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FOLLOW-UP STUDY AMONG IUD ACCEPTORS OF JAVA

INDONESIA

FINAL REPORT

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EXECUTIVE SUMMARY

In 1991, the IUD was the second most commonly used family planning method in Indonesia (13.4 percent). According to the Indonesia Demographic and Health Survey, in 1994 it became the third most commonly used method among currently married women (10.3 percent), primarily on the islands of Java and Bali.

The National Family Planning Coordinating Board (BKKBN), in collaboration with the Faculties of Medicine, Diponegoro University in Semarang, Airlangga University in Surabaya, and BKS-Penfin in Bandung, conducted a "Follow-up Study Among IUD Acceptors on Java", from November-December 1994. IUD acceptors (1,825) who had their IUD inserted during April 1989-March 1994 were interviewed. The study collected data on follow-up mechanisms; frequency, type and management of side-effects; switching of method and clinic; and use-effectiveness of IUD, by type.

A sample of 2,400 IUD acceptors was selected using a stratified, multi-stage sample design with probability proportionate to size. Seventy-six percent of the respondents were found and interviewed successfully, with 24 percent (575) of the sample lost to follow-up. The 24 percent were unable to be interviewed for one of the following reasons: moved to another location, house not found, non-IUD acceptor, and died, among other reasons. A large proportion of respondents who were unable to be interviewed fell into the category, "moved to another location", reflecting the need for a better follow-up system. The overall non-response rate was found to be highest in East and Central Java.

The study found that the majority of IUD acceptors were using the Lippes Loop (60 percent) and had had their IUDs inserted at government service delivery points (91 percent). More than one-half of the acceptors were above 30 years of age, had 2-4 living children, had completed primary school, and were being paid for their work. Approximately two-thirds of the acceptors did not want any more children indicating that they were using the IUD to limit births and that they had used a family planning method prior to their current IUD.

The majority of acceptors knew what type of IUD they were using (69 percent), and that their first follow-up visit should occur after one week (72 percent). However, knowledge of side-effects and how to handle them were low. Less than one-fourth of the acceptors knew about the majority of side-effects and how to handle them. The proportion of IUD acceptors who knew about possible side-effects and what actions should be taken were higher

among those women who used private sources as compared to public sources.

Eighty-six percent of IUD acceptors had their IUD inserted free of charge, 73 percent had their IUDs removed free of charge, while only 47 percent received counselling for side-effects free of charge. Both government and private sources had free services available to some IUD acceptors. The proportion of IUD acceptors who paid for insertion was higher at private clinics (35 percent) than at government clinics (12 percent). Among acceptors who paid for insertion 30 percent paid less than Rp. 3000, 31 percent between Rp.3000 - Rp.10,000, 21 percent between Rp.10,000 - Rp.30,000.

Almost all of the acceptors were not visited by a health worker after their IUDs were inserted. However, more than four-fifths of the IUD acceptors went to see their health worker at least once after IUD insertion, while one fifth of the acceptors never visited the health worker.

Approximately one-third of the acceptors experienced one or more side-effects. Of those who experienced side-effects, one-half reported occurrence within one month of insertion, while 20 percent reported occurrence after seven months. The most frequently reported side-effects were abdominal pain (40 percent) and heavy bleeding (25 percent). Nearly one-third of acceptors did not seek treatment or advice about what to do about experienced side-effects. More Copper T users sought assistance than acceptors who were using the Lippes Loop and Multiload IUD. Approximately one-half of the acceptors experiencing side-effects who sought assistance were given medicine while one-third were counselled.

Overall, 68 percent of the acceptors interviewed reported continued IUD use, 26 reported that their IUD had been removed, and 6 percent reported that their IUD had been expelled. The proportion of acceptors whose IUD was expelled was as high as 8 percent if they were using the Lippes Loop, and only 4 percent if they were using the Copper T. Of the acceptors who stopped using the IUD twenty-three percent did so within three months of insertion. The duration of IUD use was longer among acceptors who used private providers than among those who used government sources. The duration of use also was longer for acceptors using the Copper T as compared to those women using the Lippes Loop.

Of those women who stopped using the IUD, 24 percent cited side-effects as the reason, 18 percent wanted another child, 17 percent IUD expulsion, 12 percent switched methods, 8 percent IUD expiration and 21 percent other reasons. IUD acceptors who cited expulsion as the reason for discontinuation was three times higher

for users of the Lippes Loop than the Copper T. A significantly higher number of Copper T users also were advised to switch to another method by their health worker when they sought advice about side-effects. Similarly, switching methods was advised more by government than private providers.

Among acceptors who discontinued IUD use, 36 percent were not using any family planning method at the time of the interview. Of those who switched to another method, the majority were using injectables (27 percent) followed by oral pills (17 percent). Only 9 percent of the acceptors chose the IUD again. Acceptors were more likely to have their IUD in place if they were older, more educated, being paid for their work, and either didn't want any more children or wanted a child after 12 months. Women who did not experience any side-effects also were more likely to have their IUD in place. Side-effects such as heavy bleeding, spotting between menses, infection, heavy discharge, abdominal pain, and pain during intercourse appeared to have a significant impact on the status of IUD use.

Current use of a family planning method among women who discontinued using the IUD was strongly affected by whether they knew about the possibility of switching methods and which type of IUD they had used. If the acceptor who stopped using her IUD knew she could switch methods, the probability that she would currently be using a method doubled compared to acceptors who were not aware that they could switch methods. Similarly, Copper T acceptors as compared with Lippes Loop users were more likely to be using a family planning method, even after discontinuing IUD use.

Overall, 85 percent of the IUD acceptors continued to use the IUD through the first year, 77 percent through the second year, 66 percent through the third year, 61 percent through the fourth year, and 54 percent through the fifth year. Life table continuation rates indicate that the cumulative continuation rates declined over the years and that continuation rates were highest among those acceptors who used private sources and those who used the Copper T (up to the second year). Termination rates due to side-effects, IUD expulsion, and accidental pregnancy were found to increase over the years.

Based on the findings of this study, perhaps it is important to consider some changes in policies regarding the provision of different types of IUDs in the program. Specifically, women might benefit if the program considers the following:

1. The use of more effective IUD, such as Copper T380A should be given an alternative to women. There are several advantages to providing the device, as for example:

- expulsion of IUD would reduce considerably
- less side-effects
- accidental pregnancies would decline
- duration of IUD use would be greatly increased
- increased in extended use-effectiveness of the
- contraceptives
- the method is less provider-dependent and client could be taught how to remove the device

Implications of the above policy would result less burden on the providers, managers, and clients.

2. While providing information to potential clients, distinct advantages and disadvantages of all available IUDs be given so that client might make their own decision. Also an option to switching method would greatly, not only increased the duration of contraceptive use, but also ensure client satisfaction.

3. Providers should be trained in all different types of IUDs.

4. Family planning clinics should have adequate stock of all different types of IUD to give choice to potential clients.

5. Contact between Health workers/volunteers and clients should be improved to ensure client's good health after the insertion of the IUD.

CHAPTER 1

INTRODUCTION

1.1. Introduction and Background

Intrauterine devices (IUDs) have been used throughout the world for almost three decades. Millions of women have found the IUD to be very effective, safe, and convenient and it continues to be used as one of the main contraceptive methods. Modern IUDs, including the Copper T 380 and Multiload 375 are extremely effective long-term methods and should be one of the contraceptive choices available to women seeking to space or limit childbearing (PATH, 1992).

Although accurate figures are difficult to obtain, it is estimated that about 55 million women throughout the world are presently using IUDs. As of April 1993, it is estimated that approximately 5.3 million women in Indonesia were using IUDs (BKKBN 1993).

Whereas research continues into the development and design of the IUD to improve its ability to prevent pregnancy and to deal effectively with the occasional problems of expulsion and bleeding, it is hard, if not impossible, to find any logical pattern in the use of IUDs around the world. The use of the IUD seems to flourish and to falter both in less developed and developed countries. It seems to adapt well to the needs of the rich and the poor, the well educated and the illiterate. It seems to be rejected equally by these groups in the face of side-effects or complications. The IUD also seems to be sensitive to public airing of its shortcomings, the same as any other contraceptive method; witness the drop in use and increase in extractions for personal reasons following poor press and the spread of rumors through interpersonal communication.

Views on the IUD have shifted during the last four decades from outright condemnation to relative acceptance. This acceptance is not complete, however, and arguments for and against the use of IUDs are still heard (IPPF, 1980). There are still numerous medical and non-medical barriers to using the IUD, which prevent women from having access to this most effective modern method.

During the 1960s and 1970s researchers developed the "second generation" copper IUDs, which are highly effective, long-lasting, and have fewer side-effects. While these improved IUDs are becoming widely available attention also is being shifted toward identifying appropriate IUD users and providing high-quality medical care and counselling to maximize safety and acceptability.

In the earliest formal family planning efforts that began in Indonesia under the auspices of the Indonesian Planned Parenthood Association, the contraceptives available included only foam tablets and the diaphragm (Dutch Cap), the latter only in very limited numbers. A year later, under a grant from the Pathfinder Fund, the Marguliez IUD was locally tested and found to be an effective and acceptable contraceptive. Shortly afterwards, the Lippes Loop and the M device were introduced although the M device was soon abandoned because of serious complications encountered with it in other programs. Gradually, the Lippes Loop became the preferred IUD and ultimately replaced the Marguliez IUD. The Lippes Loop became the primary method of choice prior to the establishment of the national family planning program. At the inception of the national program the Lippes Loop became the method advocated by the IPPA and BKKBN. Not only is this method inexpensive but also effective and therefore strongly recommended. The disadvantage associated with the IUD is that trained medical or paramedic personnel must insert it necessitating clients having to travel long distances to reach a clinic. In 1976, the Cu-7 and Cu-T IUD became available. Due to their high cost only those women who could afford to pay have had access to them (see Judono, 1980).

1.2. IUD Performance in Indonesia

In Indonesia, the IUD is the second most commonly used method following contraceptive pills. The percentage of IUD users among currently married women, aged 15-49, declined to 10 percent in 1994 from 13 percent in 1991 (IDHS, 1994). IUD users are mainly concentrated on the islands of Java and Bali (Table 1.1). IUDs are less used in Aceh, South Kalimantan, Central Kalimantan, and East Timor. Of the estimated 5.1 million women using IUDs within the country, at least 3.8 million are located on Java (BKKBN, 1995).

Similarly, as in many other countries and programs, the pattern of IUD use has changed considerably over time. Over the last 15 years (1976-1991), the percentage of currently married women on Java and Bali islands who use IUDs has grown almost three-fold (CBS, 1992). At the beginning, Indonesia's program offered a limited method mix and then gradually expanded its options as it became feasible to provide additional methods. In the 1970s, the IUD was the most widely used method in Indonesia. Oral contraceptive pills gradually gained acceptance in the early 70s. Changes in method use patterns over time are caused by a variety of factors including availability of methods, availability of medical facilities and skilled personnel, targets or incentives, campaigns to promote specific methods, medical barriers, side-effects, management of side-effects, and changes in user preference.

Table 1.1: Number of IUD Users in Indonesia By Province during the Fifth Five–Year Development Plant (1989/90 – 1993/94)

PROVINCE	YEAR				
	1989/1990	1990/1991	1991/1992	1992/1993	1993/1994
DKI Jakarta	221,015	216,195	203,210	215,670	207,252
West Java	642,644	651,479	654,256	666,789	720,454
Central Java	983,587	952,566	939,021	926,863	862,655
Yogyakarta	171,115	175,048	170,485	175,061	170,926
East Java	1,484,743	1,488,260	1,594,345	1,605,913	1,622,710
Bali	247,645	246,928	251,690	254,139	255,873
Java Bali	**3,750,749**	**3,730,476**	**3,813,007**	**3,844,435**	**3,839,870**
Aceh	14,200	13,217	16,576	15,874	14,878
North Sumatra	233,719	276,465	284,347	293,458	261,809
West Sumatra	108,098	112,785	109,353	108,511	101,463
South Sumatra	69,522	84,799	87,448	87,144	72,585
Lampung	192,559	183,285	193,059	210,712	159,580
Nusa Tenggara Barat	100,754	105,958	98,357	103,147	99,315
West Kalimantan	31,997	32,292	43,724	49,552	46,199
South Kalimantan	22,458	22,211	23,400	20,838	19,478
North Sulawesi	88,239	76,649	102,511	101,083	92,288
South Sulawesi	58,622	67,051	61,361	59,885	60,320
Outer Island I	**920,168**	**974,712**	**1,020,136**	**1,050,204**	**927,915**
Riau	42,620	46,587	53,932	53,899	46,210
Jambi	40,738	46,905	53,407	47,754	45,242
Bengkulu	34,233	36,480	42,748	43,210	37,238
Nusa Tenggara Timur	62,804	63,840	82,467	85,064	82,430
Central Kalimantan	14,151	13,612	16,055	16,830	15,370
East Kalimantan	35,732	34,424	42,783	45,279	42,856
Central Sulawesi	28,982	27,450	36,438	38,196	34,779
South East Sulawesi	11,951	10,463	15,962	14,224	12,159
Maluku	36,521	24,767	40,435	37,475	32,691
Irian Jaya	20,417	13,576	15,473	15,769	14,103
East Timor	2,506	2,984	3,846	4,479	4,818
Outer Island II	**330,655**	**321,088**	**403,546**	**402,179**	**367,896**
NATIONAL	5,001,572	5,026,276	5,236,689	5,296,818	5,135,681

Source: BKKBN (1995) Bureau of Reporting and Statistics, Jakarta

At present, there are several issues concerning IUDs in Indonesia. Some of these issues include: types of side-effects; management of side-effects; discontinuation of IUDs, in particular, due to side-effects; continued use of a family planning method after discontinuation of the IUD; IUD continuation rate; cost; and quality of services. Issues concerning quality of services including counselling, informed choice, provider competence, were studied under another Operations Research project, entitled, "Situation Analysis Study (SAS)" which covered nine provinces including West, Central, and East Java.

Side-effects are most commonly cited as the reason for discontinuing use of the IUD in Indonesia. During field observation under the SAS in West Java it was noticed that more than one out of two IUD users reported side-effects or the wish to change from the IUD to another method. A majority of women reported having medical side-effects which had not been explained to them when they initially accepted the method. In East Java, 64 percent and 74 percent of reported minor and major complications were found among IUD users (MacDonald, 1992). Similarly, the failure rate was highest among IUD users in comparison to other methods used in East Java. According to the 1991 IDHS, 32 percent and 16 percent, respectively, of IUD users in Indonesia adopted the IUD because they wanted to have a more effective method, and because other methods had side-effects. Among IUD acceptors who had side-effects, one out of five stopped using a family planning method and one out of seven changed to another method. This type of situation is undesirable because high numbers of complications create dissatisfied users who may spread rumors and bad messages, and keep others away from the family planning program. Unfortunately, no recent data is available describing these medical side-effects.

The majority of IUD clients who visit clinics and consult clinic staff feel that they are getting appropriate services. As a result, some continue to use the IUD. Data are not available as to how reported side-effects are treated or whether clients have had their IUD removed and a new one reinserted. Removal and reinsertion of the IUD could have taken place in a different clinic since a very large proportion of the IUD clients knew of other clinics where similar services were available.

Although the discontinuation rate after twelve months of use is still low among IUD users (16 percent) compared to pills (30 percent) and injectables (32 percent), it is almost four times higher than implants (4 percent in West Sumatra and West Java) (CBS, 1993 and BKKBN, 1993). It is not clear to the program managers why discontinuation rates for IUDs are higher than for

implants and what percent of IUD users continued use beyond twelve months. What happened to those acceptors who discontinued using the IUD is crucial information for program managers whose aim it is to achieve wide coverage.

In Indonesia, there are different types of IUDs available through government and private sources. The most commonly available IUDs are the Lippes Loop, Multiload, Cu T-220, and Cu T-380A. All of these IUDs are locally manufactured. The Lippes Loop is still the most popular, which may be because it is the least expensive. The cost of the IUD is very important since 39 percent of women using this method pay for it partially or totally and the percentage of women paying for the IUD is even higher on Java and Bali (68 percent, IDHS, 1992). The providers' capability of dealing with various issues relating to different types of IUDs is of concern to program managers and providers, since the type of IUD used may have a direct bearing on side-effects and discontinuation rates. In the long run the Government of Indonesia aims to have a full cost recovery family planning program. Therefore, types of IUDs being used and implications for payment by clients are of great importance to the national program which is moving toward a sustainable community based approach.

1.3. Objectives of the Study

The overall objective of this study was to determine factors relating to side-effects and pattern of IUD use. The study was designed to obtain information on follow-up mechanisms, frequency of follow-up, types of side-effects and how they are managed, method and clinic switch, and use-effectiveness of the IUD.

The specific objectives of this study were to:

1. Estimate the percentage of IUD acceptors who received follow-up care (either at home or at a clinic).

2. Estimate the percentage of IUD acceptors who experienced side-effects after the use of the IUD and the type of side-effects.

3. Determine how reported side-effects and complications were managed.

4. Estimate the percentage of acceptors who retained the IUD by month following acceptance and failure rates.

5. Estimate the percentage of IUD acceptors who

discontinued use and switched methods including reinsertion of the IUD (either at a previous clinic or a different clinic).

6. Determine whether reported side-effects and discontinuation rates differ according to various socio-demographic characteristics of acceptors, service type (government versus private, paying versus free) and type of IUD.

1.4. Organization of the Study

Agencies Involved: The National Family Planning Coordinating Board (BKKBN), particularly the Center for Training and Development for Biomedical and Human Reproduction Studies (PUBIO), assumed overall responsibility for this research project. BKKBN is the official organization of the Indonesian government charged with coordinating the national effort to reduce fertility and population growth by promoting the increased use of contraception. PUBIO sub-contracted parts of the project activities to the Biomedical and Human Reproduction (HR) Study Groups in both East and Central Java and BKS-Penfin in West Java.

Both the Faculty of Medicine of Diponegoro University in Semarang (Central Java) and Airlangga University in Surabaya (East Java), two of 11 HR groups, have previously been involved in collaborative research with BKKBN on different areas of human reproduction. The BKS-Penfin, a non-profit scientific, professional organization in Bandung, established in January 1977 by a group of distinguished gynecologists and obstetricians, has conducted a number of clinical studies and large scale studies, one being the 1992 NORPLANT® Use-Dynamics study. The HR groups from Diponegoro University, Airlangga University, and BKS-PENFIN took responsibility for data collection, data editing, and data entry.

The Population Council which funded this study under its Asia and the Near East Operations Research and Technical Assistance Project (ANE OR/TA) worked closely with BKKBN and the institutions subcontracted to carry out all phases of the study. Specifically, the Council provided technical assistance on questionnaire development and pretesting, sample selection, training of field staff and data entry personnel, data entry package, data editing, data analysis and report writing.

Staffing: Three senior researchers, Dr. Dinan S. Bratakoesoema from BKS-PENFIN, Dr. Batuk Hadiyanto from Diponegoro University, and Dr. Pudjo Hartono from Airlangga University were responsible

for carrying out the provincial activities, such as training of interviewers, data collection, data editing, and data entry. These researchers received support from the local BKKBN offices in addition to assistance provided by Dr. Anthony Tan of PUBIO, BKKBN.

A total of 29 interviewers (10 for West Java, 8 for Central Java, and 11 for East Java) were actively involved in interviewing IUD acceptors.

Time Schedule: Although the duration of this study was to be seven months (June 1-December 31, 1994), it took almost 11 months to complete. The major causes for the delay were: (1) actual implementation of activities began after August 31, 1994, due to the first payment not arriving until the end of August; (2) preparation of sampling frames took more time than anticipated; and, (3) awarding of the sub-subcontracts with local research organizations was not completed until September 1994. A detailed list of activities by time period is shown below.

Table 1.2: Activities undertaken by time period

Activity	Period of activities
1. Sub-contract agreement signed	June 16, 1994
2. Agreement with local research agencies:	
West Java	
Central Java	
East Java	
3. First payment received	August 31, 1994
4. Questionnaire development	
5. Questionnaire pre-testing	Sept. 20 - Oct.13, 1994
6. Questionnaire finalization	
7. Meeting with local research organizations	
8. Sampling frame preparation	
9. Sampling of clinics	October 1995
10.Training of interviewers:	
West Java	November 25-26, 1994
Central Java	November 21-22, 1994
East Java	Nov.30- Dec.2, 1994
11.Data collection:	
West Java	November 1-30, 1994
Central Java	November 28-Dec. 16, 1994
East Java	December 20-29, 1994
12.Data entry program development	November 1994
13.Data editing and entry	December 1994-Feb. 1995
14.Data editing and analysis	January-March 1995
15.Draft Report preparation	April 1995
16.Dissemination workshop	April 1995
17.Final report/distribution	April 1995

CHAPTER 2

METHODOLOGY

Prior to sample selection and questionnaire development, a small diagnostic study was carried out with two broad objectives: a) to obtain information to guide in the development of the larger follow-up study; and, b) to supplement existing information on IUD service delivery with a field-based observational study. The study included two activities: field visits to 10 clinics in three provinces (North Sumatra, South Kalimantan and Central Java), and follow-up interviews with a sample of twenty acceptors from each clinic.

Findings and experiences from this diagnostic study helped guide in the detailed planning, design and development of the larger study on IUD use-dynamics. Based on the experience of the diagnostic study, women identified as new acceptors within the last five years (1989/90 to 1993/1994) were used as the sampling base for this study. In attempting to better divide them in terms of the "type" of IUD used, clinical records, such as registration books, K/IV/KB and F/II/KB forms were used. Furthermore, during the diagnostic study, it was found that most women were able to name the type of IUD they had used in the past as well as what IUD they were using at present. In addition, most of the field workers or voluntary village family planning workers (PPKBDs) were also able to identify the type of IUD that the women in the village had used in the past and what they were using at present.

2.1. Sample Design

Given that the IUD has long been popular in Indonesia, long before the inception of the national program, much of the information pertaining to its use was obtained from the provinces with the highest IUD use prevalence. Information concerning IUD use dynamics was obtained from those provinces with the highest incidence of side-effects, complications and method failure.

The study was carried out in the three provinces of Java (West Java, Central Java, and East Java). These provinces represent different levels of IUD use according to the 1991 IDHS. West Java has the lowest level of IUD use (7 percent), yet it constitutes a large number of users. Central Java represents the national average (16 percent). East Java represents the province with the highest IUD use prevalence (22 percent) following Bali and North Sulawesi. Although they differ in contraceptive prevalence levels, these provinces constitute the largest number of IUD users in the country, accounting for 68 percent of the total number of IUD users (BKKBN, 1993).

The second reason for selecting West, Central, and East Java

is that they are among the seven priority provinces included in the USAID funded Service Delivery Expansion Support (SDES) Project in which efforts are concentrated to improve availability, accessibility, and service quality over the next five years. BKKBN, with technical and financial support from the Population Council has just completed a Situation Analysis Study (SAS) to determine the availability, accessibility, and quality of services in these same provinces. While the SAS provided information at the macro-level on the service quality provided at clinics, the present study provides information on types of side-effects and their management, discontinuation rates, and use-effectiveness by following-up IUD acceptors (current and past users). Information from these two studies provide a large amount of data dealing with issues related to the BKKBN IUD program.

The sample design for this study was adopted from the SAS (see SAS final report). A three-stage sampling design was followed in each study province. First stage sampling was selected from districts and second stage sampling was selected from clinics within each district. Twenty clinics per province were selected based on a systematic random sample with probability proportion to its number of acceptors (PPS). Some clinics which had a large number of acceptors selected twice and therefore, for the purpose of sample selection, they were counted as two clinics (see Appendix A). Within the selected clinics, a total of 800 new IUD acceptors (40 acceptors per clinic) were selected per province.

While constructing a sample frame, special care was taken to ensure that the list of acceptors from each selected clinic contained acceptors using IUDs obtained from both government and private sources. Still, the final sample turned out to underrepresent acceptors who obtained IUDs from private sources.

Systematic sampling procedures were employed to randomly select 40 new IUD acceptors from a list of acceptors kept at the clinics in the sample (IUDs obtained from both private and government sources). In order to estimate continuation rates over a five year period, the list contained acceptors from the period April 1989-March 1994.

2.2. Training

An orientation program was organized to familiarize all researchers from the local research organizations before the start of the project. In particular, researchers were informed of the study's objectives and the sampling procedures involved in selecting IUD acceptors who obtained IUDs from government and private sources. Their input was solicited in developing the data collection instrument.

A two-day training session also was organized in each province for the interviewers and the supervisors. Each team was composed of 3-5 interviewers and one supervisor. Training consisted of theory, class room role-play, field practice, and discussion

sessions. Given that the large majority of the trainers had previous experience with interviewing, the training focused more on familiarizing them with the questionnaires. Dr. Anthony Tan (BKKBN) and Dr. Tuladhar (The Population Council) assisted during the training session.

2.3. Data Collection

A structured acceptor interview questionnaire was used to collect data from clients in both provinces. A draft questionnaire was first pre-tested in Jakarta and nearby villages in West Java by the PUBIO, BKKBN staff who were familiar with the questionnaire and pre-testing. Approximately 25 IUD acceptors were interviewed during pre-testing. Results of the pre-test were discussed and the questionnaire changed accordingly. The questionnaire (see Appendix B) contained information on:

1) Respondent characteristics: Acceptor's characteristics, such as age, education, occupation, number of living children, age of youngest child, desire for more children;

2) Previous history of contraceptive use: Type of method used, year/month of use, year/month of termination, location/type of service provider, reason(s) for termination, counselling and treatment of side-effects, payment for service;

3) IUD use: Type of IUD used, year/month of use, location/type of service provider, payment for service, side-effects and type, awareness of side-effects before use, counselling and treatment of side-effects, follow-up schedule/location/type of provider, currently using IUD or not, reason(s) for termination;

current IUD users: What was your most disturbing side-effect; when did side-effect occur; with whom did you discuss side-effects; do you have any side-effects now; will you continue using the IUD, and if yes, for how long;

acceptors NOT currently using the IUD: When did you stop using the IUD (month/year); what was or were the reason(s) (including side-effects); what was your most disturbing side-effect; who removed the IUD and where; with whom did you discuss side-effects; what happened after the discussion; what method of family planning are you now using: if user of new method, when did you start (month/year) this method; why did you choose this method; who advised you to use this method, how much did you pay, were you told about possible side-effects of new method; do you have any side-effects now; were you given a choice of other methods before adopting your current method; will you continue using this method, and if yes, for how long; if not; why not; if not using any method, why are you not using any method; do you know what other methods are available.

Data on service providers' knowledge, technical competency,

and aseptic procedures were already available from the SAS on the sampled clinics. All of the providers from the catchment areas of each of the sampled clinics were included in the provider survey. Also of interest are the actual service delivery practices of these providers in IUD delivery, screening, counselling, side-effects management, and follow-up care.

2.4. Data Edit and Analysis

All completed questionnaires were checked and edited by the provincial principal investigators before data was entered into the microcomputer. The data entry program which was especially tailored for this study took care of wild codes, range checks, and consistency checks, avoiding errors in data sets. Data were entered at the respective provincial offices. Once the data sets were sent to Jakarta, further cross checks were carried out and inconsistencies corrected before conducting data analysis was conducted.

In general, cross tabulations were used for descriptive purposes and to analyze the experience of acceptors with side-effects, management of side-effects, IUD status, and factors affecting present and future IUD use. IUD continuation and termination rates were calculated by life table techniques. Data analysis was carried out in Jakarta using the SPSS statistical package.

2.5. Response Rate

Of all 2400 samples of IUD acceptors selected for this study, approximately 76 percent were located and successfully interviewed. Twenty-four percent were lost to follow-up with 15 percent due to migration, three percent due to false reporting (not IUD acceptors) and three percent for other reasons. An estimated two percent of acceptors could not be interviewed because their houses could not be found and less than one percent of acceptors had died.

Within the three provinces, lost to follow-up cases were highest in East Java, followed by Central and West Java. The proportion of the sample who could not be contacted due to migration was approximately 19 percent in East Java, 18 percent in Central Java, and 8 percent in West Java. Data in Table 2.1 suggests that client's records were probably not properly filled out (correct addresses) in Central and East Java.

Table 2.1: Percent Distribution of IUD Samples According to Outcome of Visits, by Province.

Outcome of visit	West Java	Central Java	East Java	All
Successful interview	89.1	72.8	66.3	76.0
Moved to another location	7.6	18.1	19.1	15.0
House not found	1.4	1.0	4.0	2.1
Died	0.8	1.0	0.4	0.7
Non-IUD acceptor	0.5	5.0	4.0	3.2
Other	0.6	2.1	6.3	3.0
Total	100.0	100.0	100.0	100.0
Number of samples	800	800	800	2400

Note: Total may not add up to 100 percent because of rounding off of numbers.

CHAPTER 3

PROFILE OF IUD ACCEPTORS

This chapter provides information on the characteristics of the IUD acceptors. This information is presented in six sections: (1) socio-economic characteristics; (2) demographic characteristics and fertility preference; (3) previous use of family planning methods and experiences; (4) current family planning method; (5) basic knowledge concerning the IUD; and, (6) cost of family planning services.

Four different types of IUDs (Lippes Loop, Multiload, Copper T220, and Copper T380A) were being used in the sample areas of West, Central, and East Java. More than one-half of the IUD acceptors in these provinces used the Lippes Loop (Table 3.1). However, the percentage of IUD acceptors who used the Lippes Loop and Multiload varied significantly according to province. Approximately 43 percent of the IUD acceptors in East Java used the Lippes Loop (LL), while 62 percent and 72 percent, respectively, in Central Java and West Java used this method. The use of the Multiload (ML) was found to be highest in East Java (38 percent). The Copper T220 (CU) was being used by less than 10 percent of IUD acceptors and less than three percent of acceptors were using the latest version of the IUD, the Copper T380A (CU).

Table 3.1: Percent Distribution of IUD Acceptors According to Type of IUD, by province.

	West Java	Central Java	East Java	All
Type of IUD				
Lippes Loop(LL)	71.9	61.7	42.6	60.2
Multiload(ML)	14.9	25.8	37.5	24.9
Copper T220(CU)	11.6	5.5	6.4	8.2
Copper T380A(CU)	-	3.3	4.9	2.5
No information	1.5	3.8	8.5	4.3
Total	100.0	100.0	100.0	100.0
Number of cases	713	582	530	1825

Source: K-IV cards kept at the clinics.

Ninety-one percent of the IUD acceptors obtained an IUD through government sources and only nine percent from private sources (Table 3.2). Government sources include public hospitals and health centers. Private hospitals, private clinics, private doctors, nurses, and midwives are categorized as private sources. The sample contains relatively more IUD acceptors who obtained IUDs from government sources when compared with the data from the 1994 Indonesia Demographic and Health Survey (IDHS). The 1994 IDHS reported that only three-fourths of current IUD users obtained an IUD from government and other sources while one-fourth of current users obtained IUDs from private sources. This may be due in part to the incompleteness of the client cards kept at the local health centers, in particular cards of clients obtaining IUDs from private sources. Data also indicates that the Copper T is twice as likely to be used (16 percent) than the Lippes Loop (7 percent) by private providers. Information on the source of services was collected using the information kept at the sample health centers on the K-IV client card.

Table 3.2: Percent Distribution of IUD Acceptors According to Type of IUD and Source of Service.

	Source of Service			
	Government	Private	Total	N
Type of IUDs				
LL	92.6	7.4	100.0	1098
ML	88.8	11.2	100.0	455
CU	84.5	15.5	100.0	194
Total	90.7	9.3	100.0	1747

Note: Total may not add up to 100% because of rounding off of numbers.
N= Number of cases.

3.1. Socio-economic Characteristics

Education: Two socio-economic variables, educational attainment and type of paid work were collected during the study. Approximately one-third of the IUD acceptors completed primary school, 11 percent junior high school, and 13 percent senior high school (Table 3.3). The sample also contains approximately 23 percent who never completed their primary school education and 19 percent who never attended school. A greater proportion of the IUD acceptors who used government sources never attended school as compared to those who used private sources. Consequently, a slightly higher percentage of the IUD acceptors using private sector sources completed their higher education.

Employment: Information on type of paid work was gathered by asking two questions: Are you currently engaged in paid work? and What type of work do you do? Table 3.3 reveals that over half of

the IUD acceptors (59 percent) did not have paid work at the time of interview. The highest proportion of IUD acceptors who were engaged in paid work reported being engaged in agriculture/ fishery (12 percent) followed by commerce/trade (10 percent). A greater percentage of IUD acceptors from government sources did not have paid work as compared to those acceptors from private sources.

Table 3.3: Percent Distribution of IUD Acceptors According to Socio-economic Characteristics and Source of Service.

	Source of service		
	Government	Private	All
Respondent's Education			
Never attended school	19.9	10.1	18.9
Never completed primary school	22.4	24.0	22.6
Primary school completed	32.3	33.5	32.4
Junior high completed	11.3	11.2	11.3
Senior high completed	12.8	15.1	13.0
Academy/university	1.3	6.1	1.8
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Respondent's Paid Work			
No paid work	60.1	52.5	59.4
Civil servant	5.2	5.0	5.2
Private business	3.3	5.0	3.5
Commerce/trade	9.5	13.4	9.9
Agriculture/fishery	11.5	10.6	11.5
Factory worker	7.5	8.4	7.6
Other	2.8	5.0	3.0
Total	100.0	100.0	100.0
Number of cases	1646	179	1825

Note: Total may not add up to 100% because of rounding off of numbers.

3.2 Demographic Characteristics

Age: The median age of IUD acceptors at the time of the interview was 30 years, with 29 percent 35 years and above. About 46 percent of acceptors were between the ages of 20 to 29 years, the period of highest fertility. There was little age difference between IUD acceptors who used government sources and those who used private sources (Table 3.4).

Number of living children: The median number of living children was two, with 22 percent of IUD acceptors having four or more

children. Although the median number was not different between women using government and private sources, the proportions of women with four or more living children were quite different, with 13 percent using government sources and 23 percent private sources. This indicates that private providers are providing IUD services to slightly lower parity women than government providers.

Age of youngest child at the time of interview: A large proportion of the IUD acceptors tended to adopt the IUD after the youngest child became four years old or more, irrespective of the source of service. Those acceptors who obtained the IUD after one year of delivery were only seven percent.

Desire for more children: At the time of the interview a high percentage of the IUD acceptors reported that they did not want any more children. A little less than two-thirds of the IUD acceptors did not wish to have any more children in the future. This figure is slightly higher than the 1994 IDHS data wherein 51 percent of all current users in rural Java and Bali did not want more children. Twenty seven percent of acceptors wanted more children, while 10 percent said that it depended upon 'God' or 'husband'. The proportion who said 'Depends' was much smaller among those using private sources compared to those using government sources. Of those women who wanted more children, more than half wanted to have a child only after two years. Only 16 percent wanted a child within a year, while 31 percent wanted a child within 12-24 months. For this category of information, there is no difference between women using government or private sources.

Unplanned pregnancy: A series of questions were asked to all the IUD acceptors to find out if they had experienced an unplanned pregnancy in the past. An attempt was also made to ascertain whether they were using a family planning method during the period when such a pregnancy occurred. About 14 percent of IUD acceptors reported to have been pregnant when they were not ready for the pregnancy. Of all the women who had had an unplanned pregnancy, about half (52 percent) were using a family planning method with a large proportion of women using the IUD (43 percent), followed by oral pills (27 percent).

Table 3.4: Percent Distribution of IUD Acceptors According to Demographic, Fertility Preference and Previous Use of Family Planning Characteristics.

	Source of Service		
	Government	Private	All
Age at interview			
15-19 years	0.6	0.6	0.6
20-24 years	15.0	15.1	15.0
25-29 years	26.8	30.2	27.1
30-34 years	28.5	27.4	28.4
35-39 years	16.8	17.3	16.8
40 years and above	12.4	9.5	12.1
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Number of living children			
< 2	22.2	24.6	22.4
2	32.5	37.4	33.0
3	22.2	24.6	22.5
4	12.5	6.7	11.9
5 +	10.6	6.7	10.2
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Age of youngest child			
< 12 months	6.6	6.1	6.6
12-23 months	10.1	9.5	10.0
24-35 months	14.5	14.0	14.5
36-47 months	13.9	19.6	14.5
48-59 months	16.4	10.6	15.8
60 months +	38.5	40.2	38.7
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Desire more children			
Yes	26.4	30.2	26.7
No	63.2	66.5	63.5
Depends	10.4	3.4	9.7
Total	100.0	100.0	100.0
Number of cases	1646	179	1825

continued

	Source of Service		
	Government	Private	All
Timing of next child desired			
Less than 12 months	16.4	14.8	16.2
12-24 months	30.9	31.5	30.9
25 months +	52.8	53.7	52.9
Total	100.0	100.0	100.0
Number of cases	434	54	488
Pregnant when not ready			
Yes	13.6	16.8	13.9
No	86.3	83.2	86.0
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Method in use when pregnant			
Yes	52.7	43.3	51.6
No	47.3	56.7	48.4
Total	100.0	100.0	100.0
Number of cases	224	30	254
Type of method in use when pregnant			
IUD	40.7	61.5	42.7
Injectable	17.8	15.4	17.6
Pills	29.7	-	26.7
Condoms	11.9	15.4	12.2
Others	-	7.7	0.8
Total	100.0	100.0	100.0
Number of cases	118	13	131

Note: Total may not add up to 100 % because of rounding off of numbers.

3.3 Family planning experiences in the past

Use of family planning methods prior to acceptance: All respondents were asked if they had used a contraceptive method prior to using the IUD. Those who had were asked to name the most recent method used, reasons for discontinuing the method, their experience with the method, particularly with side-effects, and payment for services and contraceptives.

Table 3.5: Percent Distribution of IUD Acceptors According to Whether a Family Planning Method was Used before the IUD.

	Source of Service		
	Government	Private	All
Type of method previously used			
Other IUD	28.6	37.4	29.5
Injectable	15.6	12.3	15.3
Pills	17.3	13.4	16.9
Other	0.7	3.4	1.0
None	37.8	33.0	37.3
Total	100.0	100.0	100.0
Number of cases	1646	179	1825

Note: Total may not add up to 100 % because of rounding off of numbers.

More than one-third of the IUD acceptors (37 percent) reported that they had never used a family planning method before. As shown in Table 3.5, the IUD had been used by 29 percent of women, 17 percent had used oral pills, and 15 percent had used injectables. A slightly higher percentage of IUD acceptors using private sources (37 percent) had recently used an IUD compared to those using government sources (29 percent). For more than two-thirds of the IUD acceptors (70 percent) using family planning methods side-effects were not given as the reason for method discontinuation. Only 30 percent of women discontinued use of a method because of side-effects (Table 3.6). Obviously, there were several other reasons why previous methods were discontinued. Data presented in Table 3.7 shows that 'Desire for a child' accounted for 44 percent discontinuation and 16 percent for 'Want to switch method'. Eight percent of IUD acceptors reported that 'Pregnant' and 'IUD expulsion' were reasons for discontinuing previous methods. The proportion of IUD acceptors who discontinued previous methods was higher among those who used government sources (17 percent) than among those who used private sources (10 percent). Private providers received twice the number of IUD acceptors whose previous IUD was expelled (15 percent) compared to those who used government sources (7 percent).

Table 3.6: Percent Distribution of IUD Acceptors According to Whether the Previous Method Discontinued because of Side-effects.

	Source of Services		
	Government	Private	All
Whether Discontinued because of side-effects			
Yes	28.9	37.4	29.7
No	71.1	62.6	70.3
Total	100.0	100.0	100.0
Number of cases	925	99	1024

Note: Total may not add up to 100 % because of rounding off of numbers.

Table 3.7: Percent of IUD Acceptors Who Used FP Before The IUD According to Reasons for Discontinuing their Previous Method (other than side-effects).

	Source of services		
	Government	Private	All
Desired a child	44.4	43.5	44.3
Wanted to switch method	16.8	9.8	16.1
Moved residence	1.9	5.4	2.3
Forgot follow-up	2.6	2.2	2.6
Pregnant	8.4	6.5	8.2
Late period	2.8	1.1	2.6
IUD expulsion	7.3	15.2	8.1
Other	13.1	12.0	13.0
Number of cases	833	92	925

Note: Total may not add up to 100 % because of rounding off of numbers.

3.4. Current family planning method use

Table 3.8 shows that at the time of the interview a large proportion of IUD acceptors were using a family planning method. The majority of these acceptors (80 percent) were using the IUD. As shown in the second panel of Table 3.8, of those women who were not using the IUD, most were using injectables (10 percent), oral pills (6 percent) and a variety of other methods.

Table 3.8: Percent Distribution of IUD Acceptors By Current Family Planning Method Being Used.

	Source of Service		
	Government	Private	All
Currently using a FP method			
Yes	88.5	86.6	88.3
No	11.5	13.4	11.7
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
FP method currently being used			
IUD	79.9	81.9	80.1
Implant	2.0	2.6	2.1
Injectable	9.6	11.0	9.7
Pills	6.3	3.9	6.0
Sterilization	2.1	0.6	1.9
Other	0.2	-	0.2
Total	100.0	100.0	100.0
Number of cases	1453	155	1608

Note: Total may not add up to 100 % because of rounding off of numbers.

3.5. Basic knowledge of IUD

Respondents were asked if they knew what type of IUD they were using. Researchers confirmed their responses by showing respondents samples of different IUDs to verify the type of IUD mentioned. Each respondent was asked questions about when the first follow-up should take place, how to determine whether the IUD is in place, possible side-effects and warning signs in order to find out their knowledge level of IUD use. All responses were spontaneous.

Table 3.9 shows that 69 percent of respondents knew the type of IUD they were using, 72 percent knew that they should return to the provider after one week for their first follow-up examination, and 18 percent knew how to check to see whether the IUD was in place. The respondents were classified as 'Yes',

having knowledge of whether the IUD was in place, if they responded 'touching the thread regularly'. The data also showed that the knowledge of the acceptors about the IUD was similar regardless of whether they obtained the IUD from government or private sources.

Table 3.9: Percent Distribution of IUD Acceptors According to Knowledge of Basic Information on the use of IUD.

	Source of Service		
	Government	Private	All
Knew the type of IUD used			
Yes	68.8	67.6	68.7
No	31.2	32.4	31.3
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Knew the time for the first check-up			
After one week	72.5	68.2	72.1
After one month	9.1	10.6	9.3
After six months	1.6	3.9	1.8
Any other time	3.0	3.4	3.1
No need to come	0.1	1.1	0.2
Don't know	13.7	12.8	13.6
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Knew the way to check whether IUD in place			
Yes	18.2	19.6	18.4
No	81.8	80.4	81.6
Total	100.0	100.0	100.0
Number of cases	1646	179	1825

Note: Total may not add up to 100 % because of rounding off of numbers.

There were six possible IUD side-effects listed in the questionnaire to determine the IUD acceptors knowledge of side-effects. These were: cramps, heavy bleeding, spotting between menstrual periods, infection, backache, and infertility. Some of these side-effects (such as infection) are difficult to define and identify. Without prompting, 43 percent knew of cramps, 25 percent heavy bleeding, 16 percent backache, 14 percent spotting between menses, 7 percent infection, and 2 percent infertility (Table 3.10). The proportion of IUD acceptors who knew about possible side-effects were higher among acceptors who used private sources than those who used government sources.

Table 3.10: Percent of IUD Acceptors Having Basic Knowledge About IUD Use.

	Source of Service		
	Government	Private	All
IUD might cause:			
Cramps	41.4	53.1	42.6
Heavy bleeding	23.6	33.5	24.6
Spotting between menses	13.2	17.3	13.6
Infection#	6.6	10.5	6.9
Backache	15.4	16.8	15.6
Infertility	2.4	2.8	2.4
Must see provider if:			
Heavy discharge	14.1	15.6	14.2
Abnormal discharge	17.9	26.3	18.7
Abdominal pain	25.2	39.7	26.6
Pain during intercourse	11.4	8.9	11.1
Infection	9.2	7.3	9.0
Late period	9.7	9.5	9.6
Not feeling well, fever, or chills	10.3	12.3	10.3
Expulsion or cannot feel thread	8.3	7.8	8.2
Shorter or longer thread	5.4	1.7	5.0
Number of cases	1646	179	1825

Note: # "Infection" question was not asked in East Java.

The second part of Table 3.10 shows the percent of IUD acceptors with knowledge of symptoms which indicate that they must see their provider immediately. These symptoms include: heavy discharge, abnormal spotting or bleeding, abdominal pain or severe cramps, pain during intercourse, infection, late period, feeling not well - fever and/or chills, expulsion/cannot feel thread and shorter or longer thread. Data reveals that the proportion of IUD acceptors who recognized `abdominal pain' as a warning sign was the highest (27 percent). Other warning signs were known to less than 20 percent of IUD acceptors. The proportion of IUD acceptors who recognized `heavy discharge', `abnormal discharge', `abdominal pain', and `not feeling well-fever and/or chills' were higher among the acceptors who used private sources than those who used government sources.

The above findings indicate that the acceptors who obtained their IUD from private sources were better informed of side-effects and warning signs than those who used government sources. In order to find out which group of acceptors were actually better informed, a composite index was formed. The index is the sum of the 15 possible side-effects and warning signs. Each individual variable is assigned a value of `0' if `knew not of' and a value of `1' if `knew of'. The index is divided into four

groups with 0 meaning `no knowledge', a score of 1-5 meaning `low knowledge', a score of 6-10 meaning `medium knowledge', and a score of 11-15 meaning `high knowledge'.

Table 3.11: Percent Distribution of IUD Acceptors According to Level of Knowledge of IUD Use.

		Source of Service		
		Government	Private	All
Level of Knowledge				
No knowledge	(0)	36.6	24.4	35.8
Low knowledge	(1-5)	55.2	66.3	55.9
Medium knowledge	(6-10)	7.8	8.1	7.8
High knowledge	(11-15)	0.4	1.2	0.5
Total		100.0	100.0	100.0
Number of cases*		1210	86	1296
Mean score		2.1	2.5	2.1

Note: Total may not add up to 100% because of rounding off of numbers.
*"Infection" question was not asked in East Java, therefore number of cases are only 1296.

Table 3.11 presents the percent distribution of the IUD acceptors according to knowledge scores by source of service. Thirty-five percent of respondents using government sources had no knowledge of side-effects and warning signs, 56 percent had low knowledge, 8 percent had medium knowledge, and less than 1 percent had high knowledge. The mean knowledge score was 2.1 for the acceptors who obtained their IUD from government sources and 2.5 for those who used private sources.

3.6. Cost of family planning services

In this study, all respondents were asked whether they paid for their family planning method, including IUD insertion and removal, and treatment/advice on side-effects or complications. For those who contributed towards services, the amount was recorded. Acceptors who had discontinued method use were also asked how much their new method cost. The results are presented in Tables 3.12 and 3.13.

Of the IUD acceptors who had used a family planning method before, approximately two-thirds obtained their previous method free of charge. More than four-fifths (86 percent) of the IUD acceptors obtained their IUD free of charge, 73 percent had their IUD removed without charge, and 47 percent received treatment/ advice without charge. Data presented in the tables show that both government and private sources have a free family planning

service available. As expected, the proportion of acceptors who paid for their previous method and their IUD insertion were significantly higher among those who used private sources compared to those used government sources. An equal proportion of the IUD acceptors (27 percent) using government and private sources paid for their IUD removal. Almost two-thirds of the IUD acceptors who opted for this new method paid, there being no difference if obtained through government or private sources.

Table 3.12: Percent Distribution of IUD Acceptors According to Whether Paid for Services.

	Source of Service		
	Government	Private	All
Payment for previous method			
Yes	29.9	54.4	32.5
No	70.1	45.8	67.5
Total	100.0	100.0	100.0
Number of cases	1023	120	1143
Payment for IUD insertion			
Yes	12.2	35.2	14.4
No	87.8	64.8	85.6
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Payment for IUD removal			
Yes	27.2	27.3	27.2
No	72.8	72.7	72.8
Total	100.0	100.0	100.0
Number of cases	503	44	547
Payment for treatment/advice on IUD			
Yes	53.4	48.9	52.9
No	46.6	51.1	47.1
Total	100.0	100.0	100.0
Number of cases	367	47	414
Payment for new contraceptive			
Yes	65.2	63.3	65.1
No	34.8	36.7	34.9
Total	100.0	100.0	100.0
Number of cases	342	30	372

Note: Total may not add up to 100% because of rounding off of numbers.

Of all the IUD acceptors who paid for their IUD insertion, about a third (30 percent) paid less than Rp. 3000, 17 percent paid between Rp. 3000 and less than Rp. 5000, 14 percent paid between Rp. 5000 and less than Rp. 10000, 13 percent paid between Rp. 10000 and less than Rp. 20000, 8 percent paid between Rp. 20000 and less than Rp. 30000, and 18 percent paid Rp. 30000 or more. The proportion of IUD acceptors who paid Rp. 5000 or more differed significantly depending on whether they used private or government services. More than 75 percent of the IUD acceptors who obtained their IUD from private sources paid more than Rp. 5000 while only 45 percent who used government sources paid more

than Rp. 5000. Similarly, the IUD acceptors who paid Rp. 30000 or more for their IUD insertion was almost double the number for those women using private services. In short, the IUD acceptors who used private sources paid more than those who used government sources.

Table 3.13: Percent Distribution of IUD Acceptors According to Amount Paid for IUD Services

	Source of Services		
	Government	Private	All
Payment for IUD insertions			
< Rp. 3000	37.0	9.5	30.4
Rp.3000 - < Rp.5000	18.0	14.3	17.1
Rp.5000 - < Rp.10000	12.5	17.5	13.7
Rp.10000 - < Rp.20000	9.0	27.0	13.3
Rp.20000 - < Rp.30000	8.5	4.8	7.6
Rp. 30000 +	14.5	27.0	17.5
Not stated	0.5	0.0	0.4
Total	100.0	100.0	100.0
Number of cases	200	63	263
Payment for IUD removal			
< Rp. 3000	24.1	25.0	24.2
Rp.3000 - < Rp.5000	19.0	33.3	20.1
Rp.5000 - < Rp.10000	36.5	25.0	35.6
Rp.10000 - < Rp.20000	14.6	8.3	14.1
Rp.20000 - < Rp.30000	2.9	0.0	2.7
Rp. 30000 +	2.9	8.3	3.4
Total	100.0	100.0	100.0
Number of cases	137	12	149

Note: Total may not add up to 100% because of rounding off of numbers.

For IUD removal, the majority of acceptors (56 percent) paid Rp. 5000 or more, fourteen percent paid between Rp. 10000 and 20000, 3 percent paid between Rp. 20000 and 30000, and 3 percent paid Rp. 30000 or more.

CHAPTER 4

POST-INSERTION EXPERIENCE

This chapter describes the activities and experiences of the IUD acceptors. In particular, it contains information on follow-up visits, types of side-effects and the available sources and nature of assistance for side-effects.

4.1. Follow-up

Respondents were asked whether they knew that a follow-up visit to their provider was necessary after IUD insertion and how many times they had visited their health worker. They also were asked how many times they were visited by their health worker in connection with their general health condition after IUD insertion. As shown in Table 4.1, a large majority of acceptors (89 percent) knew that a follow-up visit was essential after IUD insertion. Approximately one-fifth (20 percent) of the acceptors never visited their provider after IUD insertion while 35 percent visited their provider one to two times, 30 percent three to four times, and 16 percent five times or more (Table 4.2). The number of visits to the health worker seemed to vary according to the type of IUD used, with a higher proportion of acceptors who used the Lippes Loop not visiting their health worker than acceptors using either the Multiload or Copper T. Data (not presented here) suggests that there is no difference in the number of visits to providers by the IUD acceptors according to source of service.

Table 4.1: Percent Distribution of IUD Acceptors According to Follow-up Status.

	Source of Service		
	Government	Private	All
Whether client knew need to see HW			
Yes	89.4	87.2	89.2
No	10.4	12.8	10.7
Total	100.0	100.0	100.0
Number of cases	1646	179	1825

Note: Total may not add up to 100% because of rounding off of numbers.

Table 4.2 also indicates that a large majority of the IUD acceptors (94 percent) had never been visited by a health worker after their IUD was inserted. Only six percent of IUD acceptors

reported that they had received a visit by a health worker, with less than 2 percent receiving five or more visits by the health worker. There was little difference noted in the number of visits made by health workers to IUD acceptors according to type of IUD used and source of service.

Table 4.2: Percent Distribution of IUD Acceptors According to Follow-up Status.

	Type of IUD			
	LL	ML	CU	All
Whether client knew need to see HW**				
Yes	88.3	88.6	95.9	89.2
No	11.7	11.2	4.1	10.8
Total	100.0	100.0	100.0	100.0
Number of times seen HW*				
0	23.5	12.3	14.4	19.6
1-2	35.4	34.5	33.5	34.9
3-4	28.1	30.5	36.1	29.6
5 +	13.0	22.6	16.0	15.9
Total	100.0	100.0	100.0	100.0
Number of times visited by HW				
0	94.0	92.5	92.8	93.5
1-2	3.0	4.8	5.2	3.7
3-4	1.4	0.9	1.0	1.2
5 +	1.6	1.8	1.0	1.6
Total	100.0	100.0	100.0	100.0
Number of cases	1098	455	194	1747

Note: Total may not add up to 100% because of rounding off of numbers.
* Chi-square is significant at 1% level.
** Chi-square is significant at 5% level.

4.2. Side-effects

One-third of the IUD acceptors experienced side-effects as a result of using the IUD. As shown in tables 4.3 and 4.4, the proportion of women experiencing side-effects was no different according to type of IUD used and source of service. A little over one-fifth of women experienced only one side-effect, 7 percent experienced two types of side-effects, and 5 percent experienced more than three types of side-effects. Of those who experienced side-effects as a result of using the IUD, 28 percent were still experiencing side-effects at the time of the interview. The proportion of IUD acceptors still experiencing side-effects was significantly higher in the women who obtained their IUD from government sources as compared to those who obtained their IUDs from private sources.

Table 4.3: Percent Distribution of IUD Acceptors Who Experienced Side-effects by Type of IUD.

	Type of IUDs			
	LL	ML	CU	All
Experienced side-effects				
Yes	31.3	36.7	37.6	33.4
No	68.7	63.3	62.4	66.6
Total	100.0	100.0	100.0	100.0
Number of cases	1098	455	194	1747
Still experiencing side-effects				
Yes	30.5	24.6	26.0	28.3
No	69.5	75.4	74.0	71.7
Total	100.0	100.0	100.0	100.0
Number of cases	344	167	73	584
Number of side-effects				
0	68.7	63.3	62.4	66.6
1	20.1	24.6	22.7	21.6
2	6.6	5.7	9.8	6.7
3+	4.7	6.3	5.1	5.1
Total	100.0	100.0	100.0	100.0
Number of cases	1098	455	194	1747

Note: Total may not add up to 100% because of rounding off of numbers.

Table 4.4: Percent Distribution of IUD Acceptors Who Experienced Side-effects by Source of Service.

	Source of Services		
	Government	Private	All
Experienced side-effects			
Yes	32.3	38.0	32.8
No	67.7	62.0	67.2
Total	100.0	100.0	100.0
Number of cases	1646	179	1825
Still experiencing side-effects**			
Yes	29.8	16.2	28.2
No	70.2	83.8	71.8
Total	100.0	100.0	100.0
Number of cases	531	68	599
Number of side-effects			
0	67.7	62.0	67.2
1	20.5	28.5	21.3
2	6.6	5.0	6.4
3+	5.3	4.5	5.2
Total	100.0	100.0	100.0
Number of cases	1646	179	1825

Note: Total may not add up to 100% because of rounding off of numbers.
** Chi-square is significant at 5% level.

Tables 4.5 and 4.6 present data on the type of side-effects reported as a result of IUD use. Table 4.5 shows that the most frequently reported side-effects were `abdominal pain' (39 percent) and `heavy bleeding' (25 percent). Approximately 17 percent of the acceptors reported having experienced `backache', 14 percent `heavy discharge', 12 percent `cramps', 11 percent `late period', and 10 percent `spotting between menses'. `Fever', `infection', and `pain during intercourse' were reported by less than 10 percent of the women.

It is to be noted that the percentage of IUD acceptors who knew about the possibility of 'heavy bleeding' occurring and actually reporting it as a side-effect are the same. A lesser percentage of acceptors knew that 'abdominal pain' was a warning sign compared to those who reported it as a side-effect. Of all possible side-effects, `cramps' was most widely known, but was not reported as a side-effect. There was no significant difference in reported side-effects in connection with the type of IUD used and source of service.

Table 4.5: Percent of IUD Acceptors Who Experienced Side-effects According to Type of IUD.

	Type of IUD			
	LL	ML	CU	All
Cramps	11.9	12.6	11.0	12.0
Heavy bleeding	26.2	22.8	26.0	25.2
Spotting	9.9	10.2	12.3	10.3
Infection	4.1	4.2	5.5	4.3
Backache	18.3	18.0	9.6	17.1
Heavy discharge	12.8	13.8	16.4	13.5
Abdominal pain	38.7	41.3	39.7	39.6
Pain during inter.	3.5	2.4	6.8	3.6
Late period	13.1	9.6	8.2	11.5
Fever	7.6	9.0	9.6	8.2
Number of cases	344	167	73	584

Table 4.6: Percent of IUD Acceptors Who Experienced Side-effects According to Source of Service.

	Source of Service		
	Government	Private	All
Cramps	13.2	7.4	12.5
Heavy bleeding	25.0	27.9	25.4
Spotting	10.5	11.8	10.7
Infection	4.0	7.4	4.3
Backache	17.9	13.2	17.4
Heavy discharge	14.1	8.8	13.5
Abdominal pain	39.4	38.2	39.2
Pain during inter.	4.0	1.5	3.7
Late period	11.9	7.4	11.4
Fever	8.5	5.9	8.2
Number of cases	531	68	599

Table 4.7 shows that half of the IUD acceptors experienced side-effects within one month of IUD insertion. A slightly higher percentage of women using private sources (64 percent) reported side-effects within this period compared with 49 percent of women using government sources.

Table 4.7: Percent Distribution of IUD Acceptors Who Experienced Side-effects According to Number of Months After Insertion and by Type of IUD.

	Type of IUD			
No. of Months	LL	ML	CU	All
Less than a month	14.5	14.5	7.1	13.5
One month	33.8	41.9	37.5	36.7
Two months	15.4	12.8	14.3	14.5
Three months	6.6	8.5	12.5	8.0
Four months	2.2	0.0	1.8	1.5
Five months	4.4	2.6	0.0	3.2
Six months	2.2	4.3	0.0	2.5
After seven months	20.2	15.4	25.0	19.5
Not stated	0.9	0.0	1.8	0.7
Total	100.0	100.0	100.0	100.0
Number of cases	228	117	56	401

Note: Total may not add up to 100% because of rounding off of numbers.

The majority of the IUD acceptors reported having experienced heavy bleeding and abdominal pain within a month of IUD insertion (Table 4.9). These side-effects were experienced by one-third of the acceptors even after three months. More than half of the acceptors also reported experiencing backache, cramps, and spotting within a month of IUD insertion. Almost one-third of the acceptors reported having a backache after four months of IUD use, a lesser percentage reported cramps and spotting during this period.

Table 4.8: Percent Distribution of IUD Acceptors Who Experienced Side-effects According to Number of Months After Insertion Side-effects Occurred.

No. of Months	Source of Services Government	Private	All
Less than a month	13.1	19.1	13.8
One month	36.0	44.7	37.0
Two months	14.7	8.5	14.0
Three months	7.9	8.5	8.0
Four months	1.4	2.1	1.4
Five months	3.3	2.1	3.1
Six months	2.5	2.1	2.4
After seven months	20.4	12.8	19.6
Not stated	0.8	0	0.7
Total	100.0	100.0	100.0
Number of cases	367	47	414

Note: Total may not add up to 100% because of rounding off of numbers.

Table: 4.9: Percent Distribution of IUD Acceptors According to Number of Months After Insertion Side-effects Experienced.

	No. of months after insertion side-effect occurred						
	<1	1	2	3	4+	All	N
Cramps	14.6	45.8	10.4	10.4	18.8	100.0	48
Heavy bleeding	17.4	32.2	16.5	11.6	22.3	100.0	121
Spotting	20.9	41.9	9.3	9.3	18.6	100.0	43
Infection	38.9	5.6	33.3	0.0	22.2	100.0	18
Backache	27.3	24.2	10.6	6.1	31.8	100.0	66
Heavy discharge	3.4	24.1	13.8	10.3	48.3	100.0	58
Abdominal pain	19.3	34.3	13.9	6.6	25.9	100.0	166
Pain during sex	9.1	36.4	27.3	9.1	18.2	100.0	11
Late period	14.7	29.9	29.4	0.0	26.5	100.0	34
Fever	27.3	24.2	15.2	6.1	27.3	100.0	33

Note: Total may not add up to 100% because of rounding off of numbers.

Seventy percent of the IUD acceptors who experienced a side-effect sought assistance from their health provider. Those using the Copper T were more likely to seek help than those using other

types of IUDs (Table 4.10). The single most utilized source of assistance was the health center, it was visited by almost half of the acceptors who experienced side-effects (49 percent; not shown in Table). Private doctors and midwives were consulted by five percent of the acceptors. Village midwives, fieldworkers, and cadres were less likely to be the source of help for side-effects.

Of those IUD acceptors who did not go for help even though they experienced side-effects, forty percent considered their side-effects not to be serious (Table 4.11). A higher percentage of Copper T users reported side-effects that were not serious than those using other types of IUDs. Similarly, the percentage of the acceptors using private sources who considered side-effects not serious was significantly higher than those who used government sources.

Table 4.12 presents data on the type of assistance provided to the IUD acceptors who experienced side-effects and sought help. Half of the acceptors were prescribed medicine, 37 percent were given advice, and 17 percent had their IUD removed. It is to be noted that multiple responses were possible. Data also suggests that Copper T and Lippes Loop users were more likely to get their IUD removed than those using the Multiload.

Table 4.10: Percent Distribution of IUD Acceptors Who Experienced Side-effects According to Whether Sought Assistance For Side-effects.

	Whether sought assistance			
	Yes	No	All	N
Source of Services				
Government	69.3	30.7	100.0	525
Private	70.6	29.4	100.0	68
Total	69.5	30.5	100.0	593
Type of IUDs*				
LL	66.8	33.2	100.0	340
ML	70.3	29.7	100.0	165
CU	76.7	23.3	100.0	73
Total	69.0	31.0	100.0	578

Note: Total may not add up to 100% because of rounding off of numbers.
* Chi-square is significant at 1% level.

Table 4.11: Percent Distribution of IUD Acceptors Who Experienced Side-effects According to Reasons for Not Seeking Assistance.

	Reason for not seeking assistance Considered not serious	Other reasons	All	N
Source of Services**				
Government	37.7	62.3	100.0	154
Private	65.0	35.0	100.0	20
Total	40.8	59.2	100.0	174
Type of IUDs				
LL	36.9	63.1	100.0	111
ML	39.1	60.9	100.0	46
CU	68.8	31.2	100.0	16
Total	40.5	59.5	100.0	173

Note: Total may not add up to 100% because of rounding off of numbers.
** Chi-square is significant at 5% level.

Table 4.12: Percent of IUD Acceptors Who Experienced Side-effects According to Type of Assistance Received for Side-effects.

	Advice Given	Medicine Given	IUD Removed	N
Source of Services				
Government	36.9	52.2	17.0	347
Private	34.9	48.8	18.6	43
Total	36.7	51.8	17.2	390
Type of IUDs				
LL	40.1	46.5	19.8	217
ML	33.3	58.7	10.1	109
CU	33.3	55.6	20.4	54
Total	37.1	51.3	17.1	380

Note: N = number of cases.

Sixty-three percent of the IUD acceptors who experienced side-effects made between one and two visits to their service provider, 29 percent between three and four visits and 9 percent five or more visits (Table 4.13). A lesser percentage of the IUD acceptors who used private sources (18 percent) required three or more visits compared to those who used government sources (39 percent). Also, a slightly higher percentage of Lippes Loop users made five or more visits to their provider compared to women using the Multiload and Copper T. As shown in Table 4.14, a large majority of the IUD acceptors (86 percent) were attended by the same person every time they visited the health center for consultation on side-effects.

Table 4.13: Percent of IUD Acceptors Who Experienced Side-effects According to Number of Visits to Provider For Side-effects Assistance.

	Number of visits				
	1-2	3-4	5+	All	N
Source of Services**					
Government	60.7	30.1	9.3	100.0	366
Private	81.3	16.7	2.1	100.0	48
Total	63.0	28.5	8.5	100.0	414
Type of IUDs					
LL	63.9	29.5	6.6	100.0	227
ML	59.3	30.5	10.2	100.0	118
CU	66.1	19.6	14.3	100.0	56
Total	62.8	28.4	8.7	100.0	401

Note: N = number of cases.
Total may not add up to 100% because of rounding off of numbers.
** Chi-square is significant at 5% level.

Table 4.14: Percent of IUD Acceptors Who Experienced Side-effects According to Whether Same Person Assisted them for Side-effects.

	Whether attended by same person				
	Yes	No	NS	All	N
Source of Services					
Government	85.2	11.7	3.0	100.0	366
Private	87.5	12.5	0.0	100.0	48
Total	85.5	11.8	2.7	100.0	414
Type of IUDs					
LL	84.6	11.5	4.0	100.0	227
ML	89.8	8.5	1.7	100.0	118
CU	83.9	16.1	0.0	100.0	56
Total	86.0	11.2	2.7	100.0	401

Note:Total may not add up to 100% because of rounding off of numbers.
NS = Not stated.
N = number of cases.

CHAPTER 5

ACCEPTOR'S USE STATUS

This chapter describes the status of IUD use, retention rate, reasons for discontinuation, assistance sought for removal, and current family planning method being used. Additionally, this chapter provides analysis of factors affecting IUD use status and factors contributing to the current use of family planning methods after IUD discontinuation.

5.1. IUD Use Status

As shown in Table 5.1, 68 percent of the IUD acceptors were still using the IUD at the time of the interview. More than one-fourth of the acceptors (26 percent) had had their IUD removed and six percent reported the device had been spontaneously expelled. As expected, the expulsion rate was higher among those women who used the Lippes Loop (8 percent) compared to those who used the Multiload (3 percent) and the Copper T (4 percent).

Table 5.1: Percent Distribution of IUD Acceptors by Current Use Status.

	Current IUD Use Status				
	Still using	Removed	Expelled	Total	N
Source of Service					
Government	69.6	26.4	6.0	100.0	1646
Private	69.8	24.0	6.1	100.0	179
Total	67.8	26.1	6.0	100.0	1825
Type of IUD*					
LL	69.8	22.7	7.6	100.0	1098
ML	65.3	31.6	3.1	100.0	455
CU	62.4	34.0	3.6	100.0	194
Total	67.8	26.3	6.0	100.0	1747

Note: Total may not add up to 100% because of rounding off of numbers.
* Chi-square is significant at 1% level.
** Chi-square is significant at 5% level.

Tables 5.2 and 5.3 present the cumulative IUD continuation rates by duration of use according to source of service and type of IUD used. The cumulative continuation rates were calculated using the survival life table techniques. Overall, 85 percent of the IUD acceptors continued to use the IUD through the first year, 77 percent the second year, 66 percent the third year, 61 percent the fourth year, and 54 percent the fifth year.

Table 5.2: Percent of IUD Acceptors By Duration of Use and Source of Service.

	Source of service		
Duration of Use(Months)	Government	Private	All
1	93.7	96.4	93.9
3	92.0	95.1	92.3
6	88.9	92.1	89.2
9	86.1	89.7	86.4
12	84.4	87.8	84.7
24	76.8	81.5	77.2
36	65.4	73.2	66.2
60	52.7	60.1	53.6
Number of cases	1609	167	1776

obtained IUDs from private sources were consistently higher than those who used government sources. Also, during the second year

Lippes Loop and Multiload acceptors. However, it is to be noted that after the second year the continuation rates for Lippes Loop

Differences became wider as the duration of use increased. At the end of the fifth year the continuation rate of Lippes Loop

acceptors were 50 and 36 percent, respectively.

Table 5.3: Percent of IUD Acceptors According to Duration of Use and Type of IUD.

Duration of Use(Months)	Type of IUD LL	ML	CU	All
1	93.6	94.3	95.2	93.9
3	91.6	92.7	95.2	92.3
6	88.6	89.3	93.0	89.2
9	85.3	87.5	90.8	86.4
12	83.9	85.6	87.3	84.7
24	76.6	78.4	79.4	77.2
36	67.9	63.3	63.0	66.2
48	63.8	56.4	49.3	60.5
60	57.3	50.3	36.0	53.6
Number of cases	1067	447	192	1776

Of those acceptors who had their IUDs removed or expelled, 23 percent stopped use within three months of insertion, 48 percent after two years, and 16 percent after three or more years (Table 5.5). The table shows that the proportion of Copper T acceptors who stopped use after three years was significantly higher than Lippes Loop and Multiload acceptors. Similarly, a significantly higher proportion of Lippes Loop and Multiload acceptors stopped use within three months of insertion as compared with Copper T acceptors. Although acceptors using private sources were more likely to continue use for a longer time than those using government sources, the relationship was not statistically significant (Table 5.5).

Table 5.4: Percent Distribution of IUD Acceptors No Longer Using an IUD By Duration of Use and Source of Service.

Duration of Use(Months)	Source of service Government	Private	All
< 4	24.0	14.8	23.2
4 - 6	9.1	9.3	9.1
7 - 12	13.0	13.0	13.0
13 - 18	9.1	9.3	9.1
19 - 23	8.3	5.6	8.1
24 - 35	21.4	20.4	21.3
36 +	15.1	27.8	16.3
Total	100.0	100.0	100.0
Number of cases	529	54	583

Note: Total may add up to 100 % because of rounding off of numbers.

Table 5.5: Percent Distribution of IUD Acceptors No Longer Using an IUD By Duration of Use and Type of IUD.

Duration of Use(Months)*	Type of IUD LL	ML	CU	All
< 4	26.7	20.5	12.3	23.1
4 - 6	9.4	9.6	5.5	8.9
7 - 12	14.5	10.3	13.7	13.2
13 - 18	9.4	10.3	5.5	9.1
19 - 23	7.9	6.4	8.2	7.5
24 - 35	17.9	30.1	21.9	21.8
36 +	14.2	12.8	32.9	16.3
Total	100.0	100.0	100.0	100.0
Number of cases	330	156	73	559

Note: Total may not add up to 100% because of rounding off of numbers.
* Chi-square is significant at 1% level.

Acceptors who stopped using the IUD were asked what the main reason was for doing this. Tables 5.6 and 5.7 present data on the responses received. The data indicates that one-fourth of the IUD acceptors gave `side-effects' as the reason for stopping. 'Desire pregnancy' and 'IUD expulsion' were the second reasons most given (each 17 percent). Another 12 percent of acceptors stopped using the IUD because they wanted to switch to another method (mostly to sterilization), and five percent became pregnant after the IUD was inserted. Gross termination rates calculated using life table techniques will be presented in Chapter 6.

As shown in Table 5.6, a slightly higher percentage of IUD acceptors using private sources tended to give reasons, such as `desire pregnancy', `side-effect' and `expulsion' than those women using government sources. Also, the proportion of the acceptors reporting IUD expulsion was three times higher for the Lippes Loop as compared to the Multiload or Copper T (Table 5.7). Similarly, a higher percentage of women using the Copper T (16 percent) stopped IUD use because of `IUD expiring' as compared with those using the Lippes Loop. This suggests that both acceptors and providers lack knowledge about the maximum duration that the Copper T can remain effective.

Table 5.6: Percent Distribution of IUD Acceptors According to Reasons for Discontinuing use of the IUD by Source of Service.

Reasons*	Source of service Government	Private	All
Desire pregnancy	16.6	26.4	17.5
Switch method	12.5	7.5	12.1
Side-effects	23.5	34.0	24.4
Fear of side-effects	3.9	1.9	3.8
Pregnant	6.0	0.0	5.5
Husband asked to remove	1.4	1.9	1.4
IUD expiring	8.2	7.5	8.2
Expulsion	16.2	20.8	17.1
Others	11.0	0.0	10.0
Total	100.0	100.0	100.0
Number of cases	583	53	636

Note: Total may add up to 100 % because of rounding off of numbers.

Table 5.7: Percent Distribution of IUD Acceptors According to Reasons for Discontinuing use of the IUD by Type of IUD.

Reasons*	Type of IUD LL	ML	CU	All
Desire pregnancy	19.2	14.9	14.9	17.3
Switch method	9.6	12.3	23.0	12.1
Side-effects	26.5	20.5	27.0	24.6
Fear of side-effects	5.5	1.0	2.7	3.8
Pregnant	4.7	7.7	4.1	5.5
Husband asked to remove	1.7	1.0	1.4	1.5
IUD expiring	2.6	14.4	16.2	8.0
Expulsion	24.1	7.2	8.1	16.8
Others	6.1	21.0	2.7	10.5
Total	100.0	100.0	100.0	100.0
Number of cases	344	195	74	613

Note: Total may not add up to 100% because of rounding off of numbers.
* Chi-square is significant at 1% level.
** Chi-square is significant at 5% level.

Of all the acceptors who stopped using their IUDs, sixty-four percent discussed the question of removal with someone prior to doing so (Table 5.8), while 36 percent did not. The data suggests that a slightly higher proportion of acceptors using private sources, as well as those using the Multiload, discussed removal prior to doing so as compared with acceptors using government sources, as well as those using the Lippes Loop and Copper T.

Table 5.8: Percent Distribution of IUD Acceptors According to Whether They Had Discussed IUD Removal.

	Whether discussed removal of IUD			
	Yes	No	Total	N
Source of Service*				
Government	61.9	38.1	100.0	506
Private	84.4	15.6	100.0	45
Total	63.7	36.3	100.0	551
Type of IUD*				
LL	56.4	43.6	100.0	312
ML	79.3	20.7	100.0	150
CU	59.2	40.8	100.0	71
Total	63.2	36.8	100.0	533

Note: Total may not add up to 100% because of rounding off of numbers.
* Chi-square is significant at 1% level.
N = number of cases.

Among the acceptors who discussed IUD removal prior to doing so, 33 percent talked with midwives from health centers, 12 percent with fieldworkers, and 11 percent with friends/relatives (multiple responses were possible). As shown in Table 5.9, less than six percent of women discussed removal with other groups of people, including private doctors, midwives, and other IUD users. The proportion of the acceptors who discussed IUD removal with fieldworkers and midwives from health centers was higher among those who used government sources and the Multiload as compared with those who used private sources and the Lippes Loop. Table 5.10 indicates that private midwives were more likely to be contacted for discussion by Copper T acceptors than by Lippes Loop and Multiload acceptors.

Table 5.9: Percent of IUD Acceptors According to Persons With Whom they Discussed IUD Removal by Source of Service.

Persons contacted	Source of service Government	Private	All
Friends/ relatives	11.5	10.5	11.4
Other IUD users	3.8	5.3	4.0
Field workers**	13.1	2.6	12.0
Volunteers	7.0	15.8	8.0
Midwives	34.2	26.3	33.3
Doctors	3.5	2.6	3.4
Private Doctors	3.2	2.6	3.1
Private Midwives	5.4	7.9	5.7
Village Midwives	3.8	0.0	3.4
Number of cases	313	38	351

Note: ** Chi-square is significant at 5% level.

Table 5.10: Percent of IUD Acceptors According to Persons With Whom they Discussed IUD Removal by Type of IUD.

Persons contacted	Type of IUD LL	ML	CU	All
Friends/relatives	12.5	11.8	7.1	11.6
Other IUD users	2.8	5.0	4.8	3.9
Field workers	14.8	10.9	7.1	12.5
Volunteers	6.3	11.8	7.1	8.3
Midwives	29.0	41.2	33.3	33.8
Doctors	4.0	2.5	2.4	3.3
Private Doctors	2.3	5.0	2.4	3.3
Private Midwives	4.5	5.0	9.5	5.3
Village Midwives	2.8	5.9	0.0	3.6
Others	61.4	40.3	57.1	53.4
Number of cases	176	119	42	337

A majority of the acceptors (70 percent) seemed to have discussed IUD removal with only one person (Table 5.11). The remaining 22 and 8 percent discussed removal respectively with two, three or more people prior to removal. In general, there seemed to be no difference in the proportion of acceptors who discussed removal by service source and type of IUD. However, a slightly higher proportion of the acceptors using government sources tended to discuss removal with more than one person. The sample size was too small to establish any concrete relationship.

Table 5.11: Percent Distribution of IUD Acceptors According to Number of Persons With Whom They Discussed IUD Removal.

	Number of persons with whom discussed				
	1	2	3+	Total	N
Source of Services					
Government	68.3	24.0	7.6	100.0	312
Private	86.8	7.9	5.2	100.0	38
Total	70.3	22.3	7.5	100.0	350
Type of IUDs					
LL	68.8	22.7	9.4	100.0	176
ML	71.4	20.2	8.3	100.0	119
CU	73.8	23.8	2.4	100.0	42
Total	70.3	22.0	7.7	100.0	337

Note: Total may not add up to 100% because of rounding off of numbers.

Table 5.12 indicates that about one-half of the acceptors were advised to discontinue using their IUD, 37 percent switched to another method, and 7 percent continued using their IUD. A slightly higher proportion of the acceptors using private sources received advice to discontinue IUD use as compared to those women using government sources. More than half of the Copper T acceptors (55 percent) were given advice to switch to another method, as compared to 39 percent of Lippes Loop and 29 percent of Multiload acceptors.

Table 5.12: Percent Distribution of IUD Acceptors According to Suggestions Provided When Discussing IUD Removal.

	Suggestion provided before removal				
	Continue	Discontinue	Switch	Total	N
Source of Services					
Government	7.4	51.6	37.8	100.0	312
Private	5.3	63.2	28.9	100.0	38
Total	7.1	52.9	36.9	100.0	350
Type of IUDs*					
LL	2.3	53.4	38.6	100.0	176
ML	13.4	56.3	29.4	100.0	119
CU	11.9	33.3	54.8	100.0	42
Total	7.4	51.9	37.4	100.0	337

Note: Total may not add up to 100% because of rounding off of numbers and 'not stated' cases.
* Chi-square is significant at 1% level.

The majority of the IUD acceptors (70 percent) had their IUDs removed at health centers and 17 percent by private providers. Less than 10 percent had their IUDs removed at public hospitals, and less than three percent at private hospitals and other locations. A significantly higher proportion of Lippes Loop acceptors (78 percent) had their IUDs removed at health centers as compared with those using the Multiload (66 percent) or the Copper T (48 percent). A higher proportion of Copper T acceptors received their IUDs from hospitals or private providers as compared with Lippes Loop and Multiload acceptors (Table 5.14). This suggests that Copper T acceptors preferred using facilities that were better equipped and private providers who could give them more personal attention.

Table 5.13: Percent Distribution of IUD Acceptors According to the Provider Who Removed an IUD by Source of Service.

Reason	Source of service Government	Private	All
Hospital	8.4	2.6	7.7
Health Center	70.4	63.2	69.6
Private Hospital	2.3	5.3	2.6
Private Provider	16.3	21.1	16.9
Others	2.6	7.9	3.2
Total	100.0	100.0	100.0
Number of cases	311	38	349

Note: Total may not add up to 100 percent because of rounding off of numbers.

Table 5.14: Percent Distribution of IUD Acceptors According to the Provider Who Removed IUD by Type of IUD.

Reason*	Type of IUD LL	ML	CU	All
Hospital	2.9	11.8	14.3	7.4
Health Center	77.7	65.5	47.6	69.6
Private Hospital	2.3	2.5	4.8	2.7
Private Provider	13.1	19.4	26.2	17.0
Others	4.0	0.8	7.1	3.3
Total	100.0	100.0	100.0	100.0
Number of cases	175	119	42	336

Note: Total may not add up to 100 % because of rounding off of numbers.
* Chi-square is significant at 1% level.

5.2. Current Method Use

Of the 585 acceptors whose IUD was expelled or removed, 64 percent went on to use another family planning method, with 27 percent using injectables, 17 percent oral pills, 9 percent the IUD, 7 percent implants, and 5 percent sterilization. As shown in Table 5.16, the proportion of acceptors who went on to use another family planning method was significantly higher among those who used the Copper T (79 percent) as compared with those women who used either the Lippes Loop (60 percent) or the Mulitload (54 percent), while no difference in method use was found according to source of service (Table 5.15).

Table 5.15: Percent Distribution of IUD Acceptors According to Method Use After IUD Expulsion/Removal by Source of Service.

Method	Source of service Government	Private	All
Sterilization	5.7	1.9	5.3
Implant	5.5	7.5	5.6
IUD	9.0	3.8	8.5
Injectable	26.1	32.1	26.7
Pills	17.1	11.3	16.6
Others	0.6	0.0	0.5
Not stated	0.4	0.0	0.3
No method	35.7	43.4	36.4
Total	100.0	100.0	100.0
Number of cases	532	53	585

Note: Total may not add up to 100 % because of rounding off of numbers.

Table 5.16: Percent Distribution of IUD Acceptors According to Method Use After IUD Expulsion/Removal by Type of IUD.

Method*	Type of IUD LL	ML	CU	All
Sterilization	5.7	3.8	4.2	5.0
Implant	4.8	7.6	5.6	5.7
IUD	4.8	13.3	15.3	8.6
Injectable	27.8	23.4	27.8	26.6
Pills	16.0	12.7	25.0	16.2
Others	0.0	1.9	0.0	0.6
Not stated	0.3	0.0	1.4	0.4
No method	40.5	37.3	20.8	37.1
Total	100.0	100.0	100.0	100.0
Number of cases	331	158	72	561

Note: Total may not add up to 100 % because of rounding off of numbers.
* Chi-square is significant at 1% level.

Overall, 88 percent of the IUD acceptors were still using a family planning method at the time of the interview, with 80 percent using IUDs. After IUDs, injectables were the second most popular method (10 percent), followed by oral pills (6 percent). Tables 5.17 and 5.18 show that there was no difference in current use according to type of service and type of IUD.

Table 5.17: Percent Distribution of IUD Acceptors According to Current FP Method Being Used by Source of Service.

	Source of service		
	Government	Private	All
Currently using a FP method			
Yes	88.3	87.1	88.2
No	11.7	12.9	11.8
Total	100.0	100.0	100.0
Number of cases	1645	178	1823
FP method currently being used			
IUD	79.9	81.9	80.1
Implant	2.0	2.6	2.1
Injectable	9.6	11.0	9.7
Pills	6.3	3.9	6.0
Sterilization	2.0	0.6	1.9
Others	0.2	0.0	0.2
Total	100.0	100.0	100.0
Number of cases	1453	155	1608

Note: Total may not add up to 100 percent because of rounding off of numbers.

Table 5.18: Percent Distribution of IUD Acceptors According to Current FP Method Being Used by Type of IUD.

Methods	Type of IUD LL	ML	CU	All
Currently using a FP method				
Yes	87.7	87.0	91.7	88.0
No	12.3	13.0	8.3	12.0
Total	100.0	100.0	100.0	100.0
Number of cases	1097	455	193	1745
FP method currently being used				
IUD	81.3	80.3	74.6	80.3
Implant	1.7	3.0	2.3	2.1
Injectable	9.6	9.3	11.3	9.7
Pills	5.5	5.1	10.2	5.9
Sterilization	1.9	1.6	1.7	1.8
Others	0.0	0.3	0.0	0.1
Total	100.0	100.0	100.0	100.0
Number of cases	962	396	177	1535

Note: Total may not add up to 100 % because of rounding off of numbers.

5.3. Factors Affecting IUD Use Status

The following section presents an analysis in order to determine what factors might contribute to sustained use, expulsion or removal of the IUD.

Table 5.19: Percent Distribution of IUD Acceptors According to Demographic Factors Affecting IUD Use Status.

	Current IUD Use Status				
	In Place	Removed	Expelled	Total	N
Age of Woman*					
< 25 years	68.6	24.9	9.5	100.0	285
25 - 29 years	60.6	31.9	7.5	100.0	495
30 - 34 years	68.5	26.1	5.4	100.0	518
35 - 39 years	74.6	20.8	4.6	100.0	307
40 + years	75.9	22.3	1.8	100.0	220
Total	67.8	26.1	6.0	100.0	1825
Number of living children					
< 2	66.5	26.7	6.8	100.0	409
2	67.6	27.1	5.3	100.0	602
3	68.8	24.9	6.3	100.0	410
4	68.3	26.1	5.5	100.0	218
5+	68.8	24.7	6.5	100.0	186
Total	67.8	26.1	6.0	100.0	1825
Age of youngest child*					
< 12 months	37.5	48.3	14.2	100.0	120
12 - 23 months	66.7	23.5	9.8	100.0	183
24 - 35 months	72.7	20.8	6.4	100.0	264
36 - 47 months	68.2	24.6	7.2	100.0	264
48 - 59 months	67.4	26.4	6.3	100.0	288
60 + months	71.6	25.4	3.0	100.0	705
Total	67.9	26.1	6.0	100.0	1824

Note: Total may not add up to 100% because of rounding off of numbers.
* Chi-square is significant at 1% level.

Demographic factors are explored in Table 5.19. As shown in this table, there was a significant correlation between a woman's age, the age of her youngest child and use of the IUD. The proportion of the IUD acceptors whose IUDs were expelled was lower as the age of the woman and age of her youngest child increased. Seventy-two percent of women whose youngest child was 60 months or older had their IUD in place as compared with only 38 percent of women whose youngest child was less than 12 months old. IUD expulsion was found to be as high as 14 percent if the youngest child was less than 12 months or 10 percent if the acceptor was below the age of 25. Similarly, the removal rate was likely to double if the youngest child was less than 12 months as compared with women whose youngest child was more than 60 months. The data suggests that the age of the youngest child has a more

pronounced effect on IUD use status than a woman's age. The parity did not appear to have any effect on IUD use status.

Table 5.20: Percent Distribution of IUD Acceptors According to Socio-economic Status, Fertility Preference and Previous Use of FP Factors Affecting IUD Use Status.

	Current use status of IUD				
	In Place	Removed	Expelled	Total	N
Ever attended school*					
Never attended school	65.8	23.5	10.7	100.0	345
Not complete primary	66.0	28.6	5.3	100.0	412
Primary +	69.2	26.0	4.8	100.0	1068
Engaged in paid work*					
Yes	71.8	25.0	3.2	100.0	740
No	65.1	27.0	7.9	100.0	1082
Desire more children**					
Yes	62.5	30.7	6.8	100.0	488
Depends	66.9	25.3	7.9	100.0	178
No	70.2	24.3	5.4	100.0	1159
Timing of next child wanted*					
Within 12 months	32.4	59.6	8.1	100.0	136
After 12 months	71.7	21.5	6.8	100.0	530
No desire more child	70.2	24.3	5.4	100.0	1159
Previous use of FP method					
Yes	66.0	27.9	6.1	100.0	1143
No	70.9	23.2	5.9	100.0	681
Total	67.8	26.1	6.0	100.0	1825

Note: Total may not add up to 100% because of rounding off of numbers.
* Chi-square is significant at 1% level.
** Chi-square is significant at 5% level.
n = number of cases.

The acceptor's educational level and work status appeared to have a significant impact on IUD use (Table 5.20). Acceptors who had never attended school were less likely to have their IUD in place and more likely to have their IUD expelled than their counterparts who had completed primary school or had obtained a higher education. Similarly, the acceptors who were paid for their work were more likely to have their IUD in place and less likely to have their IUD expelled than those who were not paid for their work.

Table 5.20 also shows that the desire for more children and the timing of the next child had a significant impact on IUD use

status. Seventy-two percent of the IUD acceptors who wanted a child after 12 months still had their IUD in place as compared to 32 percent of women who wanted a child within the next 12 months. There appeared to be little effect on IUD use regardless of whether or not a family planning method had been used before.

Table 5.21 shows that the proportion of IUD acceptors who did not experience expulsion increased significantly if contact was made between a health worker and acceptor after IUD insertion. Only 4 percent of the IUD acceptors who had contact with a health worker experienced IUD expulsion. This figure was three and half times higher (14 percent) if no contact was made with a health worker. Likewise, IUD removal was less likely to occur if contact was made with a health worker. There also appeared to be a relationship between whether a woman knew that it was possible to change methods, knowledge level and an acceptor's IUD status. The data indicates that IUD acceptors with low knowledge did not differ from those women categorized as having no knowledge. The proportion of IUD acceptors whose IUDs were in place increased if they were categorized as having moderately high knowledge. However, the relationship was not statistically significant since the sample size was too small for the category 'High'.

Twenty-nine percent of women who knew that they could switch to another method had their IUD removed compared with 16 percent of women who did not know that this switch could occur (Table 5.21). As will be shown later, 'Whether knew possible to switch' was a strong factor in determining current use of a family planning method among women who discontinued IUD use.

Table 5.21: Percent Distribution of IUD Acceptors According to Follow-up Visits, and Knowledge Affecting IUD Use Status.

	Current use status of IUD				
	In Place	Removed	Expelled	Total	N
Contact with Health worker*					
Yes	68.6	27.3	4.2	100.0	1485
No	64.7	21.2	14.1	100.0	340
Whether knew possible to switch*					
Yes	64.5	28.8	6.7	100.0	1443
No	80.3	16.3	3.4	100.0	381
Knowledge score					
No knowledge	72.2	18.1	9.7	100.0	464
Low	64.6	32.0	3.4	100.0	725
Medium	72.3	21.8	5.9	100.0	101
High	-	-	-	-	6
Total	68.0	26.2	5.9	100.0	1296

Note: Total may not add up to 100% because of rounding off of numbers.
N= number of cases.
Ns may not be same in all variables because of 'not stated' and/or 'missing' cases.
* Chi-square is significant at 1% level.
** Chi-square is significant at 5% level.
- indicates 'N' is too small to calculate %.

Three different types of side-effect variables- whether experienced side-effects, number of side-effects, and type of side-effects- were used to determine what factors contribute to IUD use status. All three variables were found to have a strong influence on IUD use.

Table 5.22: Percent Distribution of IUD Acceptors According to Factors Affecting IUD Use Status.

	Current IUD use status				
	In Place	Removed	Expelled	Total	N
Experienced side-effects*					
Yes	50.1	44.2	5.7	100.0	599
No	76.5	17.3	17.3	100.0	1226
Number of side-effects*					
0	76.5	17.3	6.2	100.0	1226
1	49.5	43.8	6.7	100.0	388
2 - 3	50.6	45.6	3.9	100.0	180
4 +	54.8	41.9	3.2	100.0	31
Type of side-effects					
Cramps	52.0	45.3	2.7	100.0	75
Heavy bleeding*	26.3	67.1	6.6	100.0	152
Spotting*	48.4	40.6	10.9	100.0	64
Infection**	42.3	50.0	7.7	100.0	26
Backache	60.6	33.7	5.8	100.0	104
Heavy discharge*	51.9	45.7	2.5	100.0	81
Abdominal pain*	54.9	39.1	6.0	100.0	235
Pain during inter.*	18.2	81.8	0.0	100.0	22
Late period	72.1	25.0	2.9	100.0	68
Fever*	49.0	46.9	4.1	100.0	49
Total	67.8	26.1	6.0	100.0	1825

Note: Total may not add up to 100% because of rounding off of numbers.
N= number of cases.
'Ns'may not be same in all variables because of 'not stated' and/or 'missing' cases.
* Chi-square is significant at 1% level.

At the time of the interview 77 percent of women who had not experienced side-effects had their IUD in place compared with only 50 percent who had had side-effects (Table 5.22). If side-effects occurred the acceptors were two times more likely to have their IUD removed, and IUD expulsion was three times more likely to occur compared with women who did not have side-effects. As shown in the table, the number and type of side-effects were also important factors affecting IUD use. Among the acceptors who experienced four or more types of side-effects, 55 percent had their IUDs in place while this figure was 20 percentage points higher among the acceptors who did not have any side-effects.

The third panel of Table 5.22 presents the effect of various side-effects on IUD use status. Side-effects, such as- heavy bleeding, spotting between menses, infection, heavy discharge, abdominal pain, and pain during intercourse- seemed to have a significant impact on IUD use. Fifty-two percent of women who

reported heavy discharge and 55 percent who reported abdominal pain still had the IUD in place, however, the figure drops to 18 percent if they experienced pain during intercourse. The acceptors who experienced heavy bleeding had an IUD retention rate of as low as 26 percent. Those who experienced spotting between menses had the highest IUD expulsion rate (11 percent), followed by infection and heavy bleeding (7 percent each) and abdominal pain and backache (6 percent each).

Table 5.23: Percent Distribution of IUD Acceptors According to Whether They Paid for Insertion, Type of IUD, Source of Service Affecting IUD Use Status.

	Current IUD use status				
	In Place	Removed	Expelled	Total	N
Payment for IUD insertion*					
Yes	76.4	20.9	2.7	100.0	263
No	66.4	27.0	6.6	100.0	1562
Type of IUD*					
LL	69.8	22.7	7.6	100.0	1098
ML	65.3	31.6	3.1	100.0	455
CU	62.4	34.0	3.6	100.0	194
Source of service					
Government	67.6	26.4	6.0	100.0	1646
Private	69.8	24.0	6.1	100.0	179
Total	67.8	26.1	6.0	100.0	1825

Note: Total may not add up to 100% because of rounding off of numbers.
N= number of cases.
* Chi-square is significant at 1% level.

Payment for IUD insertion appears to have some effect on IUD use (Table 5.23). Seventy-six percent of the acceptors who paid for IUD insertion still had their IUD in place, while a slightly smaller proportion of women who had not paid for insertion retained their IUD. There appears to be a significant relationship between the type of IUD used and IUD use status. Although Copper T acceptors were less likely to have their IUD in place than Lippes Loop acceptors, the expulsion rate among Lippes Loop acceptors (8 percent) was almost twice that of the Copper T acceptors (4 percent). IUD use status was not affected by whether acceptors used government or private sources.

5.4. Factors Affecting Current FP Use

This section presents an analysis of factors which might effect the use of family planning among the acceptors whose IUDs

were removed or expelled. Overall, 64 percent of the acceptors who no longer were using the IUD due to removal or expulsion, reported using a family planning method at the time of the interview (Table 5.24).

Table 5.24: Percent Distribution of IUD Acceptors According to Demographics, Fertility Preference, Previous Family Planning Use and the Effect on Current Family Planning Use.

	Current FP use			
	Yes	No	Total	N
Number of living children*				
< 2	44.9	55.1	100.0	166
2	72.8	27.2	100.0	195
3	71.9	28.1	100.0	128
4	62.3	37.7	100.0	69
5+	60.3	39.7	100.0	58
Age of youngest child*				
< 12 months	46.7	53.3	100.0	75
12 - 23 months	80.3	19.7	100.0	61
24 - 35 months	76.4	23.6	100.0	72
36 - 47 months	66.7	33.3	100.0	84
48 - 59 months	59.6	40.4	100.0	94
60 + months	61.3	38.7	100.0	199
Desire more children*				
Yes	37.9	62.1	100.0	182
Depends	74.6	25.4	100.0	59
No	75.4	24.6	100.0	345
Timing of next child wanted*				
Within 12 months	6.6	93.4	100.0	91
After 12 months	71.3	28.7	100.0	150
Previous use of FP method**				
Yes	66.8	33.2	100.0	389
No	57.4	42.6	100.0	197
Total	63.7	36.3	100.0	586

Note: Total may not add up to 100% because of rounding off of numbers.
N= number of cases.
* Chi-square is significant at 1% level.
** Chi-square is significant at 5% level.

As shown in Table 5.24, number of living children and age of the youngest child appear to determine current method use of acceptors who were no longer using the IUD. They have an inverted U-shape relationship, with the peak of current use being among women who have 2-3 living children (72 percent) and those whose youngest child is between 12 and 23 months. The age, education,

and work status of the woman did not have any impact on current use of a family planning method (not shown in table).

Table 5.24 also shows that the proportion of the acceptors currently using a family planning method, after discontinuing the use of the IUD, was highest among those who did not want to have any more children, or wanted their next child after 12 months, and who had used a family planning method prior to using the IUD.

Table 5.25: Percent Distribution of IUD Acceptors According to Whether Knew Possible to Switch, Type of IUD, and Source of Service Affecting Current Family Planning Use.

	Current family planning use			
	Yes	No	Total	N
Whether knew possible to switch*				
Yes	67.6	32.7	100.0	512
No	36.5	63.5	100.0	74
Type of IUD**				
LL	59.8	40.2	100.0	331
ML	62.7	37.3	100.0	158
CU	78.1	21.9	100.0	73
Source of service				
Government	64.1	35.9	100.0	434
Private	54.8	45.2	100.0	42
Total	63.7	36.3	100.0	585

Note: Total may not add up to 100% because of rounding off of numbers.
N= number of cases.
Ns may not be same in all variables because of 'not stated' and/or 'missing' cases.
* Chi-square is significant at 1% level.
** Chi-square is significant at 5% level.

There seems to be a strong correlation between 'whether knew possible to switch' to another method and the current use of a family planning method. Sixty-eight percent of women who knew that they could switch methods were using a family planning method at the time of the interview, compared to only 37 percent of women who did not know that they could switch methods (Table 5.25). The percentage of women currently using another method also varied greatly according to the type of IUD they had used. Of those acceptors who were no longer using the Copper T, 78 percent reported that they were using a family planning method. This figure drops to 63 percent and 60 percent in cases where women used the Multiload and Lippes Loop, respectively. Although data indicates that more acceptors who used government sources rather than private sources were currently using a method, the

relationship between source of service was not statistically significant.

CHAPTER 6

PATTERNS OF IUD USE

The purpose of this chapter is to present estimated continuation rates, termination rates, and contraceptive failure rates, according to selected characteristics of IUD acceptors. In order to provide an accurate estimate, a life-table technique was used. This technique takes into account the variable "observation period", resolving the problem of different start dates. This permits the inclusion of all women in the analysis up until the end of their observation period.

6.1. Continuation Rates

Table 6.1 presents data on continuation rates from year 1 to 5, following IUD insertion. As can be seen from the data, one year continuation rates ranged from 79 percent among women using the IUD during 1988-1990 to 87 percent among those who started IUD use during 1993-1994. The acceptors who started IUD use most recently had the lowest continuation rates compared to those women who started IUD use earlier.

Overall, 85 percent of IUD acceptors continued IUD use through the first year, 77 percent through the second year, 66 percent through the third year, 61 percent through the fourth year, and 54 percent through the fifth year.

Acceptors from West Java consistently had the lowest continuation rates from year 1 (80 percent) to year 5 (44 percent). The differences between West Java, which had the lowest continuation rates, and Central Java which had the highest continuation rates, were approximately 18 percentage points at or beyond the third year. This represented twice the difference reported at the end of the first and second years.

As shown in Table 6.1, the continuation rates of the acceptors who used private sources were consistently higher than those who used government sources. Also, the continuation rates of Copper T acceptors were higher than Lippes Loop and Multiload acceptors through the second year. However, after the second year the Lippes Loop acceptors had higher continuation rates than those using the Multiload and Copper T with differences becoming wider as the duration of use increased. For example, at the end of the fifth year the continuation rate of Lippes Loop acceptors was 57 percent while that of Multiload and Copper T acceptors was 50 percent and 36 percent, respectively.

Table 6.1: Life-table Cumulative Continuation Rates for IUD Acceptors, According to Selected Characteristics, by Year.

	Years of use				
	1	2	3	4	5
Year of acceptance					
1988-1990(780)	87.4	80.0	68.2	62.5	55.1
1991-1992(661)	84.0	76.0	66.3	N.A.	N.A.
1993-1994(329)	77.8	N.A.	N.A.	N.A.	N.A.
Province					
West Java(706)	80.3	71.7	55.4	50.5	44.0
Central Java(579)	88.8	81.5	73.6	67.7	62.4
East Java(491)	86.2	79.4	71.0	64.5	56.1
Source of Service					
Government (1609)	84.4	76.8	65.4	60.2	52.7
Private(167)	87.8	81.5	73.2	63.8	60.1
Type of IUD					
Lippes loop (1067)	83.9	76.6	67.9	63.8	57.3
Multiload (447)	85.6	78.4	63.3	56.4	50.3
Copper T (192)	87.3	79.4	63.0	49.3	36.0
All (1776)	84.7	77.2	66.2	60.5	53.6

Note: Figure inside parenthesis indicates number of respondents.

Table 6.2 shows that younger women (15-29 years) had lower rates of continuation than older women (30 years and above). This is consistent with the figures that appear in Table 6.2, i.e. low continuation rates for women who had fewer children, whose youngest child was less than 2 years old, and who wanted to have more children.

Although there were slightly higher continuation rates among women who had completed primary school or who had received a higher education as compared to women who had not, the pattern was not consistent and the differences were not high enough to be significant. Consistently higher continuation rates were found among IUD acceptors who were paid for their work as compared with women who were not paid, with only a small difference of 5 percentage points at the end of the fifth year.

Table 6.2: Life-table Cumulative Continuation Rates for IUD Acceptors, According to Selected Demographic and Socio-economic Variables, by Year.

	Years of use				
	1	2	3	4	5
Age of Woman					
15-29 years(762)	82.4	72.6	59.8	51.5	40.8
30 + years (1014)	86.4	80.5	70.6	66.4	61.7
Number of Living Children					
< 2 (401)	85.5	80.2	65.8	54.6	42.5
2 (577)	85.0	75.3	65.5	61.9	53.6
3 (403)	85.9	77.6	69.2	62.7	57.7
4 + (395)	82.3	76.6	64.5	60.9	58.7
Age of Youngest Child					
< 24 months (294)	78.0	60.0	36.1	25.7	18.2
24-59 months(795)	82.9	76.0	65.4	60.2	53.5
Desire More Children					
Yes (478)	85.5	77.2	60.9	50.7	35.7
No (1126)	85.3	77.8	68.9	64.7	60.4
Education					
< Primary (741)	83.0	75.9	65.6	62.1	53.2
Primary+ (571)	85.4	77.2	67.3	60.0	56.0
Paid Work Status					
Yes (708)	89.7	82.2	71.3	66.8	56.0
No (1065)	81.4	73.8	62.7	56.0	51.7
All (1776)	84.7	77.2	66.2	60.5	53.6

Note: Figure inside parenthesis indicates number of respondents.

Data presented in Table 6.3 shows similar IUD continuation rates for both women with low knowledge of IUD and those with no knowledge. Acceptors who had low knowledge regarding various aspects of their IUD had the lowest continuation rates. Continuation rates were consistently higher among IUD acceptors who had a medium knowledge level as compared to those who scored zero or low, except in the third and fourth years. Continuation rates increased if acceptors had contact with health workers and had no side-effects. Continuation rate differences between women who experienced side-effects and those who did not, increased markedly with increase in use duration, from 16 percentage points in the first year to 32 percentage points in the fifth year.

Table 6.3: Life-table Cumulative Continuation Rates for IUD Acceptors, According to Selected Variables, by Year.

	Years of use				
	1	2	3	4	5
Knowledge Score on IUD					
Zero (461)	84.5	77.8	68.7	64.3	57.0
Low (718)	83.7	74.8	60.8	54.7	48.8
Medium (100)	85.8	78.9	67.2	64.5	64.5
Contact with Health Worker					
Yes (1453)	86.5	78.3	66.9	61.4	54.8
No (323)	76.8	72.5	63.2	56.3	47.8
Experienced Side-effects					
Yes (578)	74.0	62.8	48.1	39.9	32.2
No (1198)	89.9	84.3	75.2	70.8	64.4
All (1776)	84.7	77.2	66.2	60.5	53.6

Note: Figure inside parenthesis indicates number of respondents.

6.2. Termination and Failure Rates

Table 6.4 presents data on the various reasons for terminating IUD use, including accidental pregnancy. The data is presented according to province at 1, 2, and 3 year intervals after IUD insertion. Gross rates are shown, which adjust for competing risks by treating acceptors who terminate, for reasons other than the ones considered here, as if they were not being observed while continuing use. Data suggests that side-effects were the most frequently reported reason for stopping IUD use. However, rates vary when examined according to province and time since IUD insertion.

Termination rates due to a planned pregnancy or wanting to have a child ranged from 2.3-3.9 per 100 acceptors at 1 year, 5.6-7.0 at 2 years, and 7.8-10.9 at 3 years. Termination of IUD use due to wanting more children was consistently lower in West Java than in Central and East Java.

The acceptors from West Java tended to have the highest termination rates due to side-effects (7.6 per 100 acceptors at 1 year, 11.4 at 2 years, and 15.0 at 3 years) and expulsions (8.6 per 100 acceptors at 1 year, 11.7 at 2 years, and 13.2 at 3 years), while the acceptors from East Java had the highest termination rates due to accidental pregnancy (2.2 per 100 acceptors at 1 year, 3.7 at 2 years and 3.7 at 3 years).

Table 6.4: Termination Rates Among IUD Acceptors by Reason for Termination, According to Province.

	Planned pregnancy	Side-effects*	Accidental pregnancy**	IUD expired	IUD expelled*
Province					
West Java					
1-year	2.3	7.6	1.7	0.6	8.6
2-year	5.6	11.4	2.7	7.9	11.7
3-year	7.8	15.0	2.7	11.0	13.2
Central Java					
1-year	3.9	4.1	0.6	0.2	1.9
2-year	6.8	5.7	1.0	0.5	1.9
3-year	9.5	8.4	1.3	0.5	1.9
East Java					
1-year	3.5	3.5	2.2	2.1	5.4
2-year	7.0	5.0	3.7	3.3	5.7
3-year	10.9	6.6	3.7	4.2	6.1
All					
1-year	3.2	7.7	1.5	0.9	5.5
2-year	6.5	9.3	2.4	3.7	6.6
3-year	9.4	11.0	2.6	4.9	7.2

Note: * indicates Lee-Desu statistics comparing provinces is significant at 1% level.
** indicates Lee-Desu statistics comparing provinces is significant at 1% level. (is significant at 5% level.)

Overall, 7.7 per 100 IUD acceptors stopped IUD use after one year because of side-effects. The rate continued to rise (9.3 per 100 IUD acceptors at 2 years, and 11 per 100 IUD acceptors at 3 years). Among those who had side-effects after using the IUD, the most common symptoms were abdominal pain and heavy bleeding (see Chapter 4).

Approximately six percent of IUD acceptors discontinued use at the end of the first year due to expulsion. This figure increased only marginally at the end of the second and third years. The low and consistently same level of expulsion rates among the IUD acceptors from Central and East Java resulted in part because of the failure to follow-up on a large proportion of acceptors who were prone to this type of occurrence. Eleven per 100 IUD acceptors from West Java had their IUD removed at 3 years because of IUD expiration. This indicates that both acceptors and providers did not have correct information. Again, the rates for Central and East Java might have been underreported because of cases lost-to-follow-up.

Table 6.5: Termination Rates Among IUD Acceptors by Reasons for Termination, According to Year of Insertion.

	Planned pregnancy	Side-effects	Accidental pregnancy	IUD expired	IUD expelled*
Year of insertion					
1988-1990					
1-year	3.7	4.1	1.1	0.6	3.9
2-year	7.4	6.3	2.1	4.1	5.3
3-year	10.6	8.6	2.3	5.4	6.1
1991-1992					
1-year	2.8	5.3	2.2	1.2	5.9
2-year	5.2	7.8	3.1	2.8	6.4
3-year	6.9	11.1	3.1	3.7	6.4
1993-1994					
1-year	2.2	9.6	0.4	0.8	8.3
2-year	N.A.	N.A.	N.A.	N.A.	N.A.
3-year	N.A.	N.A.	N.A.	N.A.	N.A.

Note: * indicates Lee-Desu statistics comparing year of IUD insertion is significant at 1% level.
N.A. = Not applicable.

Table 6.5 presents termination rates by year of IUD insertion. Over the periods 1988-90 and 1993-94, termination rates markedly increased at the end of the first year, due to side-effects and expulsion. This might indicate, along with other reasons, a lack of technical competency by the provider to insert the device properly. An increase in termination rates due to side-effects could be related to a lack of sufficient counselling during the post-insertion period, particularly when the acceptors visited the clinic for consultation on side-effects or treatment.

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Appendix A

List of Sample clinics and number of respondents interviewed

Name of clinic	Kabupaten (District)	Total number acceptors	Number of acceptors selected	interviewed
West Java				
1. PKM Cikajang	Bekasi	392	40	3 7
2. KKB Tambun	Bekasi	920	40	35
3. PKM Cibarusah	Bekasi	1292	80	72
4. PKM Sukatani	Bekasi	1675	80	78
5. KKB Cibitung	Bekasi	165	40	35
6. PKM Tarumajaya	Bekasi	2031	40	38
7. Rawa Tembaga	Bekasi	160	40	32
8. KKB Bantar Gebang	Bekasi	1620	80	75
9. PKM Jati Asih	Bekasi	1647	80	76
10.KKB Jati Sampurna	Bekasi	909	40	40
11.KKB Weru	Cirebon	427	40	30
12.KKB Babakan	Cirebon	652	40	32
13.PKBRS Waled	Cirebon	572	40	31
14.RSU Garut	Garut	722	40	32
15.KKB Karang Pawitan	Garut	508	40	33
16.KKB Pancasura	Garut	378	40	37
Sub-total		**14070**	**800**	**713**
Central Java				
1. KKB Belik	Pemalang	389	40	35
2. KKB Kunduran	Blora	680	40	29
3. KKB Ngawen	Blora	1939	40	25
4. KKB Jiken	Blora	573	40	39
5. KKB Menden	Blora	1652	40	17
6. PKBRS.RSU Blora	Blora	782	40	20
7. KKB Mojolablan	Sukoharjo	2374	40	36
8. KKB Kartasura	Sukoharjo	2639	40	32
9. KKB Sukoharjo	Sukoharjo	1568	40	20
10.KKB Bendosari	Sukoharjo	2949	40	22
11.KKB Gatak	Sukoharjo	1074	40	27
12.KKB Polokarto	Sukoharjo	2506	40	34
13.KKB Baki	Sukoharjo	2070	40	29
14.KKB Bulu	Sukoharjo	3221	40	30
15.KKB Grogol	Sukoharjo	3096	80	57
16.KKB Jatingarang	Sukoharjo	1654	40	35
17.KKB Kenokerejo	Sukoharjo	660	40	26
18.KKB Bobotsari	Purbalinggo	1088	40	1
19.KKB Rembang	Purbalinggo	330	40	62
Sub-total		**31244**	**800**	**582**

cont. from previous page

Name of clinic	Kabupaten (District)	Total number acceptors	Number of acceptors selected	Number of acceptors interviewed
East Java				
1. PKM Konor	Bojonegoro	2701	80	49
2. PKM Dander	Bojonegoro	895	40	29
3. PKM Nglumber	Bojonegoro	423	40	21
4. KKB Balongbendo	Sidoarjo	247	40	37
5. PKM Mmaron	Probolinggo	240	40	31
6. KKB Glagah	Probolinggo	262	40	35
7. KKB Batu	Malang	1957	40	33
8. KKB Turen	Malang	1515	40	21
9. KKB Kepanjen	Malang	1429	40	23
10.KKB Gondanglegi	Malang	1815	40	30
11.KKB Tumpang	Malang	2383	40	33
12.KKB Singosari	Malang	1986	80	38
13.KKB Donomuljo	Malang	3934	80	50
14.KKB Karangploso	Malang	1240	40	27
15.KKB Poncokusumo	Malang	1701	40	26
16.KKB Sukopuro	Malang	855	40	32
17.KKB Beji	Malang	596	40	15
Sub-total		**24179**	**800**	**530**

APPENDIX B

October 18, 1994

FOLLOW-UP SURVEY AMONG IUD ACCEPTORS IN JAVA ISLAND

QUESTIONNAIRE

1994

IDENTIFICATION AND INFORMATION FROM CLINIC'S RECORD

1. Province: 2. Kabupaten:

3. Clinic/Kecamaten:

4. Type of Service Delivery Point:
   1 = Hospital
   2 = Health center
   3 = Private hospital
   4 = Private doctor
   5 = Private nurse
   6 = Private midwife
   7 = Village midwife
   8 = Others (specify)_____

5. Type of IUD accepted:
   1 = LL 5 = Not mentioned
   2 = ML 6 = Others (Specify)_____
   3 = CU T220
   4 = CU T380A

6. Date of IUD insertion: _____(day/month/year)

7. Name of IUD client:_____
8. Name of IUD client's husband:_____
9. Address:_____
_____

10. Date of IUD removed, if it is removed:_____
(day/month/year)
11. Reason for removal:_____
12. Dates of follow-up visit:

1_____(day/month/year).Attended by: Outcome:
2_____(day/month/year).Attended by: Outcome:
3_____(day/month/year).Attended by: Outcome:
4_____(day/month/year).Attended by: Outcome:
5_____(day/month/year).Attended by: Outcome:
6_____(day/month/year).Attended by: Outcome:
7_____(day/month/year).Attended by: Outcome:
8_____(day/month/year).Attended by: Outcome:

RECORD OF VISIT FOR INTERVIEW

Visit	Date	Result	Appointment for coming back
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____

START TIME OF INTERVIEW:

Interviewer signature:_____ _____ _____

Review by supervisor:_____ _____ _____
(Signature) (name) (date)

BACKGROUND INFORMATION

101. How old are you? _____years (completed)

102. Have you ever attended school? 1 YES 2 NO → [Go to 102.2]

↓

102.1 What is the highest level of schooling you have completed?

0 = NEVER FINISH ELEMENTARY SCHOOL
1 = PRIMARY D
2 = JUNIOR HIGH SCHOOL 5→ [Go to 103]
3 = SENIOR HIGH SCHOOL 5
4 = ACADEMY/UNIVERSITY E

102.2 Can you read or write? 1 YES 2 NO→ Go to 103

103. Do you currently work? 1 YES 2 NO → [Go to 104]

↓

103.1 What type of work do you do?
1 = Civil servant
2 = Private business
3 = Commerce and trade
4 = Military
5 = Agricultural/ fishery
6 = Factory worker
7 = Other (specify)_____

104. How many living children of your own do you have?

Total:_____ Boys:_____ Girls:_____

105. What is the age of the your youngest child? (**CODE IN MONTHS)**
_____

106. Would like to have any (more) children?

1 = YES → Go to 106.1
2 = DEPENDS ON HUSBAND D
3 = DEPENDS ON GOD 5→ [Go to 107]
4 = NO E

106.1. When would you like the next child?
_____(**CODE IN MONTHS)**

107. In the past, have you ever been pregnant at a time when you were not ready for the pregnancy?

1 = YES 2 = NO → [Go to 201]
↓

107.1 Were you using a method at that time?
1 = YES 2 = NO →[Go to 201]
↓

107.2 What method were using that time? (**ONLY ONE ANSWER)**

1 = IUD different type (**SPECIFY**)_____
2 = Implant
3 = Injectable
4 = Pills
5 = Condom
6 = Others (specify)_____

PREVIOUS FAMILY PLANNING USE

201. When was the first time you used a family planning method?
_____(**Code Month and Year) 0 = No method used** → Go to 301

202. What method was it?
1 = IUD (specify type_____)
2 = Implant
3 = Injectable
4 = Pills
5 = Condom
6 = Others (specify)_____

203. For how long did you use that method without interruption?
_____(**Code Months) if still continuing code 97 and go To 206.**

204. Did you discontinue that method because of side-effects?
1 = YES 2 = NO → [Go to 205]
↓

204.1 What kinds of side-effects were they? **(MULTIPLE ANSWERS POSSIBLE]** _____

204.2 Did you seek for treatments? 1 = YES 2 = NO

204.3 Who did you go for help? **(MULTIPLE ANSWERS POSSIBLE)**
1 = Hospital
2 = Health center
3 = Private hospital
4 = Private doctor
5 = Private nurse
6 = Private midwife
7 = PLKB
8 = PPKBD
9 = Village midwife
10= Friends/relatives
11= Chemist
12= Others (specify)_____

204.4 What direction/treatment advice did you get?
_____

205. Why did you (Was there other reasons that) discontinue that method? **(MULTIPLE ANSWERS POSSIBLE)** _____

206. Did you pay for family planning services? 1 = YES 2 = NO
* ↓
↓ [Go to 301.1]

206.1 How much for administration? _____
How much for contraceptive?_____
How much for treatment of complications?_____

206.2 Were you happy that you paid? 1 = YES 2 = NO

INFORMATION ON THE IUD USE

==========

301. Now I am going ask about the family planning method, IUD which you used/have been using according to the record.

301.1 Is that right you accepted _____ (**write type of IUD**)?
(Show samples of different type of IUD to confirm)
1 = YES 2 = NO
* ↓
* **(if not, check with client's card and correct**
* **it both here and in the indentification**
* **section) (indicate whether they have been**
* **corrected writing "C" i.e. corrected in the**
* **box). [ ] If the woman found to have not used**
* **the IUD, terminate the interview. Cross-check**
* **before terminating.**
↓

301.2. Is that right the IUD was inserted on _____
(**write date inserted IUD**)?
1 = YES 2 = NO
* ↓
* **(if not, check with client's card and correct**
* **it both here and in the indentification**
* **section).(indicate whether they have been**
* **corrected writing "C" i.e. corrected in the**
* **box). [ ]**
↓

301.3 Is that right you had the IUD inserted by/at _____
(**write place/person where/who provided**)?
1 = YES 2 = NO
* ↓
* **(if not, check with client's card and correct**
* **it both here and in the indentification**
* **section).(indicate whether they have been**
* **corrected writing "C" i.e. corrected in the**
↓ **box). [ ],**
[Go to 302] -------

302. After you accepted the IUD and now, have you seen health worker or you been visited by health worker for the IUD ?

1 = YES 2 = NO→ [Go to 303]

↓

302.1 How many times did you go to see health worker?_____
302.2 How many times have you been visited by health worker?_____

303. Do you know you have to see health worker after you had the IUD inserted? 1 = YES 2 = NO

304. Since insertion, have you experienced any side-effects?

1 = YES 2 = NO→ [Go to 305]

↓

304.1 What are/were those experiences? **(MULTIPLE ANSWER POSSIBLE)**

1 = CRAMPS	6 = HEAVY DISCHARGE
2 = HEAVY BLEEDING	7 = ABDOMINAL PAIN
3 = SPOTTING BETWEEN MENSTRUAL PERIOD	8 = PAIN DURING INTERCOURSE
	9 = LATE PERIOD
4 = INFECTION (P.I.D.)	10 = FEVER, CHILLS
5 = BACKACHE	11 = OTHERS (**SPECIFY**)_____

304.2 Are you still having any of these experiences?
1 = YES 2 = NO

304.3 Did you seek for treatments?
1 = YES 2 = NO → [Go to 304.5]

304.4 Why did you not seek for help?_____
[Go to 305]

304.5 Who/where did you go for help for the first time?
(MULTIPLE ANSWERS POSSIBLE)

1 = Hospital	7=PLKB
2 = Health center	8=PPKBD
3 = Private hospital	9=Village midwife
4 = Private doctor	10=Friends/relatives
5 = Private nurse	11=Chemist
6= Private midwife	12=Others(**specify**)_____

304.6 What direction/treatment did you get?_____

304.7 Were you given any medication? 1 = YES 2 = NO

304.8 About how many days/months/years after the use of the IUD, the complications started?_____

304.9 Did you pay for treatments/advice? 1 = YES 2 = NO

304.10 How many times did you go for help?_____(times)

304.11 At each time you went for help did the same person attended for the service?
1 = YES ↓ [Go to 304.13]
2 = NO ↓ [Go to 304.12]

304.12 If no, why did you go to different one?_____
_____

304.13 What was your impression regarding the treatment for complications?

305. Did you pay for the IUD insertion? 1 = YES 2 = NO→[Go to 306]
↓

305.1 How much at the time of the IUD insertion?_____

305.2 Do you think this cost is too much, too little, or about right?
1 = TOO MUCH
2 = ABOUT RIGHT
3 = TOO LITLE
4 = DON'T KNOW

306. Suppose the IUD does not suit you, can you switch to another method? 1 = YES 2 = NO

307. Are you still using the IUD? 1 = YES 2 = NO→[Go to 401]
↓

308. How long do you plan to use this method? _____(**MONTHS**)
(**if the answer is as long as I want, code 88**) ↓
[Go to 501]

IUD DISCONTINUED

==========

401. About what date did you have the IUD removed?
_____**(month/year)**

402. What was the main reason you had the IUD removed? **(Only one answer and do not read the possible answers)**

1 = Desire pregnancy	5 = Pregnancy
2 = Switch to another method	6 = Advice of staff
3 = Side-effects	7 = Husband wanted to have removed
4 = Fear of side-effects	8 = Others(**Specify**)_____

403. Before you had the IUD removed, did you discuss with anyone about the IUD removal for the above reason?
1 = YES 2 = NO→ [Go to 404]
↓

403.1 Who did you see? **(MORE THAN ONE ANSWERS POSSIBLE)**
1 = Friends or neighbours
2 = Other IUD users
3 = FP field worker
4 = Volunteer
5 = Nurse or midwife at hospital or puskesmas
6 = Doctor at hospital or puskesmans
7 = Private doctor
8 = Private midwife
9 = Village midwife
10 = Other (**specify)**_____

403.2 What was their suggestions?
1 = Continue the method
2 = Discontinue the method
3 = Switch to another method

404. What is/was the most disturbing side-effects of the IUD you had expereince ? **(ONLY ONE ANSWER POSSIBLE)**

1 = CRAMPS	6 = HEAVY DISCHARGE
2 = HEAVY BLEEDING	7 = ABDOMINAL PAIN
3 = SPOTTING BETWEEN MENSTRUAL PERIOD	8 = PAIN DURING INTERCOURSE 9 = LATE PERIOD
4 = INFECTION (P.I.D.)	10 = FEVER, CHILLS
5 = BACKACHE	11 = OTHERS (**SPECIFY**)_____

405. Who/Where did you go for the IUD removal? **(ONLY ONE ANSWER POSSIBLE)**

1 = Hospital	7=PLKB
2 = Health center	8=PPKBD
3 = Private hospital	9=Village midwife

4 = Private doctor 10=Chemist
5 = Private nurse 11=Others (**Specify**)_____
6= Private midwife

406. Did you pay for the IUD removal? 1 = YES 2 = NO→[Go to 407]
↓

406.1 How much for the IUD removal?_____

406.2 Do you think this cost is too much, too little, or about right?

1 = TOO MUCH 2 = ABOUT RIGHT
3 = TOO LITTLE 8 = DON'T KNOW

407. Are you using any family planning method now?
1 = YES 2 = NO
↓ *
[Go to 408] ↓

407.1.Why are you not using any family planning method now? **(MULTIPLE ANSWERS POSSIBLE)**

_____

[Go to 418]

408. What is the name of the method?
1 = IUD (specify type_____)
2 = Implant
3 = Injectable
4 = Pills
5 = Condom
6 = Tubectomy
7 = Vasectomy
8 = Others (specify)_____

409. When did you start using the method?
_____**(month/year)**

410. Who advised you this method?
1 = Friends or neighbours
2 = Other FP users
3 = FP field worker
4 = Volunteer
5 = Nurse or midwife at hospital or puskesmas
6 = Doctor at hospital or puskesmans
7 = Private doctor
8 = Private midwife
9 = Village midwife
10= Other (**specify)**_____

411. From whom/ where did you get this method? **(ONLY ONE ANSWER)**

1 = Hospital
2 = Health center
3 = Private hospital
4 = Private doctor
5 = Private nurse
6= Private midwife
7=PLKB
8=PPKBD
9=Village midwife
10=Chemist
11=Others (**Specify**)_____

412. Were you told about the possible side-effects of this method?

1 =YES 2 = NO

413. Were you told about other methods available to you?

1 =YES 2 = NO

414. Did you pay for this FP services? 1 = YES ↓ 2 = NO→[Go to 415]

414.1 How much for the contraceptive?_____

414.2 Do you think this cost is too much, too little, or about right?

1 =TOO MUCH 2 =ABOUT RIGHT 3 =TOO LITTLE 8 =DON'T KNOW

415. Are you or have you expereinced side-effects because of this method? 1 = YES ↓ 2 = NO→ [Go to 416]

415.1 What type of side-effects?_____

415.2 Is it more or less disturbing than one you had from the IUD?

1 = Less disturbing 2 = More disturbing 8 = Don't know

416. Are you happy that you switched to this _____ **(WRITE THE NAME OF THE NEW METHOD)** method?

1 = YES 2 = NO

417. How long do you plan to use this method? _____(**MONTHS**) (**If the answer is as long as I want, code 88).**

418. If a method does not suit you, were you told by health workers

that you can switch to another method?

1 = YES 2 = NO

419. Are aware of other family planning methods available?

1 = YES 2 = NO

CLIENT'S KNOWLEDGE ON IUD

501. Now I am going to ask some questions about IUDs. Do you know what type of IUD are (did) you using (used)?

1 = YES ↓ 2 = NO → [Go to 502]

501.1 What type?(**Show samples of different type of IUD to confirm and cross-check with 301.1**)_____

502. When should you come back for a check-up for the first time? **(DO NOT READ THE POSSIBLE ANSWER, ONLY ONE ANSWER)**

1 = AFTER ONE MONTH
2 = AFTER SIX MONTHS
3 = ANY OTHER TIME
4 = NO NEED TO COME BACK
8 = DON'T KNOW

503. Can you tell me how do you check if the IUD is in place? **(DO NOT READ THE POSSIBLE ANSWER, ONLY ONE ANSWER)**

1 = TOUCHING THE THREADS REGULARLY
2 = IF NOT SURE, GO TO THE CLINIC/HEALTH WORKER
3 = ANY OTHER ANSWER
8 = DON'T KNOW

504. Some IUD needs to be replaced after sometime, how many years can you keep the IUD which you are using?

1 = AS LONG AS I WANT
2 = _____(**YEARS)**
8 = DON'T KNOW

505. What do you know about the problems, if any, you may experience with having an IUD?

MULTIPLE RESPONSES POSSIBLE: WRITE 'Y' (YES) IF MENTIONED OTHERWISE 'N' (NO).

	WRITE Y OR N
CRAMPS	
HEAVY BLEEDING	
SPOTTING BETWEEN MENSTRUALS PERIODS	
INFECTION (P.I.D.)	
BACKACHE	
INFERTILITY	

506. Apart from the regular check-up visits, for what problems, if any, should you go back to clinic or health worker?

	WRITE Y OR N
HEAVY DISCHARGE	
ABNORMAL SPOTTING OR BLEEDING	
ABDOMINAL PAIN OR SEVERE CRAMPS	
PAIN DURING INTERCOURSE	
INFECTION (P.I.D.)	
LATE PERIOD	
NOT FEELING WELL-FEVER, CHILLS	
EXPULSION/CANNOT FEEL THREAD	
SHORTER, OR LONGER THREAD	

TIME ENDING INTERVIEW:

THANKS FOR YOUR COOPERATION AND YOUR TIME.

Appendix C
IUD Acceptors by Province

Table 1: Percent Distribution of IUD Acceptors According to Socio-economic Characteristics, by Province

	Province			
	West Java	Central Java	East Java	All
Respondent's Education				
Never attended school	27.8	19.1	6.8	18.9
Never completed primary school	19.4	23.9	25.5	22.6
Primary completed	23.4	31.4	45.7	32.4
Junior high completed	11.2	11.2	11.5	11.3
Senior high completed	16.1	12.9	8.9	13.0
Academy/university	2.1	1.5	1.7	1.8
Total	100.0	100.0	100.0	100.0
Respondent's Paid Work*				
No paid work	75.6	40.2	58.7	59.4
Civil servant	5.6	5.3	4.5	5.2
Private business	3.1	3.4	4.0	3.5
Commerce/trade	6.5	16.2	7.7	9.9
Agriculture/fishery	5.3	14.9	15.8	11.5
Factory worker	2.7	13.2	7.9	7.6
Others	1.3	6.7	1.3	3.0
Total	100.0	100.0	100.0	100.0
Number of cases	713	582	530	1825

Table 2: Percent Distribution of IUD Acceptors According to Demographic, Fertility Preference and Previous Use of FP Characteristics, by Province

	Province			
	West Java	Central Java	East Java	All
Age at interview				
15-19 years	0.6	0.5	0.8	0.6
20-24 years	15.5	11.0	18.7	15.0
25-29 years	30.9	21.7	28.1	27.1
30-34 years	26.5	28.5	30.7	28.4
35-39 years	18.4	17.2	14.4	16.8
40 years and above	8.1	21.1	7.4	12.1
Total	100.0	100.0	100.0	100.0
Number of living children				
< 2	17.8	22.7	28.3	22.4
2	31.1	31.3	37.4	33.0
3	22.6	24.1	20.6	22.5
4	14.7	11.9	8.3	11.9
5 +	13.7	10.1	5.5	10.2
Total	100.0	100.0	100.0	100.0
Age of youngest child				
< 12 months	6.9	6.5	6.2	6.6
12-23 months	14.1	9.5	5.1	10.0
24-35 months	16.9	11.5	14.4	14.5
36-47 months	13.7	11.3	19.1	14.5
48-59 months	15.7	12.6	19.5	15.8
60 months +	32.7	48.6	35.7	38.7
Total	100.0	100.0	100.0	100.0
Desire more children				
Yes	24.8	24.9	31.3	26.7
No	57.5	70.1	64.3	63.5
Depends	11.7	5.0	4.3	9.7
Total	100.0	100.0	100.0	100.0
Number of cases	713	582	530	1825

contd.

Note: Total may not add up to 100 % because of rounding.

contd. from Table 2

	Province West Java	Central Java	East Java	All
Timing of next child desired				
Less than 12 months	13.6	18.6	16.9	16.2
12-24 months	24.3	25.5	21.7	30.9
25 months +	62.1	55.9	61.4	52.9
Total	100.0	100.0	100.0	100.0
Number of cases	177	145	166	488
Pregnant when not ready				
Yes	16.7	9.6	16.7	13.9
No	83.3	90.4	85.1	86.0
Total	100.0	100.0	100.0	100.0
Number of cases	530	582	731	1825
Method in use when pregnant				
Yes	47.9	46.4	60.8	51.6
No	52.1	53.6	39.2	48.4
Total	100.0	100.0	100.0	100.0
Number of cases	119	56	79	254
Type of method in use when pregnant				
IUD	38.6	53.8	41.7	42.7
Injectable	28.1	19.2	4.2	17.6
Pills	29.8	26.9	0.0	26.7
Condoms	3.5	0.0	29.2	12.2
Others	0.0	0.0	2.1	0.8
Total	100.0	100.0	100.0	100.0
Number of cases	57	26	48	131

Note: Total may not add up to 100 % because of rounding.

Table 3: Percent Distribution of IUD Acceptors According to Whether A Family Planning Method Used before the IUD, by Province

	Province West Java	Central Java	East Java	All
Type of method previously used				
IUD	14.3	51.0	26.2	29.5
Injectable	25.9	12.9	3.6	15.3
Pills	20.9	11.3	17.5	16.9
Others	1.3	0.6	1.4	1.0
None	37.6	24.2	51.3	37.3
Total	100.0	100.0	100.0	100.0
Number of cases	713	582	530	1825

Note: Total may not add up to 100 % because of rounding.

Table 4: Percent Distribution of IUD Acceptors According to Whether The Previous Method Discontinued because of Side-effect

	Province West Java	Central Java	East Java	All
Whether Discontinued because of side-effects				
Yes	28.8	33.0	26.5	29.7
No	71.2	67.0	73.5	70.3
Total	100.0	100.0	100.0	100.0
Number of cases	444	342	238	1024

Note: Total may not add up to 100 % because of rounding.

Table 5: Percent Distribution of IUD Acceptors By Current FP Method, by Province

	Province			
	West Java	Central Java	East Java	All
Currently using a FP Method				
Yes	86.4	90.0	87.9	88.0
No	13.6	10.0	12.1	12.0
Total	100.0	100.0	100.0	100.0
Number of cases	713	582	530	1825
FP method currently using				
IUD	77.9	83.0	79.0	79.9
Implant	1.8	1.9	2.6	2.1
Injectable	11.2	8.4	9.2	9.7
Pills	7.5	3.6	6.9	6.0
Sterilization	1.1	2.9	1.9	1.9
Others	1.5	0.2	0.4	0.4
Total	100.0	100.0	100.0	100.0
Number of cases	616	524	466	1606

Note: Total may not add up to 100 % because of rounding.

Table 6: Percent Distribution of IUD Acceptors According to Knowledge on Basic Information on The IUD in Use, by Province

	Province			
	West Java	Central Java	East Java	All
Knew the type of IUD used				
Yes	80.4	55.7	67.2	68.7
No	19.6	44.3	32.8	31.3
Total	100.0	100.0	100.0	100.0
Time for the first check-up				
After one week	68.2	76.6	72.3	72.1
After one month	6.6	11.0	10.9	9.3
After six months	1.5	2.1	1.9	1.8
Any other time	2.9	3.1	3.2	3.1
No need to come	0.0	0.5	0.2	0.2
Don't know	20.8	6.7	11.5	13.6
Total	100.0	100.0	100.0	100.0
Way to check whether IUD in place				
Yes	16.7	26.6	11.5	18.4
No	83.3	73.4	88.5	81.6
Total	100.0	100.0	100.0	100.0
Number of cases	731	582	530	1825

Note: Total may not add up to 100 % because of rounding.

Table 7: Percent of IUD Acceptors Having Basic Knowledge on The IUD in Use, by Province

	Province			
	West Java	Central Java	East Java	All
IUD might caused				
Cramps	37.6	38.8	53.4	42.6
Heavy bleeding	24.8	15.3	34.5	24.6
Spotting between menses	11.6	13.2	16.6	13.6
Infection	5.9	8.1	N.A.	6.9
Backache	11.8	22.3	13.2	15.6
Infertility	1.8	1.5	4.2	2.4
Must see provider if				
Heavy discharge	17.7	5.2	19.6	14.2
Abnormal discharge	14.2	17.2	26.6	18.7
Abdominal pain	18.4	25.3	39.1	26.6
Pain during intercourse	11.9	8.1	13.4	11.1
Infection	5.0	6.2	17.4	9.0
Late period	10.8	7.2	10.8	9.6
Not feeling well, fever, or chills	11.8	10.0	9.4	10.3
Expulsion or cannot feel thread	13.5	3.4	6.4	8.2
Shorter or longer thread	7.2	3.8	3.6	5.0
Number of cases	731	582	530	1825

Note: N.A. = not available.

Table 8: Percent Distribution of IUD Acceptors According to Level of Knowledge on The IUD in Use, by Province

		Province West Java	Central Java	East Java	All
Level of Knowledge					
No knowledge	(0)	35.7	36.8	31.1	34.7
Low knowledge	(1-5)	55.8	56.0	53.2	55.1
Medium knowledge	(6-10)	8.1	7.2	14.0	9.5
High knowledge	(11-15)	0.4	0.0	1.7	0.7
Total		100.0	100.0	100.0	100.0
Number of cases		712	582	530	1824

Note: Total may not add up to 100% because of rounding.

Table 9: Percent Distribution of IUD Acceptors According to Whether Paid for Services, by Province

	Province			
	West Java	Central Java	East Java	All
Payment for IUD insertion				
Yes	13.6	19.6	9.8	14.4
No	86.4	80.4	90.2	85.6
Total	100.0	100.0	100.0	100.0
Number of cases	731	582	530	1825
Payment for IUD removal				
Yes	32.0	29.3	15.3	27.2
No	68.0	70.7	84.7	72.8
Total	100.0	100.0	100.0	100.0
Number of cases	266	150	131	547
Payment for treatment/advice on IUD				
Yes	65.6	50.4	41.0	52.9
No	34.5	49.6	59.0	47.1
Total	100.0	100.0	100.0	100.0
Number of cases	151	129	134	414

Note: Total may not add up to 100% because of rounding.

Table 10: Percent Distribution of IUD Acceptors According to Amount Paid for IUD Services, by Province

	Province			
	West Java	Central Java	East Java	All
Payment for IUD insertions				
< Rp. 3000	7.2	55.2	19.2	30.6
Rp.3000 - < Rp.5000	22.7	9.5	25.0	17.4
Rp.5000 - < Rp.10000	14.4	12.1	15.4	13.6
Rp.10000 - < Rp.20000	12.4	9.5	23.1	13.2
Rp.20000 - < Rp.30000	16.5	1.7	3.8	7.5
Rp. 30000 +	26.8	10.3	13.5	17.0
Not stated	0.0	1.8	0.0	0.8
Total	100.0	100.0	100.0	100.0
Number of cases	97	116	52	265
Payment for IUD removal				
< Rp. 3000	14.1	47.7	15.0	24.2
Rp.3000 - < Rp.5000	16.5	18.2	40.0	20.1
Rp.5000 - < Rp.10000	47.1	20.5	20.0	35.6
Rp.10000 - < Rp.20000	15.3	13.6	10.0	14.1
Rp.20000 - < Rp.30000	3.5	0.0	5.0	2.7
Rp. 30000 +	3.5	0.0	10.0	3.4
Total	100.0	100.0	100.0	100.0
Number of cases	85	44	20	149

Note: Total may not add up to 100% because of rounding and 'not ascertained' cases.

Table 11: Percent Distribution of IUD Acceptors According to Follow-up Status, by Province

	Province			
	West Java	Central Java	East Java	All
Whether client knew need to see HW				
Yes	88.4	90.4	89.1	89.2
No	11.7	9.6	10.9	10.7
Total	100.0	100.0	100.0	100.0
Number of cases	713	582	530	1825
Number of times seen HW				
0	1.3	0.6	3.2	?19.6?
1-2	41.8	42.8	45.4	34.9
3-4	36.2	33.2	37.6	29.6
5 +	18.8	23.2	15.7	15.9
Total	100.0	100.0	100.0	100.0
Number of cases	436	508	540	1484
Number of times visited by HW				
0	86.9	94.3	95.9	93.5
1-2	8.9	1.0	3.5	3.7
3-4	3.2	0.4	0.5	1.2
5 +	1.2	0.6	0.2	1.6
Total	100.0	100.0	100.0	100.0
Number of cases	713	508	437	1658

Note: Total may not add up to 100% because of rounding and 'not ascertained' cases.

Table 12: Percent Distribution of IUD Acceptors Who Experienced Side-effects, by Province

	Province			
	West Java	Central Java	East Java	All
Experienced side-effects				
Yes	35.2	29.7	33.0	33.4
No	64.8	70.3	67.0	66.6
Total	100.0	100.0	100.0	100.0
Number of cases	713	582	530	1825
Still experiencing side-effects				
Yes	35.9	20.2	25.1	28.3
No	64.1	79.8	74.9	71.7
Total	100.0	100.0	100.0	100.0
Number of cases	251	173	175	599
Type of side-effects*				
Cramps	8.4	14.5	16.6	12.0
Heavy bleeding	27.9	28.3	18.9	25.2
Spotting	10.0	14.5	8.0	10.3
Infection	2.0	12.1	0.0	4.3
Backache	16.3	30.1	6.3	17.1
Heavy discharge	25.1	6.9	3.4	13.5
Abdominal pain	38.2	45.1	34.9	39.6
Pain during inter.	6.4	2.9	0.6	3.6
Late period	20.7	7.5	1.7	11.5
Fever	11.2	11.6	0.6	8.2
Number of cases	251	173	175	599

Note: Total may not add up to 100% because of rounding.
* Total will not add up to 100% because multiple responses are possible.

Table 13: Percent Distribution of IUD Acceptors Who Experienced Side-effects According to Number of Months After Insertion Side-effects Occurred, by Province

	Province			
	West Java	Central Java	East Java	All
Less than a month	0.0	44.2	0.0	13.5
One month	36.4	14.0	59.7	36.7
Two months	16.6	16.3	9.0	14.5
Three months	11.9	3.1	8.2	8.0
Four months	4.0	0.0	0.0	1.5
Five months	5.3	3.1	0.7	3.2
Six months	2.0	3.1	2.2	2.5
After seven months	23.1	15.5	20.1	19.5
Not stated	0.7	0.8	0.0	0.7
Total	100.0	100.0	100.0	100.0
Number of cases	151	129	134	414

Note: Total may not add up to 100% because of rounding.

Table 14: Percent Distribution of IUD Acceptors Who Experienced Side-effects According to Whether Sought Assistance For Side-effects, by Province

	Whether sought assistance			
	Yes	No	All	N
Province				
West Java	60.2	36.3	100.0	251
Central Java	74.6	25.4	100.0	173
East Java	78.1	21.9	100.0	169
Total	69.5	30.5	100.0	593

Note: Total may not add up to 100% because of rounding and 'not ascertained' cases.

Table 15: Percent Distribution of IUD Acceptors Who Experienced Side-effects According to Reasons for Not Seeking Assistance, by Province

	Reason for not seeking assistance			
	Considered not serious	Other reasons	All	N
Province				
West Java	23.0	77.0	100.0	100
Central Java	59.1	48.9	100.0	44
East Java	73.3	26.7	100.0	30
Total	40.8	59.2	100.0	174

Note: Total may not add up to 100% because of rounding and 'not ascertained' cases.

Table 15: Percent of IUD Acceptors Who Experienced Side-effects According to Types of Assistance Received for Side-effects, by Province

	Advice Given	Medicine Given	IUD Removed	N
Source of Services				
West Java	62.2	39.1	27.2	151
Central Java	30.3	47.3	20.9	129
East Java	20.3	61.7	10.5	133
Total	36.7	51.8	17.2	390?

Note: N = number of cases.
Total will not add up to 100 % because multiple reponses are possible.

Table 16: Percent of IUD Acceptors Who Experienced Side-effects According to Number of Visits For Side-effects Assistance, by Province

	Number of visits				
	1-2	3-4	5+	All	N
Province					
West Java	61.6	30.5	7.9	100.0	151
Central Java	64.3	26.4	8.5	100.0	129
East Java	62.7	28.3	8.9	100.0	134
Total	63.0	28.5	8.5	100.0	414

Note: N = number of cases.
Total may not add up to 100% because of rounding and 'not ascertained' cases.

Table 17: Percent of IUD Acceptors Who Experienced Side-effects According to Whether Same Person Attended For Side-effects Assistance, by Province

	Whether same perosn attended				
	Yes	No	NS	All	N
Province					
West Java	83.4	10.6	6.0	100.0	151
Central Java	83.7	14.7	1.6	100.0	129
East Java	89.6	10.4	0.0	100.0	134
Total	85.5	11.8	2.7	100.0	414

Note: N = number of cases.
Total may not add up to 100% because of rounding and 'not ascertained' cases.

Table 18: Percent of IUD Acceptors Who Experienced Side-effects According to Whether Payment Made For Side-effects Assistance, by Province

	Whether payment made			
	Yes	No	All	N
Province				
West Java	41.0	59.0	100.0	134
Central Java	50.4	49.6	100.0	129
East Java	65.6	33.8	100.0	151
Total	52.9	47.1	100.0	414

Note: N = number of cases.
Total may not add up to 100% because of rounding and 'not ascertained' cases.