3	29**	71**	100	571
4	30**	70**	100	374
5	28**	72**	100	1383
All	29	71	100	3152
c. Satisfaction with services: ***				
Highly satisfied	19	81	100	629
Satisfied	22	78	100	1212
Somewhat satisfied	35	65	100	999
Not at all satisfied	59	41	100	312
All	29	71	100	3152

* Chi-square = 787, significant at $p < .00001$.

** Correlation co-efficient between summary score for counselling and continuing use of IUD, $r = .874$.

*** Chi-square = 166.04, significant at $p < .0001$.

Table 7.6: Satisfaction with services, by experience of problems and whether visited clinic/visited at home.

	Satisfaction				Total	N
	Highly satisfied	Satisfied	Somewhat satisfied	Not at all satisfied		
a. Experience of problems:						
Yes, and functional impairment	10	27	36	28	100	235
Yes, but no functional impairment	15	37	36	11	100	1884
No problem	31	43	23	3	100	1033
All	20	39	32	10	100	3152
b. Whether visited clinic/visited at home:						
Clinic & home visit	23	40	30	7	100	818
Clinic visit only	14	33	37	16	100	702
Home visit only	26	43	24	6	100	1014
No visit	13	34	40	13	100	618
All	20	39	32	10	100	3152

Table 7.7: Percentages who are highly satisfied or satisfied with services, by type of clinic and amount of counselling (Summary Score).

Summary Score	BDG			All
	Rural	Urban	NGO	
		(Percent)		
0	35 (23)*	71 (7)	67 (3)	45 (33)
1	42 (207)	41 (44)	56 (27)	43 (278)
2	41 (332)	53 (99)	51 (82)	45 (513)
3	61 (373)	66 (134)	69 (64)	63 (571)
4	53 (243)	61 (72)	58 (59)	55 (374)
5	66 (849)	61 (332)	72 (202)	66 (1383)
All	57 (2027)	59 (688)	65 (437)	58 (3152)

* Figure in parenthesis is the N in each cell.

Table 7.8: Outcome of pregnancies occurring after the IUD insertion.

Outcome	BDG			All
	Rural	Urban	NGO	
		(Percent)		
No pregnancy	98	99	100	99
Pregnancy in-situ	2	1	-	1
Pregnancy not in-situ	0	-	-	0
Total	100	100	100	100
N ¹	567	232	129	928
Mean months between insertion and pregnancy	3.0	3.3	-	3.1

¹N in this table is the total number of clients not currently using the IUD.

Table 7.9: Differentials in the rate of complications by quality of IUD services.

IUD Service	N	Status of complications			
		Suffered side-effects/ complications	Had functional impairment	Mean No. of days of impairment	Still suffering
a. Counselling:					
(Summary score)					
0	33	66.7	18.2	1.8	42.4
1	278	70.1	11.2	2.5	41.4
2	513	67.8	8.6	1.1	45.0
3	571	67.1	7.7	1.0	42.2
4	374	67.1	7.5	1.3	45.7
5	1383	67.8	5.9	0.9	48.6
b. Number of IUD insertions performed by the provider in 1989:					
<25	184	57.6	6.0	1.3	46.2
25-50	377	73.5	6.6	0.8	51.7
51-75	378	65.6	6.9	0.9	44.2
76+	1775	67.9	8.2	1.3	45.2
Not matched	391	65.5	5.6	0.7	44.2
c. Availability of equipment with the provider: (No. of items available:)					
< 9	189	59.8	7.4	1.3	45.5
9	326	68.1	10.1	1.5	48.8
10	374	60.4	7.2	1.0	41.7
11	713	65.5	6.6	1.1	44.9
12	1159	72.0	7.9	1.2	47.5
Not matched	391	65.5	5.6	0.7	44.2
d. Procedure for preparation of the IUD for insertion:					
Correct	2032	68.9	7.7	1.1	45.7
Incorrect	729	63.5	7.7	1.6	46.9
Not matched	391	65.5	5.6	0.7	44.2
e. Whether use hand gloves:					
Always	2631	67.5	7.5	1.2	45.8
Sometimes	111	68.1	12.1	1.5	50.0
Never	14	64.3	7.1	0.6	57.1
Not matched	391	65.5	5.6	0.7	44.2
f. Whether sterilize instruments:					
Always	2627	67.9	7.9	1.2	46.1
Sometimes	130	59.2	4.6	0.5	44.6
Never	4	75.0	-	0.0	25.0
Not matched	391	65.5	5.6	0.7	44.2
g. Procedure used for sterilization of instruments:					
Use autoclave	37	67.6	10.8	1.7	56.8
Use sterilizer	157	72.6	11.5	1.5	50.3
Boil in water	1023	66.8	6.5	1.1	47.6
Use antiseptic solution	1544	67.4	8.1	1.2	44.3
Not matched	391	65.5	5.6	0.7	44.2
h. Status of follow-up:					
Not followed-up	618	47.7	4.7	1.0	29.3
Followed-up	2534	72.0	8.2	1.2	48.9
At clinic	702	82.5	11.8	1.6	60.7
At home	1014	56.4	4.4	0.6	34.5
Both at clinic and at home	818	82.3	9.9	1.2	59.5

Table 7.10: Differentials in the retention rate for the IUD by quality of IUD services.

	N	Retention rates for the IUD (months)						
		2	4	6	8	10	12	14
a. Place of insertion:								
Client's/relative's house	536	.86	.79	.74	.67	.61	.60	.56
Clinic	2616	.89	.82	.78	.74	.69	.66	.61
b. Number of items of equipment:								
< 11	889	.88	.80	.75	.70	.66	.63	.59
11	713	.90	.84	.80	.74	.67	.63	.57
12 +	1159	.89	.82	.77	.73	.69	.66	.62
Not matched	391	.90	.83	.78	.73	.69	.67	.64
c. Procedure for preparation of the IUD for insertion:								
Correct	2032	.88	.82	.78	.73	.68	.65	.60
Incorrect	729	.90	.81	.76	.71	.66	.62	.59
Not matched	391	.90	.83	.78	.73	.69	.67	.64
d. Sterilization procedure:								
Use autoclave/sterilizer	194	.84	.78	.72	.71	.62	.58	.58
Boil in water/boil and use antiseptic solution	1023	.89	.81	.77	.72	.68	.64	.59
Use antiseptic solution	1544	.90	.82	.78	.73	.68	.66	.61
Not matched	391	.90	.83	.78	.73	.69	.67	.64
e. Number of insertions performed in 1989:								
< 51	561	.88	.79	.75	.69	.63	.59	.51
51 - 100	903	.89	.82	.78	.73	.70	.66	.62
101 +	1250	.89	.82	.78	.73	.68	.66	.62
Not matched	391	.90	.83	.78	.73	.69	.67	.64
f. Length of service of provider:								
0 - 5 years	591	.88	.80	.76	.72	.67	.65	.61
6 - 9 years	606	.90	.83	.80	.76	.74	.71	.66
10 + years	1564	.89	.81	.76	.71	.66	.62	.57
Not matched	391	.90	.83	.78	.73	.69	.67	.64
g. Home visit within first 4 weeks of insertion:								
Yes	1214	.89	.81	.76	.71	.68	.67	.64
No	1938	.89	.82	.78	.73	.68	.64	.58

Table 7.11: Life table analysis by individual characteristics of clients.

	N	Retention rates for the IUD (months)						
		2	4	6	8	10	12	14
a. Age:								
< 25	1462	.90	.83	.79	.73	.67	.64	.59
25 +	1690	.88	.81	.76	.72	.68	.66	.61
b. Number of living children:								
< 2	719	.90	.82	.77	.70	.65	.59	.53
2 -3	1540	.89	.83	.78	.73	.68	.66	.62
4 +	893	.88	.80	.76	.73	.70	.67	.63
c. Desire for another child:								
Yes/uncertain	1331	.90	.83	.79	.74	.69	.65	.59
No	1821	.88	.80	.76	.72	.67	.65	.62
d. FP method in the month prior to insertion:								
MR	482	.86	.78	.75	.69	.65	.61	.57
Other	996	.88	.81	.76	.72	.66	.64	.60
No method	1674	.90	.83	.79	.74	.70	.67	.61
e. Ever-use of FP method prior to insertion:								
Yes	2352	.87	.79	.74	.69	.64	.61	.56
No	800	.93	.89	.86	.83	.80	.78	.72
f. Education:								
No education	1086	.89	.83	.78	.75	.71	.67	.63
Primary	758	.89	.81	.77	.71	.65	.64	.58
Secondary and above	1308	.89	.81	.77	.72	.67	.64	.60
g. Work status								
Never worked	2096	.88	.81	.77	.72	.67	.64	.59
Worked in the past/currently working	1056	.90	.83	.78	.73	.69	.66	.62

Table 7.12: Place of removal of IUDs by satisfaction with services (for those with removal).

Satisfaction	N	Place of removal		Total
		Same place/ person	Different place/person	
Highly satisfied	111	62.2	37.8	100
Satisfied	238	54.6	45.4	100
Somewhat satisfied	294	52.4	47.6	100
Not at all satisfied	166	47.0	53.0	100
All	809	53.3	46.7	100

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APPENDIX A

CLIENT QUESTIONNAIRE

IUD ANNUAL EVALUATION-1989

CLIENT QUESTIONNAIRE



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

IUD ANNUAL EVALUATION-1989

SAMPLE IDENTIFICATION							
Year of evaluation	<input type="text"/>	<input type="text"/>	Converted client No.	<input type="text"/>	<input type="text"/>	Stratum	<input type="text"/>
District	<input type="text"/>	<input type="text"/>	Upazila	<input type="text"/>	<input type="text"/>	Sample client No.	<input type="text"/>

SUPERVISION AND DATA PROCESSING INFORMATION

Scrutinized	<input type="text"/>	Reinterviewed or spot checked	<input type="text"/>	Edited	<input type="text"/>	Coded	<input type="text"/>
By	<input type="text"/>	By	<input type="text"/>	By	<input type="text"/>	By	<input type="text"/>
Date	_____	Date	_____	Date	_____	Date	_____

INFORMATION FROM CLINIC RECORDS

A. CLIENT IDENTIFICATION			
Name of client: _____			
Name of husband: _____			
Address: House No./Village: _____			
Road No./Union: _____			
Upazila: _____		District: _____	
Client Registration No. _____		Date of insertion: _____	
Number of living children: Son _____ Daughter _____ Total _____			
B. CLINIC IDENTIFICATION			
Name of clinic: _____		Code <input type="text"/>	
Name of NGO: _____			
Address: _____			

C. REFERRER IDENTIFICATION

Name of referrer: _____

Address of referrer: _____

Type of referrer:

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

D. REINSERTIONS

Whether maintain reinsertion register: Yes 1 No 2

Whether the client was reinserted with IUD during the refer-
ence year:

Yes	1	No	2	No record	3
		(SKIP TO E)		(SKIP TO E)	

Number of reinsertions:

Date of reinsertion: 1st _____ 2nd _____ 3rd _____

E. REMOVAL

Whether maintain removal register: Yes 1 No 2

Whether the client's IUD has been removed:

Yes	1	No	2	No record	3
		(SKIP TO F)		(SKIP TO F)	

Date of removal: _____

F. INFORMATION COLLECTED BY

Name: _____ Code: Date: _____

INFORMATION ON ATTEMPTS TO LOCATE AND INTERVIEW THE CLIENT

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

*PERSON ASSISTING

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

**RESULT CODES

Client located and interview completed	1	Address found, but client was only temporarily visiting there	7
Client located but not available	2	Address does not exist/ Not found	8
Client located but deferred interview	3	Address given on forms was incomplete	9
Client located but refused interview	4	No attempt made to locate client	10
Address found, but no such person ever lived at that address	5	Other _____ (Specify)	11
Address found, but client has permanently left that address	6		

INTERVIEWER: IF THE RESULT CODE IS OTHER THAN 1, 2, 3, AND 4 WRITE DOWN BELOW THE REASONS AND COLLECT EVIDENCE FROM LOCAL FWA, FPA, NGO WORKERS, REFERRERS, AND WARD MEMBERS.

Reasons: _____

Section-1

RESPONDENT'S BACKGROUND

Time Started: _____

	RESPONSE	SKIP
101. How old are you ? (PROBE FOR AGE IN COMPLETED YEARS)	Age <input type="text"/> <input type="text"/>	
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 <input type="text"/> <input type="text"/>	
104. What is your religion ?	Islam 1 Hinduism 2 Christianity 3 Buddhism 4 Other _____ 5 (specify)	
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 2	
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> INTERVIEWER: ASK 108 TO 109 ABOUT CURRENT OR LAST HUSBAND </div>		
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 <input type="text"/> <input type="text"/>	
110. How many living children do you have ?	<input type="text"/> <input type="text"/> Number	
111. How many of them are sons and how many are daughters ?	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 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 _____ can be obtained ?
(method)

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 <u>PILL</u> : Women can take a pill every day.	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 2 No 3
02 <u>CONDOM</u> Men can use a rubber sheath on their penis during intercourse	Yes 1	Yes 2 No 3	Yes 1 No 2	Yes 2 No 3
03 <u>FOAM TABLET/JELLY/EMKO/CREAM/DIAPHRAGM</u> : 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 2 No 3
04 <u>INJECTION</u> : 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 2 No 3
05 <u>IUD/Copper T/Coil</u> : 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 2 No 3
06 <u>FEMALE STERILIZATION</u> : 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 2 No 3
07 <u>MALE STERILIZATION</u> : 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 2 No 3
08 <u>MR</u> : 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 2 No 3
09 <u>OTHER</u> : (Specify) _____	Yes 1	=====		Yes 2 No 3

	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 Tubectomy 06 Vasectomy 07 Other 09	→ 209
207. INTERVIEWER: SEE 204: IF YES IN Q 204 COLUMN-5 ROW-05, TICK CODE-1, OR ELSE CODE-2. EVER USED <input type="checkbox"/> 1 NEVER USED <input type="checkbox"/> 2 IUD IUD (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 <input type="text"/>	

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 had used).

	Latest IUD	Earlier IUD	Even earlier IUD
211. When did you accept this IUD(Coil/C-T)?	Date _____ or <input type="text"/> <input type="text"/> Months ago	Date _____ or <input type="text"/> <input type="text"/> Months ago	Date _____ or <input type="text"/> <input type="text"/> Months ago
212. Where did you accept this IUD (Coil/C-T)? (PROBE)	In recorded clinic 1 Name of clinic _____ Address: _____ _____ In own house 2 Other place 3 _____ (Specify)	In recorded clinic 1 Name of clinic _____ Address: _____ _____ In own house 2 Other place 3 _____ (Specify)	In recorded clinic 1 Name of clinic _____ Address: _____ _____ In own house 2 Other place 3 _____ (Specify)

	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 1989 MATCHES WITH THOSE RECORDED AND CIRCLE THE APPROPRIATE CODE.	Both the clinic and time match	1 → 217
	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

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

216. EVER ACCEPTED IUD

NEVER ACCEPTED IUD

1

↓
V

2

(SKIP TO 278)

217. INTERVIEWER: PLEASE ASK ALL THE QUESTIONS FOR THE IUD INSERTED DURING 1989. IF MORE THAN ONE INSERTION IN 1989, ASK ABOUT CURRENT OR LAST IUD(Coil/C-T). IF NO INSERTION WAS DONE IN 1989, ASK ABOUT LAST INSERTION. START WITH, " I would like to ask you few questions about the IUD (Coil/C-T) you had from _____ on _____.
(write clinic name) (write date)

	RESPONSE	SKIP
218. Before having the IUD insertion, who are the persons you discussed about IUD with ? (PROBE, anyone else ?)	Husband 1 Relative _____ 2 (Specify) Friend/neighbour 3 FP worker 4 DAI/TBA 5 IUD user 6 Other _____ 7 (Specify) None 8	--> 221

	RESPONSE	SKIP
219. Before you accepted the IUD did you know any one who have accepted IUD (Coil/C-T) ?	Yes 1 No 2	--> 221
220. Did you discuss about the IUD (Coil/C-T) with anyone of IUD acceptors before you accepted the IUD (Coil/C-T) ?	Yes 1 No 2	
221. Does your husband know that you have had an IUD(Coil/C-T) inserted ?	Yes 1 No 2 Not currently married 3	
222. Among all the methods of FP why did you choose the IUD (Coil/C-T) ? (PROBE AND CODE ALL ANSWERS)	Advantage and effectiveness of IUD 1 Disadvantage of other methods 2 Absence of prior knowledge on other FP methods 3 Selected by field/clinic worker/for IUD after MR 4 Advise by FP Worker/Friends/Relative 5 Other _____ 6 (Specify)	
223. When you had IUD insertion, did you have MR at the same time ?	Yes 1 No 2	--> 225
224. IF YES, when you went for MR, had you already decided to have IUD or had doctor/provider advise you have IUD ?	Doctor advised 1 It was my decision 2 Other _____ 3 (Specify)	--> 230

	RESPONSE	SKIP
225. Did you or your husband use any family planning method during one month prior to your acceptance of this IUD (Coil/C-T) ? (PROBE)	<p>Yes 1</p> <p>No 2 --> 227</p>	
226. What family planning method did you use at that time ? (Interviewer: Code only one method)	<p>Pill 1</p> <p>Condom 2</p> <p>Foam etc. 3</p> <p>Injection 4</p> <p>IUD 5</p> <p>MR 8 --> 230</p> <p>Other 9</p>	
227. At the time of IUD insertion, how old was your youngest child ?	<div style="border: 1px solid black; width: 50px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 50px; height: 20px; display: inline-block; margin-left: 10px;"></div> Months	
228. Since birth of this child and time of IUD insertion, did you have any other pregnancy ?	<p>Yes 1</p> <p>No 2 --> 230</p>	
229. IF YES, how many months before IUD insertion did pregnancy end ?	<div style="border: 1px solid black; width: 50px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 50px; height: 20px; display: inline-block; margin-left: 10px;"></div> Months	
230. How far is the _____ (recorded clinic or clinic from _____ place of insertion) your house ?	<div style="border: 1px solid black; width: 50px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 50px; height: 20px; display: inline-block; margin-left: 10px;"></div> Miles	
231. Did anyone accompany you to the clinic/_____ ? (place)	<p>Yes 1</p> <p>No 2] --> 233</p> <p>Insertion was done at home 3]</p>	

	RESPONSE	SKIP
232. Who did accompany you to the clinic/there ? (PROBE AND CODE ALL ANSWERS)	FP worker 1 TBA/Dai 2 Relative/Neighbour/Friend 3 Child 4 Other _____ 5 (Specify)	
233. Did any one at the clinic tell you about how long the (coil/C-T) remains effective in preventing pregnancy ?	Yes 1 No 2	--> 236
234. How long ?	<input type="text"/> Years	
235. Who told you that ?	Doctor/FWV Counsellor 1 FP worker 2 TBA/Dai 3 Agent 4 IUD user 5 Other _____ 6 (Specify)	
236. 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	--> 238
237. How many days after the IUD(Coil/C-T) insertion were you advised to come back for the check-up ?	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 _____ 5 (Specify)	

	RESPONSE	SKIP		
238. Did anyone tell you how to feel the thread of IUD ?	Yes 1 No 2			
239. Have you felt for the thread of IUD since insertion ?	Yes 1 No 2			
240. Did your husband complain that he could feel the thread ?	Yes 1 No 2			
241. Did any one in the clinic tell you that you should not have intercourse for a few days after having the IUD (Coil/C-T) insertion ?	Yes 1 No 2 -->	243		
242. For how many days ?	<table border="1" style="margin-left: auto; margin-right: auto;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> Days			
243. Did any one tell you that after the IUD(Coil/C-T) insertion you may have some problem or inconvenience ?	Yes 1 No 2 -->	247		
244. What did they tell you ? (PROBE AND CODE ALL 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)			
245. Did they tell you what should you do if you face any problem ?	Yes 1 No 2 --->	247		

	RESPONSE	SKIP		
246. What did they tell you ? (PROBE AND CODE ALL ANSWERS)	Report to clinic 1 Contact the Field Worker 2 Contact a doctor 3 Other _____ 4 (Specify)			
247. Did you receive money for accepting this IUD (Coil/C-T) ? (IF YES) How much money did you receive ? (IF NO, ENTER 00)	<table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> Taka			
248. Have you experienced any particular problem or inconvenience as a result of using the IUD ?	Yes 1 No 2 --> 256			
249. What are the problems or inconveniences ? (PROBE AND CODE ALL 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 _____ 10 (Specify)			
250. How many days after the IUD insertion did this problem start ? (INTERVIEWER: RECORD ANSWER FOR THE SEVEREST PROBLEM/INCONVENIENCE)	<table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> Days after			
251. Did you discuss the problem or inconvenience with any FP worker or clinician ?	Yes 1 No 2 --> 254			

	RESPONSE	SKIP		
252. Whom did you discuss with ?	FWV/Doctor 1 FWA 2 Dai/TBA 3 Other _____ 4 (Specify)			
253. What did the person do for you or advise you ? (Interviewer: Code all the answers as mention)	Advised to remove the IUD/ removed the IUD 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 _____ 9 (Specify)			
254. Did the problem or inconvenience stop you doing your normal duties ? IF YES, For how many days ? (IF NO, Enter 00)	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> Days			

	RESPONSE	SKIP
255. Has the problem or inconvenience been resolved ?	<p>Yes 1</p> <p>No 2</p>	
256. Did you ever visit a clinic for counselling or treatment after accepting the IUD (Coil/C-T) ? (IF YES) Was it the same clinic or different clinic ?	<p>Went to same clinic 1</p> <p>Went to another clinic 2</p> <p>Insertion was done at home but visited the clinic 3</p> <p>Did not go to any clinic 4 --> 258</p>	
257. After how many days of insertion did you first visit the clinic/ place ?	<p><input type="text"/> <input type="text"/></p> <p>Days after</p>	
258. Did any family planning worker come to your house to pay you followup visit ? (PROBE)	<p>Family planning worker 1</p> <p>Somebody else came _____ 2 (Specify)</p> <p>No one visited 3 --> 260</p>	
259. After how many days of insertion were you first visited by any worker ?	<p><input type="text"/> <input type="text"/></p> <p>Days after</p>	
260. Are you using this IUD (Coil/C-T) till now ? (INTERVIEWER: PROBE FOR EXPULSION/ REMOVAL, IF NOT CURRENTLY USING)	<p>Now using 1 --> 273</p> <p>Fallen out 2 --> 265</p> <p>Removed 3</p>	

	RESPONSE	SKIP
261. 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)	
262. What are other reasons for removing the IUD ? (PROBE AND CODE ALL ANSWERS)	No other reason 00 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)	
263. 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	

	RESPONSE	SKIP
264. Is it the same place/person where this IUD was inserted ?	<p>Yes 1</p> <p>No 2</p>	
265. 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)	<p><input type="text"/> OR <input type="text"/><input type="text"/></p> <p>Weeks Months</p>	
266. Since this IUD insertion, have you ever become pregnant ?	<p>Yes 1</p> <p>No 2</p>	--> 271
267. IF YES, was this while you had IUD inside you or after it was removed/fallen out ?	<p>Had IUD inside 1</p> <p>After it was removed 2</p> <p>After it was fallen out 3</p> <p>Other _____ 4 (Specify)</p>	
268. What was the outcome of this pregnancy ?	<p>Miscarriage 1</p> <p>Stillbirth 2</p> <p>Abortion 3</p> <p>Currently pregnant 4</p> <p>Live birth 5</p>	-->270
269. Is the child still living ? IF ALIVE, is it a boy or girl ?	<p>Boy 1</p> <p>Girl 2</p> <p>Child died 3</p>	
270. How many months after the insertion did you conceive ? (IF CURRENTLY PREGNANT, SKIP TO 273)	<p><input type="text"/><input type="text"/></p> <p>Months after</p>	
271. Did you use another IUD (Coil/C-T) or any other method after expulsion/removal of this IUD (Coil/C-T) ?	<p>None 1</p> <p>Another IUD 2</p> <p>Other method 3</p>	--> 273

	RESPONSE	SKIP
272. 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 09	
273. To what extent are you satisfied with the services you received in connection with having the IUD and for subsequent followup/treatment ? Would you say, you are highly satisfied, satisfied, some- what satisfied, or not at all satisfied ?	Highly satisfied 1 Satisfied 2 Somewhat satisfied 3 Not at all satisfied 4	
274. Do you think this service can be improved further ?	Yes 1 No 2	-->276
275. IF YES, how it can be improved ? Verbatim: _____ _____	<input type="text"/>	
276. Did you advise anyone to accept the IUD (Coil/C-T) ?	Yes 1 No 2	--> 278
277. IF NO, would you advise anybody to accept IUD ?	Yes 1 No 2	

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

Time Ended: _____

APPENDIX B

**UPAZILA-WISE DIFFERENCE IN PERFORMANCE
BETWEEN MIS REPORT AND CLINIC RECORDS**

DIFFERENCE IN REPORTING BY UPAZILA

Stratum: BDG-Rural

S.L. No.	Name of Upazilas	IUD Performance in 1989		Difference (+) / (-)	%
		MIS-Printout	Clinic records		
01.	Nawabganj	698	697	+ 1	+ 0.1
02.	Pirganj	1618	1644	- 26	- 1.6
03.	Mithapukur	2876	3194	- 318	- 11.1
04.	Ulipur	1405	1361	+ 44	+ 3.1
05.	Gobindhaganj	2867	2934	- 67	- 2.3
06.	Palashbari	2924	2783	+ 141	- 4.8
07.	Nandigram	856	741	+ 115	- 13.4
08.	Badalgachi	696	628	+ 68	+ 9.8
09.	Durgapur	267	268	- 1	- 0.4
10.	Gurudaspur	448	398	+ 50	+ 11.2
11.	Tarash	571	542	+ 29	+ 5.1
12.	Mirpur	600	658	- 58	- 9.7
13.	Mohammadpur	459	461	- 2	- 0.4
14.	Keshabpur	635	635	0	0
15.	Dacope	1340	1335	+ 5	+ 0.4
16.	Sarankhola	498	496	+ 2	+ 0.4
17.	Tala	1061	1067	- 6	- 0.6
18.	Bamna	370	370	0	0
19.	Wazirpur	868	862	+ 6	+ 0.7
20.	Kathalia	374	347	+ 27	+ 7.2
21.	Banaripara	845	850	- 5	- 0.6
22.	Kalkini	1327	1302	+ 25	+ 1.9
23.	Char Bhadrasan	193	189	+ 4	+ 2.1
24.	Keraniganj	1380	1145	+ 235	+ 17.0
25.	Gozaria	595	595	0	0
26.	Shibpur	841	843	- 2	- 0.2
27.	Nagarpur	509	503	+ 6	+ 1.2
28.	Madarganj	452	451	+ 1	+ 0.2
29.	Goffargaon	1583	2056	- 473	- 29.9
30.	Nandail	1474	1456	+ 18	+ 1.2
31.	Atpara	957	956	+ 1	+ 0.1
32.	Golapganj	454	423	+ 31	+ 6.8
33.	Rajnagar	265	249	+ 16	+ 6.0
34.	Bancharampur	1309	1327	- 18	- 1.4
35.	Chandina	698	636	- 62	- 8.9
36.	Chatkhil	471	482	- 11	- 2.3
37.	Mirshari	1135	1194	- 59	- 5.2
38.	Satkania	1329	1605	- 276	- 20.8
39.	Rangarh	172	174	- 2	- 1.2
Total		37420	37857	- 437	- 1.2

DIFFERENCE IN REPORTING BY UPAZILA

Stratum: BDG-Urban

S.L. No.	Name of Upazilas	IUD Performance in 1989		Difference (+) / (-)	%
		MIS-Printout	Clinic records		
01.	Panchaghar	313	294	+ 19	+ 6.1
02.	Gaibandha	1474	1116	+ 358	+ 24.3
03.	Nowabganj	690	684	+ 6	+ 0.9
04.	Sirajgonj	1373	1147	+ 226	+ 16.5
05.	Jhenaïdh	1018	1063	- 45	- 4.4
06.	Daulatpur	1643	1676	- 33	- 2.0
07.	Bagerhat	838	960	- 122	- 14.6
08.	Patuakhali	1714	1375	+ 339	+ 19.8
09.	Perojpur	871	853	+ 18	+ 2.1
10.	Mirpur-A	6291	4396	+1895	+ 30.1
11.	Mirpur-B				
12.	Tejgaon-A				
13.	Tejgaon-B	6332	4692	+1640	+ 25.9
14.	Tejgaon-C				
15.	Tejgaon-D				
16.	Manikgonj	1051	903	+ 148	+ 14.1
17.	Mymensingh	1547	890	+ 657	+ 42.5
18.	Hobiganj	226	207	+ 19	+ 8.4
19.	Comilla	517	382	+ 135	+ 26.1
20.	Lakshmipur	1148	1366	- 218	- 19.0
21.	Hathazari	858	773	+ 85	+ 9.9
Total		27904	22777	+5127	+ 18.4

DIFFERENCE IN REPORTING BY UPAZILA

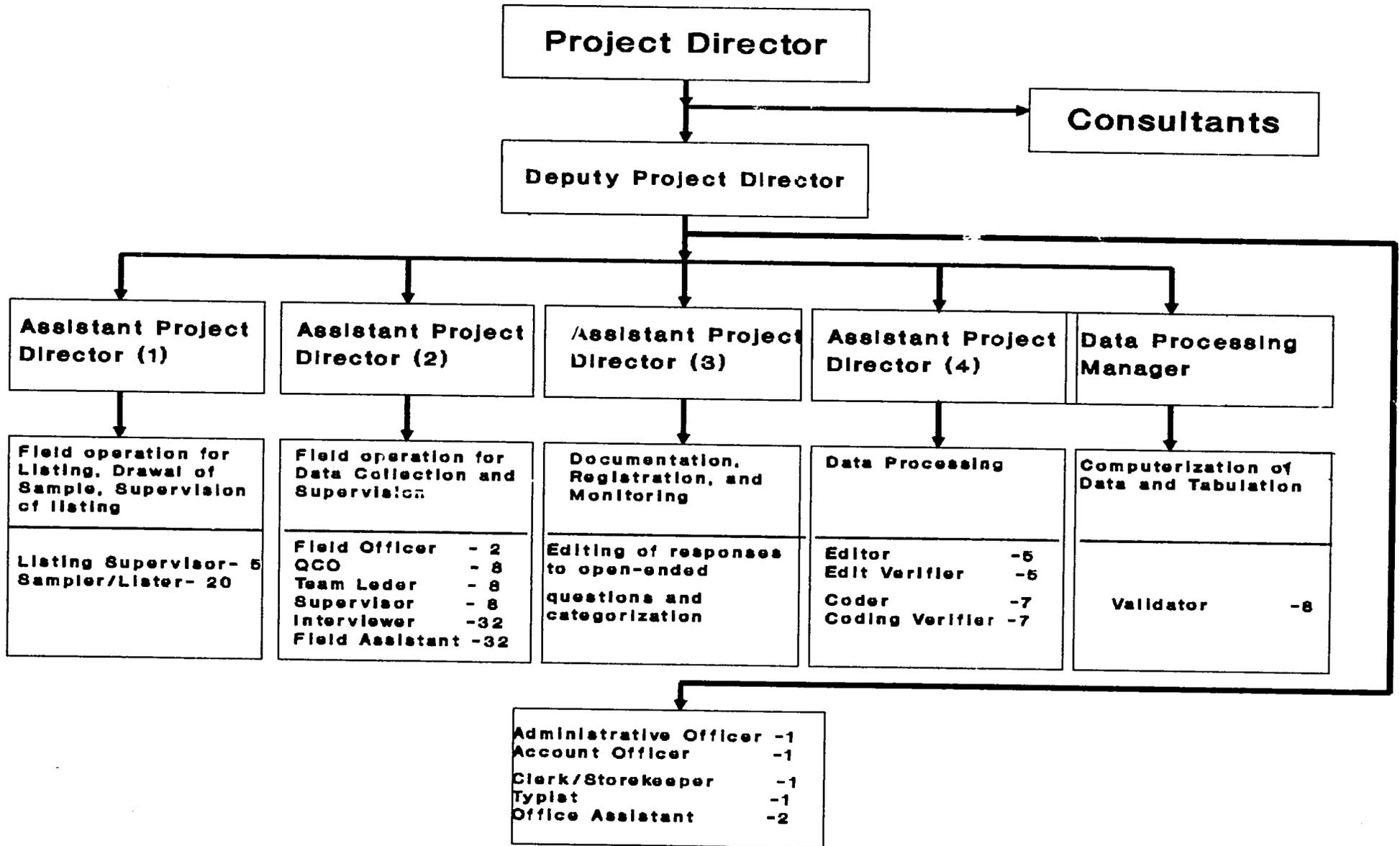
Stratum: NGO

S.L. No.	Name of Upazilas	IUD Performance in 1989		Difference (+) / (-)	%
		MIS-Printout NGO	Clinic records NGO		
01.	Rangpur (Kotwali)	563	1334	- 771	-136.9
02.	Bogra (Kotwali)	514	775	- 261	- 50.8
03.	Ishwardi	158	194	- 36	- 22.8
04.	Meherpur	428	288	+ 140	+ 32.7
05.	Lohagara	958	26	+ 932	+ 97.3
06.	Barisal (Kotwali)	770	1449	- 679	- 88.2
07.	Dhamrai	1316	1011	+ 305	+ 23.2
08.	Narayanganj	1500	1046	+ 454	+ 30.3
09.	Palash	328	342	- 14	- 4.3
10.	Brahmanbaria	148	102	+ 46	+ 31.1
11.	Feni	162	156	+ 6	+ 3.7
12.	Double Mooring	786	2878	-2092	-266.2
13.	Mirpur	5961	7050	--1089	- 18.3
14.	Tejgaon	14457	15841	-1384	- 9.6
15.	Keranigonj	477	572	- 95	- 19.9
Total		28526	35389	-6863	- 24.1

APPENDIX C

ORGANIZATIONAL SET-UP

ORGANIZATIONAL CHART



129

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. Tauhida Nasrin
Ms. Nurun Nahar

Field Officer

Mr. Abu Taher
Mr. Abdus Samad
Mr. Kh. Reaz Hossain

Quality Control Officer

Mr. Kh. Reaz Hossain
Mr. A.N. Baha Uddin Ahmed
Mr. Zahirul Islam
Mr. M. Saleh Ahmed
Mr. Afiluddin
Ms. Samsun Nahar Aktary
Ms. Alam Ara Arjumand Banu
Ms. Nilima Islam
Ms. Sonali Sarker

Team Leader

Mr. Afiluddin
Mr. Zillur Rahman
Mr. Mainul Islam
Mr. Mostafa Kamal
Mr. Akram Hossain
Mr. Shaik Altaf Hossain
Mr. Matiur Rahman
Mr. Taslim Uddin Ahmed
Mr. Dhiman Chandra Shaha

Supervisor

Ms. Shahana Akter
Ms. Mahamuda Khatoon
Ms. Kohinoor Akter
Ms. Salma Parveen
Ms. Peara Begum
Ms. Rabeya Khan
Ms. Chad Sultana
Ms. Monoura Parveen
Ms. Shormin Akter

Interviewer

Ms. Rokshana Parveen
Ms. Ferdous Ara Begum
Ms. Mobashara Ruma
Ms. Mahfuza Khatun
Ms. Mina Rani Biswas
Ms. Syeda Asma Shireen
Ms. Ashrafun Hoque
Ms. Nasima Akter Jaba
Ms. Arefa Begum
Ms. Papia Rani Shaha Roy
Ms. Meher Afzun
Ms. Banasree Gain
Ms. Reba Rani Mridha
Ms. Shamoly Roy
Ms. Mafuza Begum
Ms. Soheli Rahman
Ms. Suriaya Khatun
Ms. Sayeda Begum
Ms. Taznin Akter
Ms. Papia Rani Datta
Ms. Nurun Nahar
Ms. Mahamuda Khatun
Ms. Nasrin Jahan
Ms. Farzana Rahman
Ms. Ferdousi Begum
Ms. Hosneara Begum (Doly)
Ms. Ansari Begum
Ms. Khaleda Fency Khanum
Ms. Rehana Begum
Ms. Kanan Bala Sikder
Ms. Hosneara Begum
Ms. Bithi Kar
Ms. Razia Khatun
Ms. Nur Khaleda Akter
Ms. Smriti Rekha Biswas
Ms. Kazi Azmun Nahar
Ms. Bibi Joinab (Piru)

Secretarial Staff

Ms. Salma Alam
Ms. Nuron Nahar
Ms. Shaheen Akhter
Mr. Md. Abdur Rahim
Mr. Ali Haider
Mr. Shah Alam