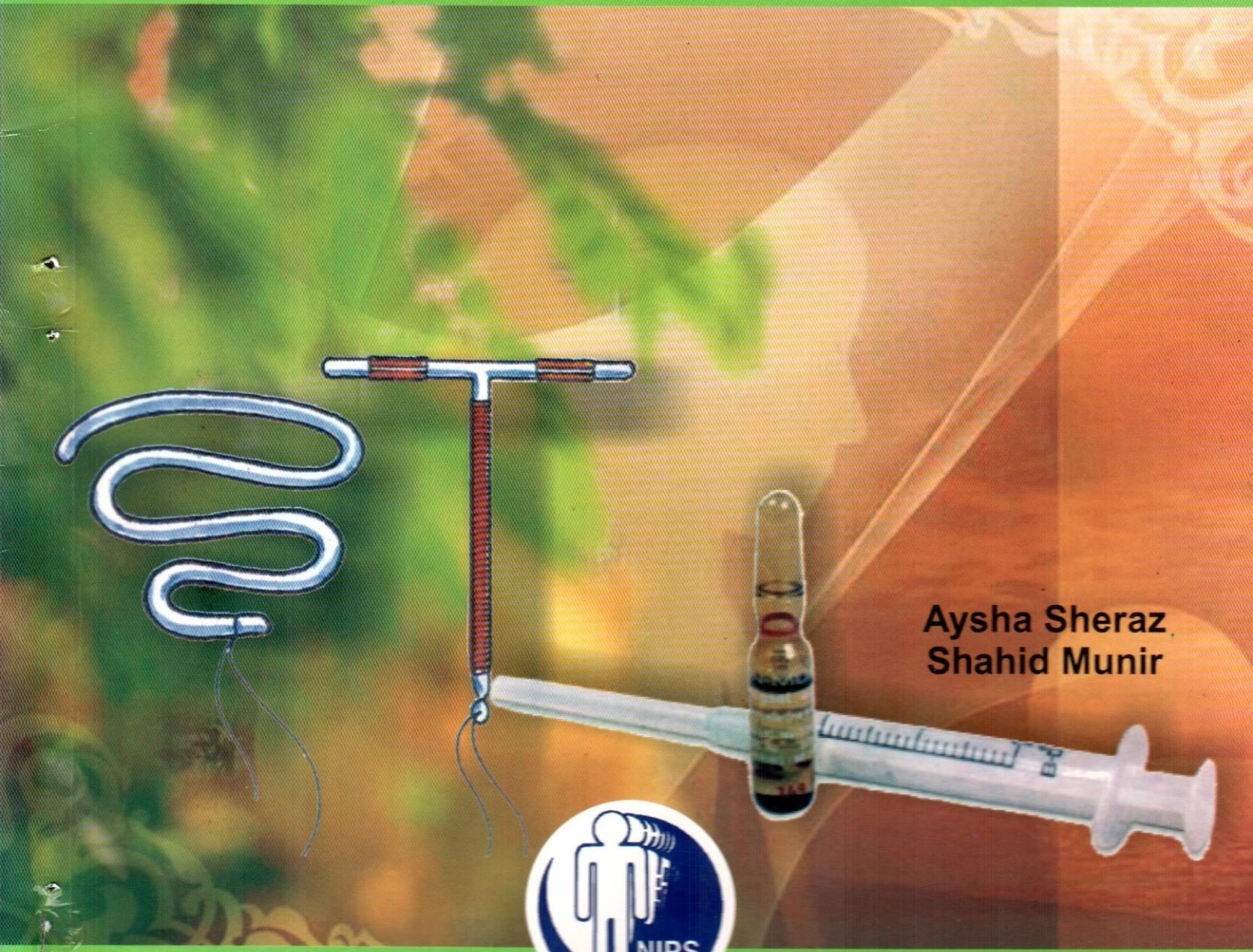
CONTINUATION OF IUD AND INJECTABLES IN SELECTED DISTRICTS OF PUNJAB



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Islamabad
2006

CONTINUATION OF IUD AND INJECTABLES IN SELECTED DISTRICTS OF PUNJAB

A Pilot Study

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FOREWORD

The National Institute of Population Studies (NIPS) is mandated to undertake applied and inter-disciplinary research in the field of population and development. It provides research-based support and analytical inputs in the area of population, family planning, reproductive health and development for planning and policy-making to the government of Pakistan.

The present study entitled "Continuation of IUD and Injectables in Selected Districts of Punjab, A Pilot Study" makes a new beginning in research conducted on follow up of IUD and Injectables use in the two districts. This study is quantitative, analytical and policy relevant. The data were collected through structured questionnaires from the respondents in four selected rural and urban areas of Attock and Chakwal in the Punjab province. A total of 1316 women between the ages of 15-49 years were identified and 644 were successfully interviewed in the Survey.

We would like to gratefully thank all those women who contributed to this study by sharing their valuable experiences and views regarding the use of the IUD and Injectables. The District Offices provided statistics needed for the selection of the samples and their assistance is gratefully acknowledgement. The research team efficiently and successfully accomplished the difficult task of data collection. Dedication and hard work of the interviewers and supervisors in carrying out their assignment in field deserve special mention and appreciation.

The authors have produced a concise and comprehensive report. At NIPS, we hope and expect that the policy makers and planners would find the data, analysis and findings of the study useful in devising strategic interventions for focusing on improving contraceptive continuation of IUD and Injectables and making their role effective in family planning.

Dr. Saeed Shafqat
Executive Director

ACKNOWLEDGEMENT

"Continuation of IUD and Injectables in selected districts of Punjab: A pilot study" was carried out in many stages i.e. planning of the project and technical assistance, research methodology including questionnaire, samples, pre-testing and training, field work, data editing, data entry and data processing and production of the research report. The field work of the survey was conducted during June and July 2005. The assistance of several individuals, organizations and technical committee of the project for their work at different stages of the project is acknowledged (including Pakistan Institute of Development Economics, Population Council, Ministry of Population Welfare etc).

Special mention should be made of the services performed by the field staff who really worked hard for the completion of the project in a substantive manner. This study would not have been completed without the painstaking work done and concerted efforts by interviewers and field supervisors. Timely completion of field activities was possible due to the continuous support provided by the offices staff.

The study culminated through a laborious process along with comments received from various other senior professionals. Especially Director Mr. Mahboob Sultan efforts are commendable who persuaded and encouraged me, and was available at every stage of the survey.

We are also grateful to Mr. Faateh ud din Ahmad, Computer Programmer NIPS and Mr. Bilal Ahmed, Data Management Supervisor who processed, and produced required tables. Mr. Asif Amin Khan also deserves appreciation who finally gave a good shape to the report. Special thanks to the women, who spared their precious time and provided us with their valuable, honest and frank opinions.

We are deeply indebted and highly obliged to Dr. Saeed Shafqat, Executive Director, NIPS for his efficient system of project management implemented by his motivational approach, which has enabled us to achieve successful completion of the project in time. He also encouraged us to finalize the report and provided valuable comments and suggestions.

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EXECUTIVE SUMMARY

At its inception Pakistan had a population of 32.5 million, which reached 153.5 million in 2005, with growth rate of 1.9 percent. Pakistan sharing 0.6 per cent of area on this globe today shares 2.3 per cent of its population. (NIPS, 2005). The contraceptive prevalence has increased from 11.8 (PDHS, 1990-91) to 36 percent (NIPS, 2006). Data indicate that there is still a big gap existing between the level of contraceptive knowledge and practice, due to multiple reasons ranging from socio-cultural barriers to availability, affordability and quality of care issues. Thus in addition to a relatively low contraceptive prevalence rate, there is also a significant discontinuation among contraceptive users, reasons for which need to be addressed by the policy makers and researchers alike. Intrauterine devices (IUDs) which are also called Copper T have been used throughout the world for almost three decades. Females use injectable contraceptives as a temporary method of contraception. They have been in use in India since 1992. They are widely accepted in USA, Europe and parts of Asia, especially in Thailand and Indonesia. Injectable Contraceptives (ICs) are made up of progestational compounds

Discontinuation of a particular contraceptive has many reasons that could relate to side effects of the contraceptive, non-availability, price of the contraception, accessibility and preferences of the clients. There have been several national and international studies on contraceptive continuation. However, there has not been any recent research on the issue in the context of Pakistan. The present report "Continuation of IUD and injectables in selected districts of Punjab: A pilot Study" is based on primary data collected from two districts of the Punjab, with the objective to study, understand and analyze the status of continuation of IUD and injectables and reasons for discontinuation of these methods in Pakistan. The study, primarily a pilot in nature, following a quantitative research approach, focused on users of IUD and Injectable in Attock and Chakwal districts of Punjab, both of which have well defined urban and rural areas. The study took a total of 1316 clients i.e. 783 of IUD and 533 of Injections registered in four FWCs in the two districts during the last 12 months (from June 2004 to June 2005) as sample for study.

The outcome of this study is expected to assist the Population Welfare Program to formulate more effective strategies taking into consideration the findings and recommendations that emerge from this study. The research findings indicate the demographic and socio-economic characteristics of IUD and injectable users in accordance to the rural and urban differentials, and their inter-linkages with the respondents' continuation with focus on IUD and injectable users only.

Major Findings

i. The study indicates that eighty percent of the respondents were in the age group 25 to 39 indicating that younger aged married females use fewer contraceptives as compared to older women. A higher percentage of contraceptive prevalence is evident in females above 35 years.

ii. The mean age at marriage is quite low i.e. 18.5, thus chances of having more children are quite high. Most of the women were married in the younger age group of 15-19 i.e. 62 percent.

iii. Nearly three fourths of the respondents (77%) have no desire for children as compared to their husbands who desire ten percent more children than their wives (67 %). Therefore, males should be educated and motivated about the concept of small family norm

iv. The share of illiterate respondents was higher (61 percent) showing that more than half of the respondents had no education, indicating a correlation between users education levels and contraceptive continuation trends.

v. More than four-fifths of the population of the survey was not working again endorsing the fact that female employment status is closely inter-linked with the number of children as well as continuation of a contraceptive method;

vi. Contraceptives use of all methods shows that the women had most knowledge of injections (98.4 %) followed by IUD (94.7%), pills (92.7%), condom (84.6%) and female sterilization (73.1%). The current use information of respondents by type of method shows that the injectables were used more in Attock (37%) whereas IUDs were mostly used in Chakwal (44%).

vii. Only one-fourth (25%) of the women were counseled about all the methods by the service providers while half of the women mentioned that they were informed about some of the methods (58%);

viii. Regarding use of contraceptives, the most frequently mentioned problem was bleeding/irregular menstruation by 20 percent of the women;

ix. In willingness of women to use contraceptives, the study indicates that the duration of the contraceptive use is a major determinant of willingness of the user to continue. Longer the contraceptive use more is the willingness of the user to continue use in future.

x. The main reason for not using contraceptives, quoted by the highest percentage of respondents, is the desire for more children. A higher proportion of such respondents live in rural areas. This was followed by "excessive bleeding, absence of husband, irregularity in menstruation cycle, stoppage of menses, nausea, infection and pregnancy.

xi. Continuous use of family planning methods may be expected to vary by various demographic, social, and economic characteristics. The study presents the continuation of IUD and injectables during the reference period of June 2004 to June 2005. It is observed that the number of both IUD and Injectable users have increased. Taking June 2004 as a reference period the number of users of IUD who obtained IUDs have increased from 41 in June 2004 to 335 by the end of June 2005. During the period a total of 40 women who had accepted IUD during different month had

CONTENTS

Title	Page No.
Chapter - 1	**1**
INTRODUCTION AND BACKGROUND	**1**
1.1 INTRODUCTION	1
1.2 IUD AND INJECTIBLE USE	2
1.3 CONTINUATION OF IUD AND INJECTABLES	3
1.4 LITERATURE REVIEW	4
1.4.1 Quality of Services	4
1.4.2 Access to Services	5
1.4.3 Contraceptive Counseling	6
1.4.4 Follow Up Visits	6
1.4.5 Contraceptive Continuation	7
1.4.6 Causes of Discontinuation`	8
1.4.7 Myths and rumors	9
Chapter 2	**11**
RESEARCH METHODOLOGY	**11**
2.2 OBJECTIVES	12
2.3 RESEARCH METHODOLOGY	12
2.4 SAMPLE DESIGN	12
2.5 RESEARCH TOOLS	13
2.6 STUDY TEAM	14
2.6.1 Composition	14
2.6.2 Training	14
2.7 FIELD WORK	14
2.7.1 Coverage of the Sample	14
2.7.2 Method Acceptance	15
2.8 DATA ANALYSIS PROCEDURES	16
Chapter 3	**17**
PROFILE OF ELIGIBLE PERSONS	**17**
3.1 DEMOGRAPHIC CHARACTERISTICS AND FERTILITY PREFERENCE	17
3.1.1 Age distribution	17
3.1.2 Age at Marriage	19
3.1.3 Living children by contraceptive Use	20
3.1.4 Desired number of children	21
3.2 SOCIO-ECONOMIC CHARACTERISTICS	22
3.2.1 Education Status	22
3.2.2 Employment Status	24

Title	Page No.
Chapter 4	**25**
KNOWLEDGE, USE AND CONTINUATION OF CONTRACEPTION	**25**
4.1 STATUS OF FP METHODS	25
4.1.1 Knowledge of Methods	25
4.1.2 Ever Use of Contraceptives	26
4.1.3 Current Use	27
4.1.4 Counseling of Contraceptive Methods	28
4.2 PROBLEMS FACED WHILE USING CONTRACEPTIVES	29
4.3 VISITS TO CENTRES	29
4.4 WILLINGNESS TO USE METHOD	30
4.5 FUTURE INTENTIONS	31
4.6 REASONS FOR NOT USING ANY CONTRACEPTIVE METHODS OR DISCONTINUATION:	31
4.7 CONTRACEPTIVE CONTINUATION	32
Chapter 5	**35**
MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	**35**
5.1 SUMMARY OF FINDINGS AND CONCLUSIONS	35
5.2 RECOMMENDATIONS	36
REFERENCE	**39**
Annex-I	**43**
Annex-II	**45**

LIST OF TABLES

Title		Page No.
Table 2.1	Percent Distribution of IUD/Injection Accepters By Area and Rural Urban Residence	13
Table 2.2	Percent Distribution of coverage of Sample By Area and Rural Urban Residence	15
Table 2.3	Annually and Monthly Performance of Method acceptance of IUD/Injection, By Area and Rural Urban Residence	15
Table 3.1	Percent Distribution according to Age distribution of IUD/Injection Users By Area and Rural Urban Residence	18
Table 3.2	Levels and trends in Percent Distribution according to Age distribution from 1993-1997 in three surveys	19
Table 3.3	Percent Distribution of IUD/Injection according to Age at Marriage By Area and by rural Urban Residence.	20
Table 3.4	Percent Distribution of IUD/Injection Users According to Living children By Area and by Rural Urban Residence	21
Table 3.5	Percent Distribution of IUD/Injection Users According to Desire for children By Area and by Rural Urban Residence	22
Table 3.6	Percent Distribution of IUD/Injection Users According to Education level By Area and by Rural Urban Residence	23
Table 4.1	Percent Distribution of IUD/Injection by knowledge according to Type of Method By Area and by Rural Urban Residence	25
Table 4.2	Percent Distribution of IUD/Injection Ever Users By Area and by Rural Urban Residence	27
Table 4.3	Percent Distribution of IUD/Injection Current Users By Area and by Rural Urban Residence	28
Table 4.4	Percent Distribution of IUD/Injection Users Having Counseling About Methods By Area and by Rural Urban Residence	28
Table 4.5	Percent Distribution of Respondents Who faced Problems while using IUD and Injectables By Area and by Rural Urban Residence	29
Table 4.6	Percent Distribution of IUD/Injection Users Who Visited Centre to solved problem among those who experienced Problems By Area and by Rural Urban Residence	30

LIST OF TABLES

Title		Page No.
Table 4.7	Percent Distribution of IUD/Injection current Users who are Willing to continue with the present method By Area and by Rural Urban Residence	30
Table 4.8	Percent Distribution of IUD/Injection Non Users Future intention to use FP method By Area and by Rural Urban Residence	31
Table 4.9	Percent Distribution of IUD/Injection Non-Users According to Reasons for discontinuation By Area and by Rural Urban Residence	32
Table 4.10	Number of IUD and Injectables Users and Dropouts for the year 2004-5	33

Chapter - 1

INTRODUCTION AND BACKGROUND

1.1. INTRODUCTION

Contraceptive behavior in the developing world has changed markedly over the past three decades (United Nations, 1996 and 1999). However, the Population Planning Programme in Pakistan, which has a long history of interventions since 1960s, has not been able to effectively reduce the population growth. At its inception Pakistan had a population of 32.5 million, which reached 153.5 million in 2005, with a growth rate of 1.9 percent. Pakistan today shares 0.6 per cent of the area on this globe and 2.37 per cent of its population. (NIPS, 2005)

One of the significant indicators of change in contraceptive behaviour is the increase in the number of consistent contraception practitioners for longer duration. The contraceptive prevalence has increased from 11.8 (PDHS, 1990-91) to 36 percent (NIPS, 2006). It was observed that 95.7 percent of the respondents had knowledge of contraceptives, while Intra-Uterine Device (IUD) was the choice of largest percentage (38%) of contraceptive users in Pakistan, followed by injection (20.9%), pill (6.8%) percent, condom (7.3%) percent and female sterilization (8.5%) percent (Hakim A, et al, 2001). It is evident from the Pakistan fertility survey that 26.7 percent acceptors from the total sample dropped out from the use of a method. Furthermore, twenty two percent of the respondents who dropped out had been IUD accepters. A major reason (36%) cited for dropping out was the desire to have more children (Hakim, 2001).

As desire for family size declines and contraceptive prevalence increases, the ability of couples to achieve their reproductive intentions depends on the effectiveness and continuity with which they practice contraception. Some of the studies have shown that the discontinuation among acceptors is very high in Pakistan. One study has analyzed that more than two-thirds of oral pill and Injectable acceptors and four out of ten IUD acceptors discontinue the use within a year of adopting the contraception. There has been evidence that women who use contraceptives discontinue using them without adopting an alternate method, or resort to traditional and less effective methods, which lead to unwanted pregnancy (Sultan. M, 2001).

Discontinuation of a particular contraceptive has many reasons that could relate to side effects of the contraceptive, non-availability, affordability, accessibility and preferences

of the clients. There have been several national and international studies on contraceptive continuation. However, there has not been any recent research on the issue in context of Pakistan, which has created justification for undertaking such a study. The present report based on primary data collected from two districts of Punjab, analyses status of continuation of IUD and injectables and reasons for discontinuation of these methods in Pakistan. The outcome of this study is expected to help the Ministry of Population Welfare to improve its service delivery in order to reduce early dropouts.

1.2 IUD AND INJECTIBLE USE

Intrauterine device (IUDs) has been used throughout the world for almost three decades. The IUD, a flexible frame that fits inside a woman's uterus, provides very effective, safe, and long term-yet quickly reversible-protection from pregnancy. It is one of the main contraceptive methods with a lower rate of complications than hormonal methods and offers 7-10 years of prevention against pregnancy (Pop Reports, 2006).

Injectable contraceptives are used as a temporary method of contraception by females. They have been in use in India since 1992. They are widely accepted in USA, Europe and parts of Asia, especially in Thailand and Indonesia. Injectable Contraceptives (ICs) are made up of progestational compounds. Progesterone is one of the female sex hormones. An estimated 16 million women throughout the world are currently relying on Injectable steroids for contraception (Snow R, 199).

IUDs are widely used only in a few large countries, such as China, Egypt, and Vietnam, and little used in most other countries. Due to these few large countries, however, almost 153 million married women of reproductive age worldwide, or 13% of all such women, use IUDs. The IUD is popular in a few other Asian countries, including Mongolia, North Korea, Taiwan, and Vietnam; Cuba and Mexico; and in several countries of the Near East and North Africa. Among developed countries, the IUD is the most popular method in Eastern Europe and Central Asia, Finland and Norway. In other countries of the world the IUD is much less commonly used.

The IUD, first introduced in Pakistan in 1962, has been playing an important role in the family planning program of Pakistan. However, the popularity of the IUD in Pakistan has fluctuated considerably, The number of insertions first peaked at 438,300 in the fiscal year 1968-69 but gradually declined to 70,800 in 1977-78 and did not exceed a level of 300,000 until 1986-87. With the introduction of the Copper-T in 1982, the performance figures started to increase sharply and reached as high as 749,963 in 1991-92. It increased to

1,284,000 in 1998, which reached to 2,457,000 in 2000 and 3,205,000 in 2003 (MoPW, 2003).

Findings from the 1991 Pakistan Demographic Health Survey (PDHS) suggest that despite the large number of reported insertions, there has not been a corresponding increase in the IUD prevalence rate among married women of reproductive age (PDHS, 1991). Insufficient attention has been paid to continuity and regularity of IUD use. Consequently, the dropout rates of IUD users have been very high (Population Council. 1992).

Observing the earlier evidence, this study explores the factors related to IUD and injectables use and also observes the reason why there is discrepancy among the actual use and number of insertions quoted by the program.

1.3 CONTINUATION OF IUD AND INJECTABLES

The continuation of contraceptives use can be observed with the help of continuation rate. The continuation rate is defined as the percentage of users still using IUD or Injectable after at least 12 months of admission" The monthly continuation rate (MCR) refers to the ratio of the total number of contraceptive users in two adjacent months to the total number of users in the first month.

Continuation rates of contraceptives can also be calculated with the help of life tables, describing the overall experience of users of a method regardless of their length of use, as well as an overall index of continuity.

Historically, in Pakistan and elsewhere, information on continuation rates has been typically obtained through follow-up studies in which samples of acceptors were drawn from lists supplied by service providers. The acceptors were located and interviewed in their homes to determine the length of method use, reason (s) for discontinuation, and degree of user satisfaction. In Pakistan, three follow-up studies have been conducted; a 1992 study on IUD acceptors (Rob et al. 1993), a 1993 study on Injectables (National Research Institute on Fertility Control et al. 1993) and later a study on Pakistan Contraceptive Users and Satisfaction Longitivity Survey in 1997 by the Population Council. Another similar kind of follow up study was also conducted in Indonesia.

The 1997 study by the Population Council observed all the characteristics of contraceptives users. It indicated a strong association between age and continuation. The study found that younger women aged <25 years had continued longer (71 percent) as

compared to women aged 30+ (64.6 percent). In addition to age, the literacy level of the users also affected continuation rates to a certain extent. Nearly 65 percent of the uneducated women continued use at 12 months as against 70 percent of educated women. However, the affect of economic situation of the user was more prominent. The continuation rate among the lower socioeconomic segments was 62 percent while nearly 71 percent women in middle-income groups continued for a longer period. The women with one living child used contraception for spacing although their continuation rate was low, 60 percent. At parity 2-3, 70 percent continued use whereas at higher parity continuation rate came down to 66 percent. Lactating mothers who had resumed menses were more in need of family planning therefore they continued use more than their counterparts (Pop. Council, 1997)

1.4 LITERATURE REVIEW

The research in the area of contraceptive continuation indicates that as the desired family size declines and contraceptive prevalence increases, the ability of couples to achieve their reproductive intention depend increasingly on the effectiveness and continuity, with which they practice contraception. Empirical research has assessed the links between contraceptive behavior, accessibility, quality of services, side effects, negative information, discontinuation and counseling. In the following context, the factors briefly described below would assist in keeping the analysis perspective in view as the issues covered in the research come under these areas.

1.4.1 Quality of Services

Contraceptive continuation is thought to be interlinked strongly with the quality of family panning service environment as indicated by various studies. Jain (1989) has argued that the quality of services affects contraceptive prevalence and ultimately fertility through increasing contraceptive acceptance and continuation. Jain argues that the quality of family planning services is an important determinant of contraceptive use because it is likely to affect contraceptive adoption and, more significantly, contraceptive continuation. He emphasizes that various methods' availability is the key component of service quality, which is likely to influence continuity of use. Based on his work and that of other, contraceptive continuation rate has been proposed as an outcome indicator for monitoring quality of care (Bertrand et al. 1994).

Our study has also observed if quality of contraceptives is good there is more contraceptive use. Similarly, a study conducted in Morocco by Magnani et al. (1999) indicates that the family planning service environment significantly influences subsequent adoption of a method. In all these studies, however, the measures of quality used did not

capture the essence of the contact that a person has with the service delivery system; such contact has been hypothesized to play an important role in client's subsequent contraceptive behavior (Bruce, 1990).

Importance of quality of contraceptives is also proved in a longitudinal study in which 7,000 reproductive-aged Bangladeshi women were observed to evaluate the relative impact of service quality and client characteristics on contraceptive adoption and method continuation. The results provide new and persuasive empirical evidence on the importance of service quality for contraceptive behavior. (Koenig MA, 2003).

Similar point is also supported in a study in which using a linked Demographic and Health Survey and situation analysis data set from Peru, Mensch et al. (1996) showed that women living in high quality service environment were significantly more likely to be practicing contraception than those living in poor quality service planning clinics. In addition, the number of contraceptive methods available at the community level was associated with adoption, continuation and switching of contraceptive methods.

A study found a significant and positive effect of women's perceptions of service quality on both adoption and continuation. Other studies have also shown a positive association between clients receiving their chosen method and contraceptive continuation in Indonesia (Pariani et al. 1991) and adequate counseling on side effects and contraceptive continuation in The Gambia and Niger (Cotton et al. 1992).

1.4.2. Access to Services

Access to and readiness of health facilities have been linked with specific contraceptive behavior, including method of adoption, continuation and switching. Although some studies have found a positive relationship (Hotchkiss et al. 1999 and Steele et al. 1999), others have found a weak link between readiness and clients' contraceptive behavior (Feyisetan and Anisworth, 1996; Mensch et al, 1996; and Magnani et al., 1999).

Analysis of impact of accessibility on the use of reversible modern methods in rural areas suggests that accessibility to static family planning services has no impact whereas access to private practitioners who offer family planning services has minor effect. Whereas the results show that the women are 86 percent more likely to use a modern method when workers and facilities are accessible within five kilometers. (Sultan M and Cleland. J, 1997). According to a study undertaken by NIPS in 2000, major reason of accepting any method is "recommended by the Family planning worker (FWW)" (Hakim, A. 2000).

1.4.3 Contraceptive Counseling

Counseling of contraceptives have great effect in the contraceptive use of a client. Studies in Asia and Africa indicate that information provided during a consultation is positively associated with contraceptive continuation. A study noted that discontinuation was higher among women who reported that they had not been adequately counseled about contraceptive side effects: for example in Niger, 37 percent of women who reported inadequate counseling discontinued use, whereas among women reporting adequate counseling, only 19 percent discontinued use. A similar situation was encountered in Gambia, where 51 percent of those who felt they were not properly counseled discontinued use, compared with 14 per cent of those who reported being well counseled.

In a Chinese study it has been noticed that among the acceptors of the inject able contraceptive in four family planning clinics in China (Lei et al. 1996) those who received more information were significantly more likely to continue using the method, than those who received little information. A study being conducted in India (Patel et al. 1999) indicated that IUD continuation rate improves after a health education intervention is introduced. A follow up study of 1,945 family planning acceptors in Indonesia reported that women who had received their preferred method were significantly more likely than were those who had not been using a contraceptive a year later (Pariani, 1991).

1.4.4 Follow Up Visits

Follow up visits after the contraceptive use play an important role but it was concluded in a study that that regular follow-up after the insertion of an IUD is not as effective. In the study, where the effectiveness of the follow-up visits after IUD insertion was observed between a group of women with regular follow-up visits in comparison to women who had non-regular follow-up visits. (Neuteboom K; et al.2003).

A research study suggests that providers may be able to predict removals for bleeding or pain at the one-month follow-up visit. Scientists analysed data from international studies and found that among 2,625 women, 89 had IUDs removed due to bleeding or pain during the first year of use. Women who were not breastfeeding at the time of insertion were nearly three times as likely as breastfeeding women to request removal. Women living in West Asia or North Africa were nearly three times as likely to seek removals as their counterparts in other countries. Researchers concluded that several factors, which could be identified at the one-month visit, predicted IUD removal. Prominent among these were; reports of inter menstrual bleeding since last menses, excessive menstrual flow and not breastfeeding or stopping breast feeding.

To learn whether follow-up visits could reduce program costs without compromising client health, Family Health Institute analyzed visits among IUD users in nine countries, looking specifically at visits for women who had no symptoms or mild symptoms but required some type of medical care. Of the more than 11,000 follow-up visits, less than 11 percent required care (treatment of side effects or IUD removal). Less than 1 percent required both treatment and removal. Therefore it is concluded that follow up visits play an important role in retaining or discontinuing IUD. The study conducted by NIPS also observed whether the clients had follow up visits as a determinant of contraceptive use.

1.4.5 Contraceptive Continuation

A 36-months retrospective study by Population Council in 1997, observed 722 married women of reproductive age in the four provinces of Pakistan. It showed contraceptive users' continuation, discontinuation, and satisfaction of the major temporary methods used in Pakistan. It was concluded that the contraceptive continuation rate in general was quite high and the failure rates were quite low. Whereas some clients showed low continuation rates for pills and injections reflected serious dissatisfaction, thus it was proposed that there should be positive involvement of husbands. (Kayani,A; Miller PC; Douthwaite M; Minhas AJ, 1997). Another study by Singh of follow-up study of women for at least 6 months revealed an effectiveness rate of 99.8%, a continuation rate of 96.1% and complications in only 3.5%. TCu-380 (another name for IUD) showed it as an effective, durable and safe method. (Singh R; Al-Amari M, 2000)

Contraceptive-continuation rates assessed in various Bangladesh studies showed marked variations by method. Pill and condom-use rates were lower than corresponding rates for the IUD and injectables (Chowdhury et al. 1986; Akbar et al.1991; Akhter and Ahmed, 1990, Akhter 1991, and 1992). In general, for Bangladesh, pill, IUD and DMPA continuation rates are somewhat lower than rates observed elsewhere in the region. Condom rates are substantially lower in Bangladesh than rates estimated elsewhere (Hossain, B 1996). Various studies have been conducted on IUD and injections. It was observed in a study that in one year the continuation rate of the TCu380A device is reported as 29.4 per 100, a rate fully 56.0 per 100 lower than the rate reported for either of the two specially designed devices (Sivin I, 2004).

International research studies report continuation rates for injectables; Indonesia, 83.2; Peru 1973,75.0; WHO 1977, 75.6, India 1990, 64.3, Bangladesh, 62.7 percent. A national study on IUD conducted by the Population Council in 1992 showed 60 percent of Lippies Loop and 72 percent of Copper-T acceptors continued use at the end of 12 months.

Available literature at international level shows that IUD continuation rates range from 55 to over 90; Oral pills from 30 to 78; Barrier methods from 30 to 70; and Implant from 77 to 92 percent. A WHO study on Tcu380A revealed continuation rates 89.4 and 83.0 at 12 months of use. (WHO Annual Technical Report 1995 p.141).

1.4.6 Causes of Discontinuation`

When there are some problems in use of IUD and injectables clients tend to discontinue use. For some clients, fear of IUD side effects is reportedly a deterrent to IUD use and a major reason for discontinuation. Inter-menstrual bleeding and cramping are the most common complaints during the initial months of IUD use. A Family Health International study in Thailand found that during the first 12 months, inter-menstrual bleeding and painful periods were the side effects most often cited by IUD users. In Bangladesh, 40 percent of the 3,678 users surveyed had their IUD removed, with about one-fifth of the removals due to menstrual problems.[4] And in Nepal, women mistakenly thought increased bleeding and cramping during the first few months of IUD use were symptoms that the IUD was migrating outside the uterus and would eventually pierce the heart. However, if the woman cannot tolerate side effects and requests IUD removal, providers should comply and offer another method.

A study conducted in a hospital showed that causes of discontinuation of the Copper T380A IUD users during the first year of use were expulsion (4.9 per 100 woman-years) followed by personal reasons (2.1 per 100 woman-years). At the end of the third year, the main cause was personal reasons (11.4) and the second cause was expulsion (6.8).

Nothing was known in case of lost or no-follow up by client. Answer to this question depended on participants who reported discontinuation at the clinics. Only 37 women stated reasons for discontinuation. The frequencies were too small to generalize the conclusions. With the available figures, it was evident that pelvic and other pains were most prevalent. The other most frequent reason for discontinuation was bleeding. Expulsion was also one of the reasons in case of IUD.

In a study of contraceptive discontinuation in Niger and Gambia, researchers reported that approximately 30 percent new family planning clients discontinued contraceptive use within the first eight months of acceptance (Cotton; 1992).

A higher probability of expulsion, pregnancy and discontinuation for bleeding and/or pain was associated with age less than 20 years. In conclusion, the effectiveness of the

CuT380A IUD after 3 years of use was 98.8 per 100 woman-years, whereas continuation was 39.2, and loss to follow-up over time (Bahamondes L; 1999). In 1968-69 NRIFC (National Research Institute of Fertility Control) study, which was confined only to IUDs presented the relationship between long-term use of IUDs and hormonal contraceptives in development of cervical dysphasia or its progression providing negative information on use of IUD.

1.4.7 Myths and rumors

Misconceptions about the safety of IUD help explain low rate of use in many countries (Pop Reports, 2006). An international mail survey being conducted by International Planned Parenthood Federation (IPPF) and the World Health Organization (WHO) has found that inaccurate information about IUDs is a barrier to use worldwide. Dr. Huezo who conducted the study observed preliminary data about clients' questions and concerns revealed that rumors are commonplace. The survey was sent to national institutions providing family planning services in 75 countries.

"The most common misconception was that IUD can cause an abortion," another misconception stated in the study was that the IUD causes cancer. This was a quite common perception, but it came as a surprise to researchers. Another concern of clients was that the IUD moves outside the uterus and can travel as far as the heart or brain."

IPPF and World Health Organization (WHO) prepared a list of misconceptions for providers and responses providers can give to address clients' concerns. For example, no scientific evidence indicates IUDs cause cancer. In fact, research suggests the devices reduce the risk of endometrial and cervical cancers. Although the IUD can be expelled through the vagina or very rarely can perforate the uterus during insertion, the IUD does not travel outside the uterus to other organs. IUDs prevent fertilization. Although the specific mechanisms are not fully understood, studies show the IUD effectively interrupts the reproductive process before implantation and pregnancy, suggesting that it does not act as an abortifacient. A recent study in Philippines (Rama Rao; 2003) repeatedly documented that fearing and experiencing side effects are principle reasons for contraceptive discontinuation.

In context of misconceptions, it was discussed that there is a large difference among the RHFPS 2001 IUD use rate of the reported figures through the services statistics. Main reason of this difference may be that the survey did not capture all IUD users in these target populations. IUD users are muddled up with contraceptive surgery cases. Illiterate women thought that they have gone through a tiny operation (contraceptive surgery) (Sultan. M, 2001).

Overall the available literature confirms that the contraceptive continuation is associated with users characteristics, contraceptive behavior, accessibility, quality of services, side effects, and negative information, discontinuation and counseling. Moreover, the link between contraceptive continuation and fertility is clear but there is a clear need to update the reasons and consequences of this association.

Chapter - 2

RESEARCH METHODOLOGY

This chapter describes the research methodology and implementation arrangements for the IUD and Injectables Survey (IIS).

There is critical dearth of organized research, evaluation and general monitoring of various components of Population Welfare Programme in Pakistan. The Management Information System of the Population Welfare Department (PWD) collects and compiles information on contraceptives use, supplies and stock position. However, the programme does not maintain any information on continuation of use or reasons for dropouts. A IUD retention study was done in late 60's since than PWD has not instituted any study on IUD and Injectables contraceptive continuation in Pakistan. Therefore, the National Institute of Population Studies (NIPS) took the task of conducting "CONTINUATION OF IUD AND INJECTABLES IN SELECTED DISTRICTS OF PUNJAB: A pilot Study". The outcomes of this study are likely to facilitate in achieving and expanding access to family planning services, through an increased choice in the appropriate methods of fertility regulation, which in the long run reduce growth rate.

This research was conducted to understand how women appraise different contraceptive methods especially IUD and Injectables and their attributes. More specifically how users and potential users assess their particular needs and weigh the different characteristics of available methods to choose and subsequently continue to use a method. Such an understanding will throw light on the future demand for a specific contraceptive method or any methods, on the need for information and programmatic intervention and on the development or modifications of contraceptive methods.

The research also dealt with opinions, attitudes and preferences related to contraceptive adoption, choice of a particular method and continuation of use of the specific methods like IUD and Injections. The Quantitative research approach was adopted to collect data through structured questionnaires. The results of the study will be very useful for the program managers and will also show the leaders the severity and magnitude of discontinuation of contraception; and secondly how these problems can be managed and prevented with appropriate measures and services..

Follow-up studies have the advantage of efficiency; for example, to learn about IUD and injection acceptors, only one sample is drawn and that is for known IUD acceptors. A

disadvantage or limitation of follow-up studies is locating the acceptors in the field, which can be difficult and costly. In addition, obtaining accurate acceptor lists for a specific method such as the IUD or Injectables can also be difficult.

2.2 OBJECTIVES

The study focused on the following objectives in the sampled districts:

i. Collection of information about socio-demographic characteristics of users of IUD and Injectables
ii. Collection of information on contraceptive knowledge and practice
iii. Identifying factors that affect the decision of a person and reason for acceptance of IUD and Injectables and to scrutinize the level and trends of IUD and Injectables acceptors
iv. Identifying reasons of discontinuation and the major problems faced and how they were managed
v. Estimating the continuation of IUD and Injectables and percentage of IUD acceptors who discontinued use and switched methods
vi. Suggesting measures and recommendations to minimize the discontinuation of FP methods

2.3 RESEARCH METHODOLOGY

The study, primarily a pilot in nature, following a quantitative research approach, focused on users of IUD and Injectable in Attock and Chakwal districts of Punjab, both of which have well defined urban and rural areas. The study started with collection of data on number of IUD and Injectable users registered in the last 12 months at 45 FWCs and 3 RHS-A Centers in the two districts, from the Monitoring and Statistics Wing of Population Welfare Department.

The research team chose two best performing FWCs, one in rural and the other in urban area of each district. The selected centers were visited for collection of addresses of clients of the IUD and Injections registered in the last 12 months, i.e. from June 2004-June 2005.

2.4 SAMPLE DESIGN

The study took a total of 1316 clients of IUD and Injections registered in four FWCs in the two districts during the last 12 months (from June 2004 to June 2005) as sample for study. Table 2.1 presents sample related data.

Table 2.1
Percent Distribution of IUD and Injection Accepters By Area and Rural Urban Residence.

Sample selected	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
IUD	65.6	41.5	56.5	72.2	56.4	62.2	68.2	51.2	59.5
Injection	34.4	58.5	43.5	27.8	43.6	37.8	31.8	48.8	40.5
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	**389**	**234**	**623**	**255**	**438**	**693**	**644**	**672**	**1316**

Table 2.1 indicates that the sample included 19 percent more IUD users than users of injections. The percentage of both in Attock and Chakwal more IUDs acceptors were contacted in urban areas than rural areas i.e. 65.6 percent and 72 percent respectively.

2.5 RESEARCH TOOLS

A Technical Advisory Committee (TAC) comprising twenty senior researchers and Demographers from the Population Council, PIDE and QAU, provided input to the development of the research design, data collection instrument, finalization of the study proposal, and sampling framework.

The structured questionnaire (Annex III) consisted of the following parameters:

i. Place of residence
ii. Personnel Characteristics (including acceptors characteristics, such as age, education, occupation, number of children, desire for children)
iii. Knowledge about Family Planning (FP) Methods
iv. Family Planning. Services' received (type of method use, year/month of use, year/month of termination)
v. Reported side effects (most disturbing side-effect; when did side-effect occurred; have any side-effects now; will you continue using the IUD, and if yes, for how long)
vi. Reasons for change of method (when did you stop using the IUD (month/year); what was or were the reason(s) (including side-effects))
vii. Reasons for not practicing FP.
viii. Problems faced
ix. Suggestions

NIPS staff, pre-tested the questionnaire before its finalization.

2.6 STUDY TEAM

2.6.1 Composition

The study team consisted of a Project Director (PD), a Principal Investigator (PI), a Deputy Principal Investigator (DPI) a Data Management Supervisor (DMS) and two data entry operators (DEO). The field staff comprised of four field supervisors, and twelve interviewers. The field staff members, experienced in field research and recruited through a merit based criteria, were drawn from the Punjab province for their proficiency in local dialect, understanding of cultural norms and acquaintance with the districts selected for the study. Four field teams were formed, with each team comprising one male and three female interviewers. Each team focused on respondents registered at one particular FWC.

2.6.2 Training

Before the start of the project, the field staff was trained in a six-day training workshop (Annex I). The training workshop focused on quantitative research methods and techniques in general and study objectives, sampling procedures, and elucidation of research questionnaire in particular (Annex II)

2.7 FIELD WORK

The fieldwork for the study was undertaken during the months of June and July 2005. Each of the four teams of field staff visited one of the sample districts for interviewing the respondents. The Deputy Principal Investigator undertook spot checks to observe the performance of field research staff and to validate the survey questionnaires in each area. The fieldwork was completed in two months.

2.7.1 Coverage of the Sample

The study at its very conception stage expected, despite its focus on a recently registered IUD population of 15-20 percent variance in sample and actual respondents. However, the actual results were far below the expectations. Table 2.2 shows the coverage of the respondents. The study could only contact 48.9 percent of respondents. In 32 percent cases either the contact address was wrong or the respondents did not exist. The preponderance of such cases pertained to urban areas (41%).

The study could not locate the remaining 16.6 percent of acceptors for a variety of reasons. About 4 percent respondents were not available at home at the time of visit, 5.1 percent were reported to have moved out of the premises or died, 5.6 percent were not available for other reasons and 1.7 percent refused to respond to the questionnaire. The availability of respondents for interview was higher in rural areas (62%) than in the urban areas (35.1).

Table 2.2

Percent Distribution of coverage of Sample By Area and Rural Urban Residence.

Result	Total Numbers	Attock			Chakwal			Total		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Completed	644	36.2	62.8	46.2	33.3	61.9	51.4	35.1	62.2	48.9
Incomplete address	7	1.0	–	0.6	0.8	0.2	0.4	0.9	0.1	0.5
Wrong address / User is fake	425	38.6	23.1	32.7	44.7	24.4	31.9	41.0	24.0	32.3
Premises locked	18	0.8	0.4	0.6	3.1	1.4	2.0	1.7	1.0	1.4
Eligible woman absent	58	4.4	3.4	4.0	3.9	5.3	4.8	4.2	4.6	4.4
User has shifted away/Died	67	1.0	6.0	2.9	9.8	5.5	7.1	4.5	5.7	5.1
Refused	23	3.3	3.4	3.4	–	0.5	0.3	2.0	1.5	1.7
Other	74	14.7	0.9	9.5	4.3	0.9	2.2	10.6	0.9	5.6
Percent		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number		**389**	**234**	**623**	**255**	**438**	**693**	**644**	**672**	**1316**

2.7.2 Method Acceptance

Table 2.3 exhibits month wise performance of the contraceptive use, it is observed that more methods were accepted in third and sixth month than the other months. The reason might be due to the heaping bias in third and six months. Another reason can be that family welfare worker compile results after two three months so there is tendency of heaping of contraceptive use in different months.

Table 2.3

Annually and Monthly Reported Performance of IUD/Injection, by Area and Rural Urban Residence.

By month	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
2004									
June	6.7	5.6	6.3	7.5	7.3	7.4	7.0	6.7	6.8
July	7.7	3.8	6.3	10.2	7.8	8.7	8.7	6.4	7.5
August	11.1	10.7	10.9	8.6	10.3	9.7	10.1	10.4	10.3
September	11.3	5.6	9.1	7.8	7.8	7.8	9.9	7.0	8.4

By month	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
2004									
October	8.7	6.4	7.9	10.2	8.7	9.2	9.3	7.9	8.6
November	11.1	20.1	14.4	11.0	12.3	11.8	11.0	15.0	13.1
December	8.5	8.5	8.5	7.8	8.4	8.2	8.2	8.5	8.4
January-05	8.7	7.7	8.3	5.9	5.9	5.9	7.6	6.5	7.1
February	6.7	8.5	7.4	9.8	6.6	7.8	7.9	7.3	7.6
March	10.0	6.0	8.5	6.7	8.7	7.9	8.7	7.7	8.2
April	4.4	10.3	6.6	7.8	8.0	7.9	5.7	8.8	7.3
May	5.1	6.8	5.8	6.7	8.2	7.6	5.7	7.7	6.8
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	**389**	**234**	**623**	**255**	**438**	**693**	**644**	**672**	**1316**

2.8 DATA ANALYSIS PROCEDURES

After the collection of quantitative data, its processing was immediately carried out. The data entry program, especially tailored for this study took care of wild codes, range checks, and consistency checks avoiding errors in data sets. A team of questionnaire editors manually undertook manual crosschecks and removed inconsistencies before data analysis. The data analysis involved cross tabulations for descriptive purposes and for analyzing the experience of acceptors with side effects, management of side effects, IUD and Injectables status, and factors affecting present and future IUD and Injectables use. IUD and Injectables continuation were calculated by life table techniques. Data analysis was carried out using the SPSS statistical package. However, as some of the responses were open ended and free flowing. The flexibility of coding multiple responses for each aspect was maintained not to lose any information.

Chapter - 3

PROFILE OF ELIGIBLE PERSONS

In order to have a better understanding of the target group of women, in the age group of 15-49, who has accepted the use of IUD and Injectables, it is equally important to know their demographic characteristics. The social environment of an individual is an important determinant of a person's behavior, attitudes and practices. This chapter included characteristics of respondents or IUD and Injectables acceptors.

This information is presented in six sections: socio-economic characteristics; demographic characteristics and fertility preference; basic knowledge concerning the IUD and Injectables, previous use of family planning methods and experiences; current use of family planning method.

3.1 DEMOGRAPHIC CHARACTERISTICS AND FERTILITY PREFERENCE

This section discusses various characteristics of the eligible women such as age, sex distribution, and marital status.

3.1.1 Age distribution

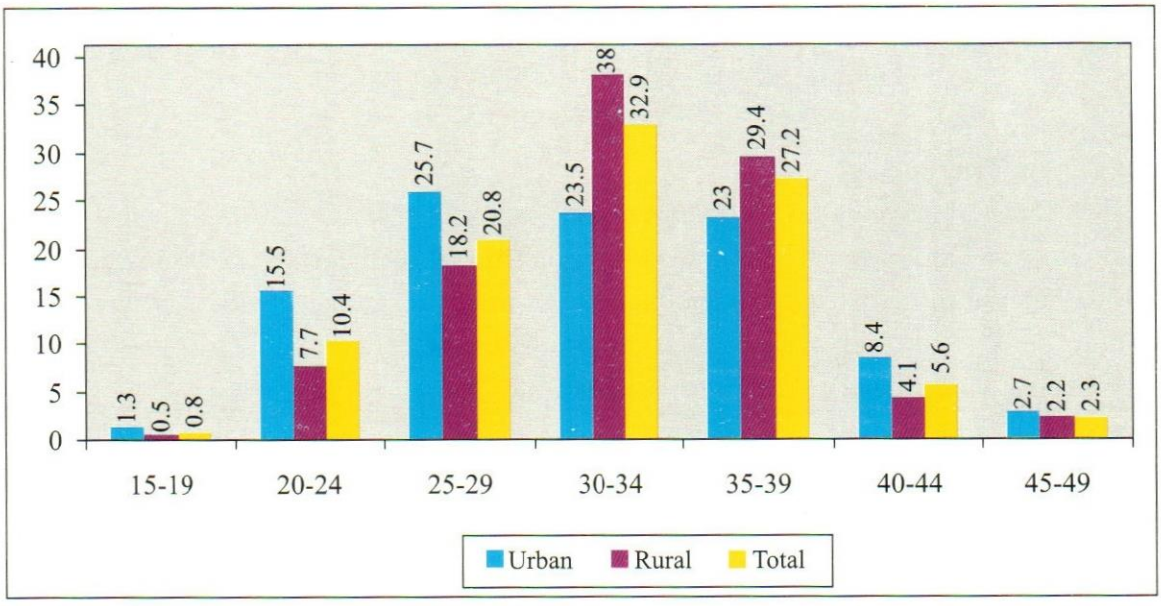
Table 3.1 presents the age distribution of respondents by IUD and Injectable use. The study finds that a significant proportion of respondents (81 percent) fall in the age group 25 to 39. The use of contraceptives exhibits an upward moving curve with each upper age cohort. There is 10 points increase in contraceptive prevalence among 20-24 age group as compared to women in the 15-19 age group. The 25-29 age group demonstrates 50 percent increase in this trend and 12 points increase in 30-34 age group. However, this trend does not sustained among age groups in 35 plus age bracket. The 30-34 age group represents the largest group of contraceptive users. However, this group, constituted of women who already had given birth to 3 to 4 children, represented lack of desire for children.

There was a gradual decline in use rate in 40 to 49 age group with similar trends observed in both rural and urban areas of the target districts.

Table 3.1

Percent Distribution according to Age distribution of IUD/Injection Users By Area and Rural Urban Residence.

Age-group	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
15 19	0.7	1.4	1.0	2.4		0.6	1.3	0.5	0.8
20 24	18.4	16.3	17.4	10.6	3.0	4.8	15.5	7.7	10.4
25 29	26.2	25.2	25.7	24.7	14.4	16.9	25.7	18.2	20.8
30 34	19.9	24.5	22.2	29.4	45.4	41.6	23.5	38.0	32.9
35 39	24.8	22.4	23.6	20.0	33.2	30.1	23.0	29.4	27.2
40 44	7.8	6.8	7.3	9.4	2.6	4.2	8.4	4.1	5.6
45 49	2.1	3.4	2.8	3.5	1.5	2.0	2.7	2.2	2.3
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	**141**	**147**	**288**	**85**	**271**	**356**	**226**	**418**	**644**



Other surveys conducted from 1993 to 1997 show a similar trend whereby a gradual decline is apparent as can also be seen in Table 3.2. One of the reason for this decline is switching over to permanent methods by older women.

Table 3.2

Levels and trends in Percent Distribution according to Age distribution from 1993-1997 in three surveys

Age-group	Age Distribution		
	IUDFUS 1993	USLS-1997	PFFPS 1997
15 19	-	5.8	7.0
20 24	9.2	16.5	17.5
25 29	2/8.4	21.3	22.4
30 34	27.8	20.6	19.3
35 39	24.0	15.8	15.4
40 44	8.3	13.1	10.8
45 49	2.2	7.0	7.7
Percent	100	100	100
Number	**1627**	**2722**	**7584**

- IUDFUS (IUD follow up Study, 1993)
- USLS 1997(&Pakistan Contraceptive User Satisfaction and Longevity Study 1997
- PFFPS (Pakistan Fertility and Family planning survey).

3.1.2 Age at Marriage

Age at marriage has a direct implication on the health and fertility behavior of the population. Several studies indicate that a young age at marriage has a direct effect on the fertility status of females. It is also an important determinant of number of children and contraceptive use among women. The younger the woman, the higher are her chances of bearing more children in an expanded reproductive life span. Younger females produce more children due to lack of awareness and low education levels.

The mean age at marriage in USLS- 1997 is 18, which is quite close to the present study, which observes 18.2 as overall mean age at marriage. District wise, Attock was 17.4, and Chakwal was 18.8, which is considerably lower than the national mean age of 22.7 years for females in Pakistan (RHFPS, NIPS, 2001).

Sixty two percent of the respondents were married in the age group of 15-19. This age cohort shows almost the same trend in urban (57 percent) and rural areas (65 %) and i

Attock (60.4) and Chakwal (63.5). The second largest concentration of respondents (23.6 percent) with reference to age at the time of marriage was in age group 20-24.

The mean age at marriage is quite low so chances of having more children are quite high. Younger age group for marriage of girls has a lot to do with the prevailing social and cultural environment. It is widely believed that in order to protect the dignity and honor of girls and their families it is better to get them married off after reaching puberty.

Table 3.3
Percent Distribution of IUD/Injection according to Age at Marriage By Area and by rural Urban Residence.

Age-groups	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
< 15	18.4	17.7	18.1	5.9	2.6	3.4	13.7	7.9	9.9
15 19	63.1	57.8	60.4	47.1	68.6	63.5	57.1	64.8	62.1
20 24	16.3	21.1	18.8	40.0	23.6	27.5	25.2	22.7	23.6
25 29	2.1	3.4	2.8	7.1	3.7	4.5	4.0	3.6	3.7
30 +	—	—	—	—	1.5	1.1	—	1.0	0.6
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	**141**	**147**	**288**	**85**	**271**	**356**	**226**	**418**	**644**

3.1.3 Living children by contraceptive Use

The aggregate number of children were also obtained in the survey. Women were asked about the total number of male and female children they have given birth to and their survival status. Information on the youngest child was also asked. Desire of additional children was also explored.

Table 3.4 presents the percentages of living children of the respondents. The study finds that 82 percent of the respondents had one to three boys, whereas 78 percent had one to three girls. A greater proportion of respondents in rural areas had four to six children. National data on living children by contraceptive use pertaining to 2001 indicate that women had two surviving children at the age of thirty, and five at the age of forty (Hakim et al, 2001)

The mean number of children is 3.8. The mean number of living children was four in IUD 1992 study, which was slightly higher than 3.5 living children of all currently married women as in PDHS 1990/91 (IUD study, 1992). This trend in proportion of living children is the same as in the other three surveys

Table 3.4

Percent Distribution of IUD/Injection Users According to Living children By Area and by Rural Urban Residence.

Children		Attock			Chakwal			Total		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Living children	None	0.7	—	0.3	1.2	0.4	0.6	0.9	0.2	0.5
	1 - 3	46.8	49.0	47.9	63.5	46.5	50.6	53.1	47.4	49.4
	4 - 6	48.2	44.2	46.2	32.9	49.8	45.8	42.5	47.8	46.0
	7 +	4.3	6.8	5.6	2.4	3.3	3.1	3.5	4.5	4.2
Living sons	None	9.2	6.1	7.6	9.4	5.2	6.2	9.3	5.5	6.8
	1 - 3	80.9	81.0	80.9	80.0	84.5	83.4	80.5	83.3	82.3
	4 - 6	9.9	12.9	11.5	10.6	10.3	10.4	10.2	11.2	10.9
Living girls	None	15.6	12.2	13.9	27.1	11.1	14.9	19.9	11.5	14.4
	1 - 3	74.5	77.6	76.0	65.9	84.1	79.8	71.2	81.8	78.1
	4 - 6	9.9	10.2	10.1	7.1	4.8	5.3	8.8	6.7	7.5
Percent		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number		**141**	**147**	**288**	**85**	**271**	**356**	**226**	**418**	**644**

The higher parity might suggest that many women only began using the contraceptive method once they had achieved their desired family size.

3.1.4 Desired number of children

Desired number of children among youth is an important indicator, which should be known to service providers for both reproductive health and family planning strategy planning and effective implementation mechanisms. In the survey, the data of the respondents' spouses reveal some interesting results; the desire for children affects contraceptive practice. Desire for more children is shown in Table 3.5.

Nearly three fourth of the females (77%) had no desire for children as compared to their husbands who desired ten percent more children then their wives (67%). It is amazing to note that percentage of rural women with no desire for children (80%) was greater than the urban women (72%). Similar trends were observed among their husbands in Attock and Chakwal. The knowledge of family planning methods for avoiding pregnancy among the respondents ranged between 94 to 98 percent in both rural and urban areas of the target districts. Those who said they wanted more children were less likely then who said they did not want to continue contraceptive practice. And they tend to practice contraception less effectively.

Table 3.5

Percent Distribution of IUD/Injection Users According to Desire for children By Area and by Rural Urban Residence

Desired		Attock			Chakwal			Total		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Own	Yes	19.9	15.6	17.7	28.2	17.7	20.2	23.0	17.0	19.1
	No	75.9	78.2	77.1	65.9	80.4	77.0	72.1	79.7	77.0
	Not Sure	4.3	6.1	5.2	5.9	1.8	2.8	4.9	3.3	3.9
Husband	Yes	33.3	25.9	29.5	38.8	20.7	25.0	35.4	22.5	27.0
	No	61.7	68.0	64.9	58.8	72.3	69.1	60.6	70.8	67.2
	Not Sure	5.0	6.1	5.6	2.4	7.0	5.9	4.0	6.7	5.7
Percent		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number		**141**	**147**	**288**	**85**	**271**	**356**	**226**	**418**	**644**

3.2 SOCIO-ECONOMIC CHARACTERISTICS

Although the study respondents belonged to the same age cohorts, but their socio-economic characteristics varied, which are of considerable importance during the analysis of their behavioral and attitudinal trends. A few demographic and socio-economic characteristics like educational attainment and employment status were taken into consideration.

3.2.1 Education Status

Education of the currently married women is closely associated with contraceptive use. The female educ ation level is 42 percent in Pakistan, which is quite low (RHFPS, 2001).

The level of education among respondent of this study was also very low as shown in Table 3.6. The share of illiterate respondents was higher (61 percent) showing that more than half of the respondents had no education. As Attock is considered more developed area than Chakwal in terms of socioeconomic indicators, it is surprising that the percentage of those women having no education, the highest percentage was in rural areas of Attock.

The concentration of education was more in category of up-to primary that is one-fourth of the population (23%). This pattern prevails in nearly all the areas. Only small percentage (3.4%) had more than secondary education.

The level of illiteracy in the preceding three surveys is a little higher, i.e. in 1997 it was 70.4, while in 2001 it was 71.5 percent.

Table 3.6
Percent Distribution of IUD/Injection Users According to Education level and work status By Area and by Rural Urban Residence

Level of education	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
No education	60.3	72.8	66.7	34.1	63.5	56.5	50.4	66.7	61.0
Upto primary	29.8	19.0	24.3	30.6	18.5	21.3	30.1	18.7	22.7
Upto middle	3.5	3.4	3.5	8.2	4.8	5.6	5.3	4.3	4.7
Upto secondary	5.7	4.1	4.9	15.3	9.6	11.0	9.3	7.7	8.2
Secondary +	0.7	0.7	0.7	11.8	3.7	5.6	4.9	2.6	3.4
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	**141**	**147**	**288**	**85**	**271**	**356**	**226**	**418**	**644**
Working for money									
Yes	22.7	12.2	17.4	20.0	7.4	10.4	21.7	9.1	13.5
No	77.3	87.8	82.6	80.0	92.6	89.6	78.3	90.9	86.5
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	--
	141	147	288	85	271	356	226	418	--

Level of education	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Level of education			USLS 1997			PFFPS1997			PRHFPS2001
No education			70.4			79.2			71.5
Upto primary			3.2			9.1			12.7
Upto middle			--			4.4			4.6
Upto secondary			15.1			6.2			6.9
Secondary +			11.2			1.1			4.3
Percent			100			100			100
Number			**2722**			**7848**			**7411**

- IUD follow up Study, 1993
- Pakistan Contraceptive User Satisfaction and Longevity Study 1997
- Pakistan Fertility and Family planning survey.

3.2.2 Employment Status

The perceptions, attitudes and practice of the IUD and Injectables acceptors in regard to their contraceptive use are influenced by their social environment and daily activities. Employment status is another important determinant in this regard.

Of all the interviewed respondents, only 13.5 per cent in all areas were employed in some kind of paid job. The remaining 77.5 percent respondents either had domestic chores as their responsibility or claimed to be unemployed. Thus implying that more than four-fifth of the population did not have any paid engagement. No significant rural urban differentials were found in this respect. Among the females, both in urban and rural areas majority of the women stayed at home.

KNOWLEDGE, USE AND CONTINUATION OF CONTRACEPTION

High population growth rate is a major hurdle in Pakistan's development process. This chapter describes and analyzes women's perceptions, and knowledge of family planning, which has a direct impact on family planning practices and health seeking behavior. Information on fertility also helps to determine the impact of changes in the use of family planning and other proximate determinants of fertility.

4.1 STATUS OF FP METHODS

Awareness of contraceptive methods has an important role in the adoption of family planning and making a choice of contraceptive methods among the respondents. In the survey, the knowledge of any family planning method for avoiding pregnancy was observed.

4.1.1 Knowledge of Methods

As this study is a follow up of users, therefore, among the married females knowledge was as high as 98.1 per cent. It was slightly higher in the urban areas than the rural ones. As shown in Table 4.1, data indicate some regional differentials regarding IUD and Injectables acceptors awareness of family planning. In Attock and Chakwal, almost all the females interviewed had high knowledge regarding limiting births. The lowest level of awareness was found in the urban areas, probably due to a more restricted social environment as well as lower ages of the respondents as compared to the rural areas.

It was also encouraging to find out that most of the respondents had a positive attitude towards family planning and promoted the concept of restricting the family size. There was awareness among most of the interviewed females about the implications of a large number of children on the health of the mother and the economic pressures associated with big families.

Table 4.1

Percent Distribution of IUD/Injection by knowledge according to Type of Method By Area and by Rural Urban Residence

Methods	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
IUD	94.3	95.9	95.1	81.2	98.5	94.4	89.4	97.6	94.7
Injection	98.6	98.6	98.6	96.5	98.9	98.3	97.8	98.8	98.4
Pills	88.7	94.6	91.7	78.8	98.2	93.5	85.0	96.9	92.7
Condom	75.2	85.0	80.2	78.8	91.1	88.2	76.5	89.0	84.6

Methods	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Female Sterilization	48.9	83.7	66.7	61.2	83.8	78.4	53.5	83.7	73.1
Male Sterilization	6.4	14.3	10.4	50.6	54.6	53.7	23.0	40.4	34.3
Norplant	8.5	6.1	7.3	22.4	15.9	17.4	13.7	12.4	12.9
Withdrawal	11.3	26.5	19.1	48.2	56.8	54.8	25.2	46.2	38.8
Rhythm	10.6	2.7	6.6	23.5	5.9	10.1	15.5	4.8	8.5
Other	1.4	1.4	1.4	11.8	3.0	5.1	5.3	2.4	3.4

Methods	Knowledge		
	USLS 1997	PRHFPS 2001	CIIS 2006
Injection	85.4	84.4	98.4
IUD	85.9	90.2	94.7
Pills	80.3	91.1	92.7
Condom	62.1	69.1	84.6
Female Sterilization	93.5	88.8	73.1
Male Sterilization	29.9	31.6	34.3
Norplant	21.0	19.9	12.9
Withdrawal	47.2	23.8	38.8
Rhythm	4.4	42.9	8.5
Other	7.8	1.9	3.4

- USLS (Pakistan Contraceptive User Satisfaction and Longevity Study 1997)
- PRFHPS (Pakistan Reproductive Health and family planning survey)
- CIIS (continuation of IUD and Injectable)

When all methods performance was observed, the women had highest knowledge of injections (98.4 %) followed by IUD (94.7%), pills (92.7%), condom (84.6%) and female sterilization (73.1%).

4.1.2 Ever Use of Contraceptives

Pakistan is a patriarchal society, whereby, decision making mostly depends on the male family members. The information regarding ever use of contraceptive method from currently married males aged 15 years to 49 years shows that a higher percentage of females had ever used any family planning method for birth spacing. Among the rank of ever use of any specific method, injection was the highest as indicated by the female respondents. Similar to the ever use female respondents; the age of the respondents played a major role in

determining their current usage status. The older the respondent the more likely was she to use any method. Nationally the overall proportion of currently married women who had ever used any method is 40.2 percent (Hakim, 2001) as compared to 36.4 percent in PFFPS (Hakim, 1997).

Though the study is a follow-up of IUD and Injections Users, yet information was also collected whether the respondents had ever used any other method. Table 4.2 shows the percentage of women who have used various methods of contraceptives. It transpires that pill and condom have also been used by about one third of women who were currently reported to have been using either IUD or injections.

Table 4.2
Percent Distribution of IUD/Injection Ever Users
By Area and by Rural Urban Residence

Methods	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
IUD	56.74	50.34	53.5	62.35	66.42	65.4	58.85	60.77	60.1
Injection	69.50	75.51	72.6	62.35	65.31	64.6	66.81	68.90	68.2
Pills	27.66	39.46	33.7	16.47	33.21	29.2	23.45	35.41	31.2
Condom	29.79	40.14	35.1	37.65	40.59	39.9	32.74	40.43	37.7
Female Sterilization	4.26	3.40	3.8	--	9.23	7.0	2.65	7.18	5.6
Male Sterilization	--	1.36	0.7	--	0.37	0.3	--	0.72	0.5
Norplant	0.71	0.68	0.7	1.18	2.21	2.0	0.88	1.67	1.4

Ever use of injectables (68.2%) was substantially higher than IUD (60.1%). Pills and condoms had been used by more than 30 percent each.

4.1.3 Current Use

Current Use refers to a proportion of women using any method at the time of the survey. Nationally 26.6 percent women use any FP method..

It is noticeable from Table 4.3, which shows the current use of respondents by type of method that injectables were used more in Attock (37%) whereas IUDs were mostly used in Chakwal (44%). The table also confirms the point that there is a wide gap between knowledge and use of contraceptive, which reinforces the national level statistics on family

planning, whereby, the knowledge is as high as 95.7 per cent and the CPR remains at 27.6 percent (RHFPS, NIPS, 1998).

Table 4.3
Percent Distribution of IUD/Injection Current Users
By Area and by Rural Urban Residence

Methods	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
IUD	36.9	21.1	28.8	43.5	44.6	44.4	39.4	36.4	37.4
Injection	44.7	30.6	37.5	34.1	28.0	29.5	40.7	28.9	33.1
Pills	0.7	4.1	2.4	2.4	0.4	0.8	1.3	1.7	1.6
Condom	1.4	9.5	5.6	5.9	1.5	2.5	3.1	4.3	3.9
Female Sterilization	3.5	2.0	2.8	---	10.0	7.6	2.2	7.2	5.4
Male Sterilization	---	1.4	0.7	---	---	---	---	0.5	0.3
Norplant	0.7	---	0.3	---	---	---	0.4	---	0.2
Any traditional method	0.7	5.4	3.1	---	0.4	0.3	0.4	2.2	1.6
Not currently using	11.3	25.9	18.8	14.1	15.1	14.9	12.4	18.9	16.6
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	**141**	**147**	**288**	**85**	**271**	**356**	**226**	**418**	**644**

4.1.4 Counseling of Contraceptive Methods

The percentage of women who received any counseling about any FP methods is presented in Table 4.4. The table exhibits that only one-fourth (25%) of the women were counseled about all the methods while half of the women mentioned that they were informed about some of the methods (58%). Only less than one-fifth (17%) of the women confessed that they were not informed about any of the methods. Not much rural urban differentials were found in Chakwal, but Attock shows marked difference of 8 points in urban and rural areas.

Table 4.4
Percent Distribution of IUD/Injection Users Having Counseling About Methods
By Area and by Rural Urban Residence

Counseled	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
All	15.4	7.2	11.2	43.5	33.2	35.7	26.5	24.4	25.1
Some	58.5	60.4	59.5	31.8	64.6	56.7	47.9	63.2	57.9
None	26.2	32.4	29.4	24.7	2.2	7.6	25.6	12.4	17.0
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	**130**	**139**	**269**	**85**	**271**	**356**	**215**	**410**	**625**

4.2 PROBLEMS FACED WHILE USING CONTRACEPTIVES

IUD and injectable users faced various problems as is indicated in Table 4.5. Almost half of the respondents had experienced some side effects or problems after the usage of either one of the methods. A noticeable percentage of respondents said that they did have side effects from the family planning method they were using or had ever used. The most frequently mentioned problem was bleeding/irregular menstruation that is by 20 percent of the women. A meager percentage of 2.2 were still using traditional methods. Other responses were headaches by 5.1 percent, followed by obesity, high blood pressure, dizziness and nausea. The women were not mostly informed about the side effects by the service provider, or told that the minor problems might fade away with the regular use of contraceptive, therefore, the user discontinued the method.

Table 4.5
Percent Distribution of Respondents Who faced Problems while using IUD and Injectables By Area and by Rural Urban Residence

Problems	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Obesity	7.1	5.4	6.3	7.1	1.8	3.1	7.1	3.1	4.5
Headaches	12.8	6.8	9.7	7.1	0.7	2.2	10.6	2.9	5.6
Dizziness	0.7	1.4	1.0	8.2	1.1	2.8	3.5	1.2	2.0
Nausea	1.4	1.4	1.4	—	0.7	0.6	0.9	1.0	0.9
Low or High (Blood Pressure)	6.4	6.8	6.6	7.1	1.1	2.5	6.6	3.1	4.3
Psychological/ Depression	0.7	—	0.3	—	1.5	1.1	0.4	1.0	0.8
Bleeding/Irregular Menses	22.7	27.2	25.0	23.5	10.7	13.8	23.0	16.5	18.8
Other	9.2	19.7	14.6	8.2	5.2	5.9	8.8	10.3	9.8
No problem	51.8	25.2	38.2	49.4	67.5	63.2	50.9	52.6	52.0
traditional method	0.7	5.4	3.1	—	0.4	0.3	0.4	2.2	1.6
									100
Not currently using	11.3	25.9	18.8	14.1	15.1	14.9	12.4	18.9	16.6

4.3 VISITS TO CENTRES

Table 4.6 consists of women who had visited a center to solve any side effect problem, which they had experienced due to use of the IUD or injectables. Of those who had experienced any discomfort, sixty five percent of the women consulted a doctor or visited the center to solve their problems. Nearly half of the women (51%) mentioned that their problems were not solved. Nearly 15 percent more women visited any center for their

problem in Chakwal (74%) as compared to Attock (60%).

Table 4.6

Percent Distribution of IUD/Injection Users Who Visited Center to solved problem among those who experienced Problems By Area and by Rural Urban Residence

Visited/solved		Attock			Chakwal			Total		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Visited center for problem	Yes	68.6	53.1	60.0	64.5	80.4	74.0	67.1	64.5	65.6
	No	31.4	46.9	40.0	35.5	19.6	26.0	32.9	35.5	34.4
Problem solved	Yes	49.0	32.8	40.0	64.5	71.7	68.8	54.9	49.1	51.6
	No	51.0	67.2	60.0	35.5	28.3	31.2	45.1	50.9	48.4
Percent		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number		**51**	**64**	**115**	**31**	**46**	**77**	**82**	**110**	**192**

4.4 WILLINGNESS TO USE METHOD

In terms of willingness of women to continue the method they were using, it was observed in table 4.7 that the longer the contraceptive use the more was their willingness to continue usage in the future. It ranges from 9.1 to 31.3 percent. The urban areas respondents were more willing to continue the use of IUD and Injectable than rural areas.

Table 4.7

Percent Distribution of IUD/Injection current Users who are willing to continue with the present method By Area and by Rural Urban Residence

Period wants to continue	Attock			Chakwal			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Upto 3 months	12.8	16.5	14.5	1.4	6.1	5.0	8.6	9.4	9.1
04 06	7.2	4.6	6.0	1.4	3.0	2.6	5.1	3.5	4.1
07 12	12	1.8	7.3	5.5	7.8	7.3	9.6	5.9	7.3
13 24	10.4	4.6	7.7	9.6	14.8	13.5	10.1	11.5	11.0
25 36	12	14.7	13.2	11.0	28.3	24.1	11.6	23.9	19.4
37 48	1.6	8.3	4.7	2.7	0.4	1.0	2.0	2.9	2.6
49 95	12.8	7.3	10.3	13.7	1.7	4.6	13.1	3.5	7.1
8-years and more	31.2	25.7	28.6	34.2	33.0	33.3	32.3	30.7	31.3
Dont know	—	16.5	7.7	20.5	4.8	8.6	7.6	8.6	8.2
Percent	100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	**125**	**109**	**234**	**73**	**230**	**303**	**198**	**339**	**537**

4.5 FUTURE INTENTIONS

Some of the respondents in our study were not currently using any contraceptive method. When asked about their future intentions to use any method, there was a large proportion of 73.8 percent who were willing to restart some kind of a contraceptive. The most preferred method to be used in future was injection (26%) followed by female sterilization (24%) and than IUD (23%). Pills and condoms were mentioned by 7.1 percent each. Table 4.8 gives details.

Table 4.8

Percent Distribution of IUD/Injection Non Users Future intention to use FP method By Area and by Rural Urban Residence

Intention/methods		Attock			Chakwal			Total		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Intend to use in future	Yes	81.3	65.8	70.4	66.7	80.5	77.4	75.0	73.4	73.8
	No	18.8	34.2	29.6	33.3	19.5	22.6	25.0	26.6	26.2
Methods	IUD	15.4	12.0	13.2	25.0	33.3	31.7	19.0	24.1	22.8
	Injection	38.5	28.0	31.6	—	27.3	22.0	23.8	27.6	26.6
	Pills	7.7	16.0	13.2	—	3.0	2.4	4.8	8.6	7.6
	Condom	—	12.0	7.9	25.0	3.0	7.3	9.5	6.9	7.6
	Female Sterilization	30.8	16.0	21.1	37.5	24.2	26.8	33.3	20.7	24.1
	Norplant	7.7	12.0	10.5	—	—	—	4.8	5.2	5.1
	Don't know	—	4.0	2.6	12.5	9.1	9.8	4.8	6.9	6.3
Percent		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number		**13**	**25**	**38**	**8**	**33**	**41**	**21**	**58**	**79**

4.6 REASONS FOR NOT USING ANY CONTRACEPTIVE METHODS OR DISCONTINUATION:

As discussed in the beginning of the Chapter that there is a high level of awareness among the respondents about Family Planning, however, there is a wide gap between knowledge and practice. But this is not unexpected as the eligible married respondents for the research lack the far sightedness to plan for the future at these stages of their lives. The research reveals that multiple factors play a role in determining respondent's behavior towards adopting family planning. The present section looks into the various aspects of non-use of contraception among the women.

The reason of discontinuation of IUDs and injectables are given in Table 4.9, a small number of respondents gave reasons for non-use. The main reason given by the highest

percentage of respondents was the desire for more children (42.17), with a higher proportion of rural residence. This was followed by "excessive bleeding (36.14%) husband away (36.14 %), irregular menses (30.12%), infection and got pregnant (24.10%) both, nausea and menses stopped (6.02%)for both.

Table 4.9

Percent Distribution of IUD/Injection Non-Users According to Reasons for discontinuation By Area and by Rural Urban Residence

Problems	Total	
	Number	Percentage
Need more children	7	17.07
Excessive Bleeding	6	14.63
Husband Absent	6	14.63
Irregular Menses	5	12.20
Infection	4	9.76
Got Pregnant	4	9.76
Menses stopped	3	7.32
Nausea/ Dizziness	3	7.32
Afraid from Husband/in -laws	1	2.44
Other	2	4.88
Total	**41**	**100**

4.7 CONTRACEPTIVE CONTINUATION

Continuous use of family planning methods may be expected to vary by various demographic, social, and economic characteristics. International studies in general have found that older and higher parity couples have higher continuation rates than younger and lower-parity couples. Less consistently, studies have found higher continuation rates among those belonging to higher socio-economic strata.

The 1997 study shows 12-month life table continuation rates by selected demographic and socio-economic characteristics. Continuation rates are consistent with expectations. The study described by all measures, older women, women married longer, and (less stikingly) women with more children are more likely to continue use than younger women, women married for shorter durations, and women of lower parity. Similarly, higher social and economic status predicts higher continuation. Women who are urban, educated, married to educated husbands, living in modern housing, and with television in the house have higher continuation, by all measures, than their rural, less educated, and less economically prosperous counterparts.

Table 4.10 presents the continuation of IUD and injectables during the reference period of June 2004 to June 2005. The number of both IUD and Injectable users have increased. Taking June 2004 as a reference period the number of users of IUD who obtained IUDs have increased from 41 in June 2004 to 335 by the end of June 2005. During the period a total of 40 women who had accepted IUD during different month had discontinued its use. The discontinuation rate comes to around 11.9 percent for the reference period. Similarly, out of 324 women who reported to have started using injections, 65 women or 20 percent had stopped using injections during the same period.

Table 4.10
Number of IUD and Injectables Users and Dropouts for the year 2004-5

Months		IUD Number	Injection Number	Total Number
June 2004	User	41	35	76
July 2004	User	72	52	124
	Drop-outs	--	2	2
August 2004	User	96	73	169
	Drop-outs	--	1	1
September 2004	User	112	94	206
	Drop-outs	5	3	8
October 2004	User	139	122	261
	Drop-outs	--	3	3
November 2004	User	164	140	304
	Drop-outs	1	5	6
December 2004	User	183	151	334
	Drop-outs	2	7	9
January 2005	User	209	167	376
	Drop-outs	6	5	11
February 2005	User	232	193	425
	Drop-outs	4	4	8
March 2005	User	261	225	486
	Drop-outs	3	10	13
April 2005	User	276	245	521
	Drop-outs	4	8	12
May 2005	User	294	259	553
	Drop-outs	3	12	15
June 2005	User	283	254	537
	Drop-outs	12	5	17
Total		295	259	554
Drop-out		40	65	105
Total women who adopted the method during the period		335	259	324

Ideally, continuation rates of contraceptive users are to be based on observing the user over a longer period of time. Unfortunately, contraceptive data collected through the Management Information System (MIS) do not yield itself to rigorous evaluation as tracking of users on their addresses is time consuming as well as disappointing exercise as a large proportion of such users are not traceable on their given addresses. Also a large number of women do not record their correct addresses or such users are recorded just to inflate the service statistics and to meet the given targets.

MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter basically identifies the various findings of the study and the recommendations that emerge through those findings, which can help other researchers and concerned policy makers in understanding the issues pertaining to the trends and patterns in continuation of contraceptive methods among Pakistani women with emphasis on IUDs and injectables.

5.1 SUMMARY OF FINDINGS AND CONCLUSIONS

i. It was observed in the study that eighty percent of the respondents were in the age group 25 to 39 indicating that younger aged married females use fewer contraceptives as compared to older women. A higher percentage of contraceptive prevalence is evident in females above 35 years.

ii. The mean age at marriage is quite low i.e. 18.5, thus chances of having more children are quite high. Most of the women were married in the younger age group of 15-19 i.e. 62 percent.

iii. Nearly three fourth of the respondents (77%) have no desire for children as compared to their husband who desire ten percent more children then their wives (67 %). Therefore, males should be educated and motivated about the concept of small family norm

iv. The share of illiterate respondents was higher (61 percent) showing that more than half of the respondents had no education, indicating a correlation between users education levels and contraceptive continuation trends.

v. More than four-fifth of the population of the survey was not working again endorsing the fact that female employment status is closely inter-linked with the number of children as well as continuation of a contraceptive method;

vi. All methods performance of contraceptives shows that the women had most knowledge of injections (98.4 %) followed by IUD (94.7%), pills (92.7%), condom (84.6%) and female sterilization (73.1%). The current use information of respondents by type of method shows that the injectables were used more in Attock (37%) whereas IUDs were mostly used in Chakwal (44%).

vii. Only one-fourth (25%) of the women were counseled about all the methods by the service providers while half of the women mentioned that they were informed about some of the methods (58%);

viii. Regarding use of contraceptives, the most frequently mentioned problem was bleeding/irregular menstruation by 20 percent of the women;

ix. In willingness of women to use contraceptives, the study indicates that the duration of the contraceptive use is a major determinant in willingness of the user to continue. Longer the contraceptive use more is the willingness of the user to continue use in future.

x. The main reason for not using contraceptives, quoted by the highest percentage of respondents, is the desire for more children. A higher proportion of such respondents live in rural areas. This was followed by "excessive bleeding, absence of husband, irregularity in menstruation cycle, stoppage of menses, nausea, infection and pregnancy.

xi. The continuation of IUD and injectables during the reference period of June 2004 to June 2005 is taken. The number of both IUD and Injectable users have increased. Taking June 2004 as a reference period the number of users of IUD who obtained IUDs have increased from 41 in June 2004 to 335 by the end of June 2005. During the period a total of 40 women who had accepted IUD during different month had discontinued its use. The discontinuation rate comes to around 11.9 percent for the reference period. Similarly, out of 324 women who reported to have started using injections, 65 women or 20 percent had stopped using injections during the same period

5.2 RECOMMENDATIONS

Although, this research more or less uncovers issues, which have also been observed in previous studies on contraceptive use status in Pakistan, however, this is an extremely effective study in terms of identifying specific areas for program interventions, as comprehensive information has been collected pertaining to behavioural and attitudinal issues related to IUD and Injectables use. The following recommendations emerge from this research:

i. The level of satisfaction is positively related to use status: the proportion of acceptors still using the IUD is higher for those having relatively higher level of satisfaction. The resolution of side effects has a more dramatic impact on IUD use status so it is recommended that there should be a side effects management process;

ii. Whether an acceptor received pre-insertion counseling about side effects appears to slightly increase the chances of an acceptor retaining the IUD, thus there should be positive counseling services available for the clients in the service centers to minimize the risk of infection following IUD insertion. Counseling of potential IUD clients can effectively help them make good family planning choices and increase successful use of their chosen method;

iii. In terms of satisfaction with services, those who were unsatisfied were far more likely to have the IUD removed than those who were satisfied therefore quality of services is an extremely important component of the service package;

iv. The data indicate differences in IUD use status by rural/urban location, therefore different strategies should be evolved according to the needs and requirements of the clients taking into consideration the socio-cultural environment and economic conditions;

v. Most of the acceptors who knew an IUD acceptor discussed the IUD with them before having the IUD inserted. Whether or not an IUD acceptor would recommend an IUD to others appears to be an important factor in popularizing the use of the IUD. Therefore, peer education or communities groups of users can be an effective intervention in improving the method continuation rates;

vi. Programs should use a variety of dissemination and implementation approaches appropriate for addressing social barriers and misconceptions regarding contraceptives with focus on IUDs and injectables. For example, seminars or workshops may be sufficient if the only barrier is lack of knowledge among providers. Educational outreach through opinion leaders would be more appropriate for overcoming provider's biases against the IUD because of cultural issues or practices;

vii. Training of providers, community mobilizers, and health workers is crucial for the effectiveness of improving contraceptive usage and continuation. Providers are more likely to apply service delivery guidelines when trained on how to apply them, especially when supportive supervision reinforces that training. The knowledge, attitudes, and practices of the providers also improve significantly but not as much as those of the directly trained providers and health workers;

viii. To assure a continuing capability to offer IUD services, a health care facilities need more infrastructure, equipment, and supplies than for other reversible contraceptive methods.

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Annex-I

Training included the following topics: -

i. Purpose of the research.
ii. Outline of research and Objectives
iii. Explanation and discussion of terms used
iv. Explanation of the Questionnaires
v. Demonstration of interviews.
vi. Discussion on possible biases in the areas
vii. One days field practice and training of questionnaires, Discussion on possible field problem areas

Annex-II

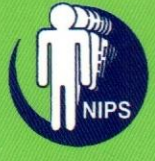
Terms Used in Questionnaire

i. **Interviewed/Had IUD**
This category includes all IUD acceptors who were located and were fully interviewed. These were acceptors reported at the clinic as having an IUD, who either still had an IUD or had it removed or expelled. The fully interviewed acceptors were considered verified cases.

ii. **Address Complete Not Located**
These were cases in which the acceptor's name and address obtained from the clinic records were complete but no person of the acceptor's name was found to exist at the address.

iii. **Refused Interview**
This category refers to the acceptors who refused to be interviewed due to the presence of the husband or in-laws at home.

iv. **Left Address**
This comprises acceptors who were not physically located because of migration or change of address.



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