

21 OCT 2000

**FACTORS AFFECTING CONTRACEPTIVE USE AMONG MARRIED
FEMALE ADOLESCENTS IN BANGLADESH**

SYEDA SELINA PARVEEN

ฉบับนี้เป็นการ
จาก
บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล

**A THESIS SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARTS
(POPULATION AND REPRODUCTIVE HEALTH RESEARCH)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2000
ISBN-974-664-667-2
COPYRIGHT OF MAHIDOL UNIVERSITY**

Copyright by Mahidol University

45682 C.1

Thesis

entitled

**FACTORS AFFECTING CONTRACEPTIVE USE AMONG MARRIED
FEMALE ADOLESCENTS IN BANGLADESH**

S S. Parveen

Ms. Syeda Selina Parveen
Candidate

Chanya Sethaput

Assoc. Prof. Chanya Sethaput, Ph.D.
Major advisor

Varachai Thongthai

Assoc. Prof. Varachai Thongthai, Ph.D.
Co-advisor

Liangchai Limlomwongse

Prof. Liangchai Limlomwongse, Ph.D.
Dean
Faculty of Graduate Studies

Chai Podhisita

Assoc. Prof. Chai Podhisita, Ph.D.
Chairman
Master of Arts Program in Population
and Reproductive Health Research
Institute for Population and Social
Research

Thesis

entitled

**FACTORS AFFECTING CONTRACEPTIVE USE AMONG MARRIED
FEMALE ADOLESCENTS IN BANGLADESH**

was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Master of Arts (Population and Reproductive Health Research)

on
September 7, 2000

S. S. Parveen

Ms. Syeda Selina Parveen
Candidate

Chanya Sethaput

Assoc. Prof. Chanya Sethaput, Ph.D.
Chairman

Varachai Thongthai

Assoc. Prof. Varachai Thongthai, Ph.D.
Member

Siriwan Graisorapong

Assoc. Prof. Siriwan Graisorapong, Ph.D.
Member

Liangchai Limlomwongse

Prof. Liangchai Limlomwongse, Ph.D.
Dean
Faculty of Graduate Studies
Mahidol University

Bencha Yoddumnern-Attig

Assoc. Prof. Bencha Yoddumnern-Attig, Ph.D.
Director
Institute for Population and Social Research
Mahidol University

ACKNOWLEDGEMENT

My first appreciation goes to Almighty god for giving me the will, courage and might to come for this course and complete it within the prescribed time.

I would like to express my sincere thanks and regards to my major advisor, Dr.Chanya Sethaput for her valuable guidance with critical, fruitful and insightful comments, suggestions and support at various stages of my thesis work. I also wish to extend my heartiest thank to my co-adviser Dr. Varachai Thonhthai for his valuable comments and fruitful suggestion in my thesis work. I would also like to convey my sincere thanks and gratitude to my external reader Dr. Siriwan Graisurapong for her useful suggestion that contributed to improve my thesis.

I express my appreciation with gratitude to Dr. Chai Podhisita, Chairman of the International Master Degree Program, for his moral support, assistance, co-operation, encouragement and guidance. I am grateful to him.

I would like to extent my sincere thanks to Dr. Bencha Yoddumnern-Attig, Director of IPSR, and all of the teachers who enlightened me by providing their valuable knowledge during this one-year course. I am really indebted to them. My special thanks to all of the staff at IPSR, especially Khun Luxana Ubol, Khun Padiwara Prasarkul (Gring) and Khun Sawitree Rutrachata (Boom) for their cooperation, support and hospitality during this one-year period. I would also like to acknowledge Khun Sansiri Chulerttiyawong, the library in charge and her staff for their readiness to help me

I wish to thank to my classmate Dr Juliandi Harahap for his cooperation, help and friendship.

My sincere thanks to Mr. Md. Sirajul Islam, former Director General, Directorate of Family Planning for his kind support for my higher study in abroad. I also thank to all my office colleagues for their cooperation.

Most of all, I am thankful to my respected father, Syed Md. Anwarul Haque and my mother, Syeda Kaniz Rasul for their guidance, moral support and kindness. Finally I would like expressing my thanks to all of my younger sisters and brother -in-laws whose inspirations encourage me for higher study and give me strength in abroad.

Syeda Selina Parveen

4238537 PRRH/M: MAJOR: POPULATION AND REPRODUCTIVE HEALTH RESEARCH: M.A. (POPULATION AND REPRODUCTIVE HEALTH RESEARCH).

KEY WORDS: CONTRACEPTIVE USE / MARRIED FEMALE ADOLESCENTS/ BANGLADESH/ EDUCATION OF WOMEN/ NUMBER OF LIVING CHILDREN/ HUSBAND'S APPROVAL OF FAMILY PLANNING/ FIELD WORKER'S VISIT/ KNOWLEDGE OF CONTRACEPTIVES.

SYEDA SELINA PARVEEN: FACTORS AFFECTING CONTRACEPTIVE USE AMONG MARRIED FEMALE ADOLESCENTS IN BANGLADESH. THESIS ADVISOR: CHANYA SETHAPUT, Ph.D., VARACHAI THONGHTHAI Ph.D., 62 p. ISBN-974-664-667-2

The aim of this study is to determine the factors affecting contraceptive use among married female adolescents in Bangladesh. The rate of contraceptive use among married female adolescents in Bangladesh is very low. That leads to high fertility, high maternal mortality and high infant mortality in the country. So to improve the overall reproductive health status of adolescents, it is important to encourage contraceptive use among married female adolescents.

This study investigates the effect of some demographic, socio-economic, cultural, and family planning programme factors on current users of contraceptives among the married female adolescents, using data from Bangladesh Demography and Health Survey 1996-97. A total of 1,222 currently married female adolescents aged 15-19 years were chosen for this study. Data were collected through direct interview method. The analysis used descriptive, crosstabulation, Chi-square and logistic regression statistics method.

Findings showed that knowledge of contraception is almost universal among the married female adolescents. Husband's approval of family planning is high and field worker's visit is low. The findings from the bivariate analysis suggest that among the ten independent variables, eight variables namely number of living children, desired number of additional children, women's education, women's occupation, husband's education, husband's approval of family planning, field worker's visit and knowledge of contraception had significant effect on contraceptive use. Only two variables namely, husband's occupation and women's mobility, were found not significant. However the result of the multivariate analysis showed that only three variables, namely, number of living children, husband's approval of family planning and field worker's visit were significant. The results of logistic regression analysis showed that women who had more living children were more likely to use contraception than those who had no children. Those married female adolescents who had been visited by the field worker and those whose husbands approved of family planning were more likely to use contraception than those who had not been visited by field workers and whose husbands did not approved of family planning.

TABLE OF CONTENTS

ACKNOWLEDGEMENT	iii
ABSTRACT	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER ONE : INTRODUCTION	
1.1. Background and Statement of Problem	1
1.2. Rationale of the Study	4
1.3. Research Question	6
1.4. Research Objectives	6
1.5. Definitions of Terms	7
CHAPTER TWO : LITERATURE REVIEW	
2.1. Adolescent's Contraceptive Use	8
2.2. Demographic Factors	8
2.3. Socio-economic Factors	10
2.4. Cultural Factors	13
2.5. Programmatic Factors	14
2.6. Summary of the Literature Review	15
2.7. Conceptual Framework	16
2.8. Hypotheses	18

CONTENTS (Cont.)

CHAPTER THREE: RESEARCH METHODOLOGY

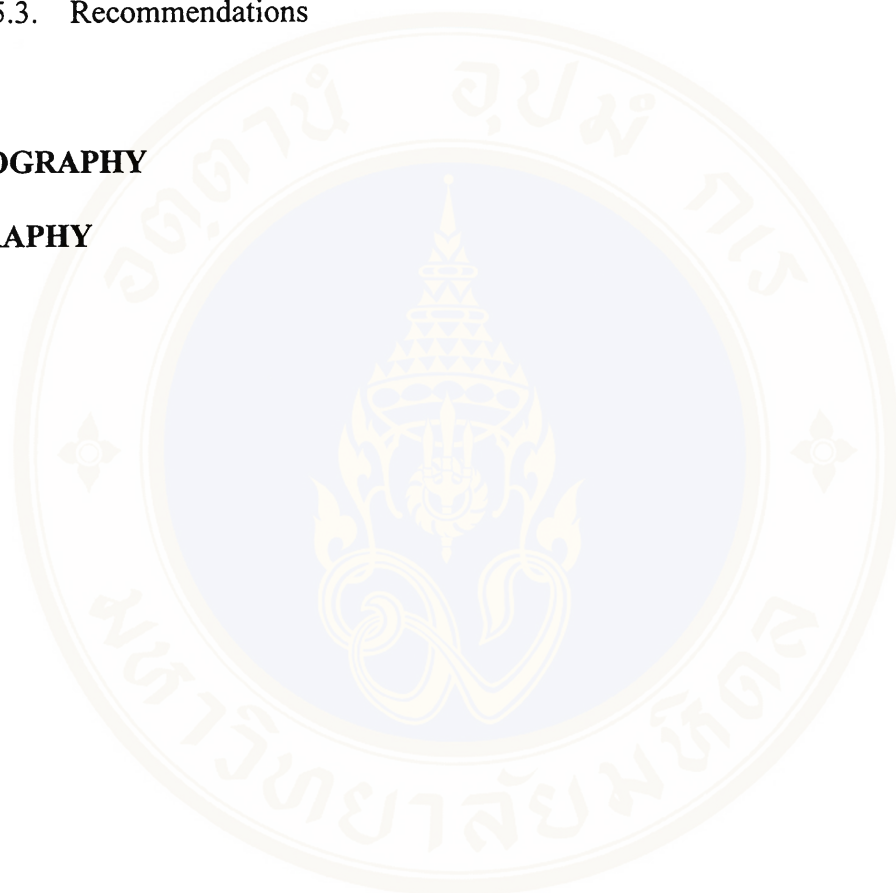
3.1. Source of Data	19
3.2. Operationalization of Variables	19
3.2.1. Dependent Variable	20
3.2.2. Independent Variables	20
3.3. Analysis of the Data	22
3.4. Limitation of the Study	22

CHAPTER FOUR: RESULT AND DISCUSSION

4.1. Selected Background Characteristics of the Sample	23
4.1.1. Demographic Characteristics	23
4.1.2. Socio-economic Characteristics	25
4.1.3. Cultural Characteristics	28
4.1.4. Family Planning Programmatic Characteristics	30
4.2. Factors Affecting Contraceptive Use (Bivariate Analysis)	34
4.2.1. Demographic Factors	34
4.2.2. Socio-economic Factors	37
4.2.3. Cultural Factors	40
4.2.4. Programmatic Factors	42
4.3. Results of Multivariate Analysis	46

CONTENTS (Cont.)**CHAPTER FIVE : SUMMARY, CONCLUSION AND RECOMMENDATION**

5.1. Summary	52
5.2. Conclusion	53
5.3. Recommendations	54
BIBLIOGRAPHY	56
BIOGRAPHY	62



LIST OF TABLES

		Page
Table 1	Percentage distribution of married female adolescents aged 15-19 by selected demographic characteristics	24
Table 2	Percentage distribution of married female adolescents aged 15-19 by selected socio-economic characteristics	27
Table 3	Percentage distribution of married female adolescents aged 15-19 by selected cultural factors characteristics	29
Table 4	Percentage distribution of married female adolescents aged 15-19 by selected family planning programmatic characteristics	31
Table 5	Percentage distribution of married female adolescents aged 15-19 who are currently using and not using contraceptive methods by selected demographic characteristics	36
Table 6	Percentage distribution of married female adolescents aged 15-19 who are currently using and not using contraceptive methods by selected socio-economic characteristics	39
Table 7	Percentage distribution of married female adolescents aged 15-19 who are currently using and not using contraceptive methods by selected cultural characteristics	41
Table 8	Percentage distribution of married female adolescents aged 15-19 who are currently using and not using contraceptive methods by selected family planning program characteristics	43
Table 9	Logistic regression coefficient of current using contraceptives by demographic, socio-economic, cultural and family planning program factors	49

LIST OF FIGURES

		Page
Figure 1	Conceptual framework of the study	17



CHAPTER ONE

INTRODUCTION

1.1 Background and Statement of Problem

Traditionally, in many parts of the world female adolescents get married early and start having child bearing before they are 20 years old. Globally, each year 15 million women under age 20 give birth, accounting for one fifth of all births worldwide (UNFPA, 1999). About 60 per cent of adolescent's births throughout the world are unplanned and about one in nine adolescents lack the contraceptive protection (GOB, 1998). The female adolescents of this age group are not physically or not psychologically ready for child bearing (GOB, 1998).

In Bangladesh the age group between 10 to 19 years old is consists of about 23 per cent of total population. About 48 per cent of them are female. The 15-19 age group of women is about a quarter of total women population. This age group has a long child bearing period. So this age group is very potential for future growth of population in the country. The annual growth rate of the adolescent's population is very high at 4.33 per cent compared to 1.7 per cent for the total population (GOB, 1998).

Marriage and then child bearing is the usual chronology of events in Bangladeshi society. Marriage in Bangladesh occurs at in early age and is almost universal. Early marriage is very high among the female adolescent's. At the same time while marriage rate per 1000 population is 10, the same for adolescents is 18. A study by Mitra et al. (1994) found that about 60 per cent of Bangladeshi women were married before age 15. The median age of first marriage is 14 years among the women age 20-49 years (Mitra et al.,1996-97).

There is a social pressure on young married female adolescent's to have child right after marriage. About 20 per cent of total births in Bangladesh belong to women who are 15-19 years old (Mitra et al., 1996-97). Thirty-one per cent of teen-age women in Bangladesh are mothers and another 5 per cent have first pregnant during Bangladesh Demography and Health Survey in 1996-97. The data has also indicated that almost one-third (31 per cent) of all women age 15-19 years have given birth.

Early marriage and child bearing are of concern due to the adverse health effects of childbearing at young ages and the lack of access to, or unavailability of preventive care (UN, 1992). An early start to childbearing remains an important issue in reproductive health because of substantial risks for immature bodies at the time of delivery, and for the babies born.

The maternal mortality rate (MMR) is high among the married female adolescent's in Bangladesh. The MMR is about 5.8 per 1000 live births among the married female adolescents, where as the national MMR is 4.5 per 1000 live births.

A study in Bangladesh (Mitra et al., 1993-94) has found that the infant mortality rate (IMR) is also higher among the children whose mother's age is below 20 at the time of birth. This data also shows that children borne to young mother suffers higher rate of morbidity and mortality.

The fertility is high among the adolescents in Bangladesh, it is about 155 per 1000 women. The contraceptive prevalence rate (CPR) is only 32.9 per cents among this age group (Mitra et al., 1996-97). Moreover, adolescent fertility contributes substantially to over all fertility (Islam et al., 1995).

In a study by Laffredo (1994) has mentioned that insufficient basic knowledge about sexual and reproductive health among the married female adolescents is usual in most parts of the world. Sex education is lacking in many developing countries where contraception is available. He has also mentioned that adolescent's motherhood adversely affects physical growth as well as the education and socio-economic development of women.

Contraceptive services have the potential to preserve women's health by enabling spacing and limiting birth (Jacobson 1992). A study by Mohammed (1994) found that in developing countries, only about 17 per cent of married adolescents between the ages of 15 to 19 use contraceptive methods. This report also has found those about 4.4 million adolescent females go to illegal and unsafe abortions each year. Gupta and Joshi (1995) have showed that contraceptive prevalence among married teenage in India is about 12 per cent. They also mentioned that teenage pregnancy was risk for both mother and child.

During past few years the issue of adolescent's pregnancy has been increasing perceived as a problem. In 1994, the International Conference of Population Development (ICPD) in Cairo issues on women's reproductive rights was highlighted. In that conference, adolescent reproductive health was cited as a priority issue because population under age 25 represent over half of the world's population. The Program of Action for ICPD in its chapter on reproductive rights acknowledges the urgent need to address the adolescent reproductive health issues of unplanned pregnancies, unsafe abortion and sexually transmitted diseases.

In Bangladesh, a traditional attitude prevails among the people that family planning services are not required for the young married females. Nevertheless, teenage reproductive behavior has received considerably less attention than it deserves (GOB, 1999). In Bangladesh a massive maternal and child health and family planning program has been functioning all over the country for the last 30 years. The program did not place much importance on the adolescent mothers. Still program has lacking to pay attention on adolescent mothers.

1.2 Rationale of the Study

Bangladesh Government has fixed its target to increase contraceptive prevalence rate to 62 per cent, to reduce fertility rate to 2.2 per cent and to reduce the maternal and child mortality by the year 2005. Contraception is one of the effective means to reduce fertility and reduce maternal and infant mortality by averting unwanted pregnancy. But contraceptive prevalence rate is low among the married

female adolescent's and this group has a long child bearing period. So if the contraceptive rate increase among the married female adolescents then national CPR will increase and that can contribute to reduce MMR, IMR, and TFR. So married female adolescent is very important target group to achieve the national target in increasing the contraceptive coverage, to reduce total fertility rate, MMR and IMR. On the other hand Bangladesh Government has also given priority to improve the overall health status of adolescents. However, in Bangladesh research on adolescent's reproductive behavior is very little in number.

So if we are avert unwanted pregnancies, frequent pregnancies, unsafe abortions those increase the risk of maternal mortality, infant mortality among the married female adolescent's and reduce the total fertility we need to address immediately the factors that related to fertility behaviour of married female adolescents in Bangladesh. Keeping these views this study is undertaken to find out the relationship between demographic, socio-economic, cultural and programmatic factors and contraceptive use among the married female adolescent's in Bangladesh. In this perspective the findings of this study can help the policy makers and program managers in formulating new policies, developing new program interventions for further strengthen and redesigning the program targeted for the female married adolescents for better contraceptive coverage.

1.3. Research Question

The family planning program in Bangladesh has achieved a success to increase contraceptive use among the couples from about 7 per cent in 1975 to 49 per cent in 1997 and the fertility decline from 6.2 in 1975 to 3.4 in 1996. But the contraceptive use rate is still low at 32.9 per cent among the young and newly wed women (Mitra et al., 1996-97). It is generally recognized that the efforts of family planning program must focus on all ages of couples. It is therefore, necessary to find out the causes of low contraceptive use among the adolescent married women in Bangladesh. So this study will explore:

- **What are demographic, socio-economic, cultural, and programmatic factors that affect contraceptive use among the married female adolescents in Bangladesh?**

1.4. Research Objectives

- To describe contraceptive use of married female adolescents according to background characteristics.
- To study the factors that affecting contraceptive uses among the married female adolescents in Bangladesh.

1.5. Definition of Terms

Adolescents: In this study the women aged 15-19 years are considered as being adolescents and focused only those are married.

Contraception: Method used by sexually active individuals and couples to prevent pregnancy. Reasons for implementing contraception techniques include personal desires (to never have children, postpone having children or stop having children); medical conditions that could threaten maternal fatal or infant health and social concerns regarding the effects of increasing population on the environment. This study considers contraceptive modern method such as pill, condom, IUD, injectable, menstrual regulation, male and female sterilization, norplant and traditional method such as withdrawal and abstinence.

CHAPTER TWO

LITERATURE REVIEW

2.1. Adolescent's Contraceptive Use

There are many factors that affect individual's use or non-use of contraceptives. Several studies have been done in the different countries in the past to find out the factors that affecting contraceptive use. Some of the studies are reviewed in this chapter.

Four priority factors, namely demographic, socio-economic, cultural, and programmatic factors are reviewed here to formulate the conceptual framework and hypothesis of this study.

2.2. Demographic Factors

The demographic characteristics such as number of living children and desire for additional children play an important role in determining the use of contraception.

Number of Living Children

Historically, thinking about children in numerical terms became parts of peoples mental outlook as they passed through a process of reproductive change (Simons, 1996). In fact, the numbers of living children influence the use of contraceptive positively. The studies in Kuwait (Shah et al., 1998) and Mexico (Nazar-

Beutelspacher et al., 1999) had shown that numbers of living children and the experience of death of the children had effect on use or non use of contraceptives. Number of living children one of the important factor that determine the use or non use of contraception. Mitra et al (1996-1997), in a study in Bangladesh had found that 13 per cent started using contraception before having the first child, because it was a social pressure to the couple to have a child after marriage. Twenty per cent began using after the first child and 20 per cent initiated to use contraception after having the second children.

Desired for Additional Child

A study (Islam et al., 1995) had indicated that among who said they wanted no more children, 29.4 per cent used contraception. Among ones who said they wanted another child in the future, 15.6 per cent were practicing contraception. The same trend was also found in various studies in other countries. Yethenpa (1999) in India, Narsingh (1997) in Nepal revealed in their studies that desire for the additional child had an influence on contraceptive use. Desired for additional children plays an important role in the decision making process concerning practicing family planning methods (Mitra et al 1996, Donahoe, 1996, Khan et al 1997). According to the Mitra et al.(1996-97) only 13 per cent initiated use of contraceptives before having the first child. It is because of a family pressure on newly married women to have children after marriage. So there is a negative relation between contraceptive use and desired for the additional child.

2.3. Socio-economic Factors

Women's Education

A study in Bangladesh showed that adolescent women who had secondary education and higher was found to 2.5 times practice contraception than those who had no education (Islam et al, 1995). A study in Bangladesh (Mitra et al. 1996-97) had shown that 46 per cent of women with no formal education were currently using a method compared with 51 per cent of women with either incomplete or complete primary school and 56 per cent of those with at least some secondary education. A study in Kenya by Lasee and Becker (1997) has revealed that if the husband lacked schooling but the wife had some higher education were 4.3 times as likely as uneducated couples to use contraceptive. According to the researcher, one interpretation of this result was that in case the wife was better educated than her husband, she might have considerably more household decisions-making. A study in Mexico by Nazar-Beutelspacher (1999) indicated that non-use of contraception was higher among the illiterate women than among those who had completed secondary schooling (49 per cent vs. 31 per cent).

In a study in Latin America country (Martin and Juarez, 1995) had revealed that the gap in contraceptive prevalence between least and most educated women ranges from approximately 20 per cent in Columbia and the Dominican Republic to more than 40 per cent in Bolivia, Ecuador, Guatemala, Mexico and Peru.

Women's education increases the age at first marriage. A study had shown that among women aged less than 18 years, who have passed 10th grade, less than one per cent were married (Islam et al., 1997). A study in Kuwait also showed that illiterate women were significantly less likely than educated women to practice contraception (Shah et al., 1998). The strong relation between women's education and contraceptive use has also shown by Avbayeru (1993) in Nigeria, Narsingh (1993) in Nepal and Yethenpa (1999) in India. The studies indicate that female's education has strong positive relation with use of contraception.

Women's Occupation

Many studies (Shapiro and Tambashe, 1994) found a significant positive association between women's employment and contraceptive use. These studies show that women's employment influences their contraceptive behaviour. A study in India Dharmalingam and Morgan (1996) found that women's work give women autonomy that led limit birth and spacing birth and contraceptive use. A study in Nepal (Narsingh, 1997) had shown the same findings that working women were more likely to use contraception. The study had also shown that the level of uses of contraceptive was higher among women who were engaged in non-agricultural sector. The study had shown that the women who were currently working in non-agricultural job were more likely to use contraceptives than who were working in agriculture. A study in Mexico, Nazar-Beutelspacher et al. (1999) indicated that women who were not working outside the home were 2.1 times as likely as those who never practiced contraception. A study in Bangladesh by Mabud et al. (1991) had shown that there was a relation between

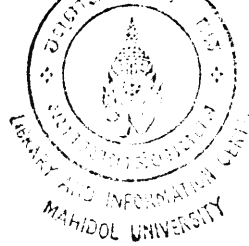
women's occupation and contraceptive use. So women's occupation have a positive relation with contraceptive use.

Husband's Education

Higher educated husband is more concern of higher living status. They are more aware of the consequence of health risk due to more pregnancy of their wives. A study in Kenya, Odhiambo (1997) found that there was a large positive effect of husband's education and contraceptive use. This study had also indicated that the net effect of husband's education on contraceptive use was larger than that of his wife's education. A study in Kuwait (Shah et al.,1998) revealed that husband's educational level was a stronger predictor of contraceptive use than wife's educational level suggesting that husband exert great influences on their wives' contraceptives behavior. Moreover, the husband's desire for more children and his attitude towards contraception is likely to have an impact on the wife's desire as well as on her contraceptive behaviour. Thus obtaining the husbands support is likely to be a major factor in advancing contraceptive practice in Kuwait (Shah et al., 1998)

Husband's Occupation

A study in Kenya, Odhiambo (1997) found that there was a large positive effect of husband's occupation on wives current contraception use. In that study he also found that husbands in higher status occupation were more likely to use contraception than the husbands employed in lower status of occupation. A study in Bangladesh had shown that wives of husbands employed in sales, services or production sectors were 1.5 times more likely to practice contraception than wives of



agricultural labors or farmers (Islam et al, 1995). These findings suggested that husband's occupational status had an effect on wives contraceptive use.

2.4. Cultural Factors

Women's Mobility

In Bangladesh young married and unmarried Muslim women have restriction to move out due to "*pardha*". In a study Islam et. al (1997) had mentioned the mobility of women had an impact on contraceptive method use. He had shown that women who had permission to go outside of home were to be two times as likely to be using contraception than those women who had no permission to go out. This study he had also pointed out that women's mobility was also positively associated with intention to use modern contraception in Bangladesh.

Husband's Approval of Family Planning

Islam et al. (1997) in a study found out that husband had a strong influence on contraceptive use among the adolescent married women in Bangladesh. That study had also shown that older family members were more perceived by the respondents to be the most hostile to family planning. In that study, 28.6 per cent of currently married women reported the disapproval of their older family members and 17 per cent reported that husband disapproved family planning.

Mitra et al. (1996-97) had also shown that husband had an important role in making decisions on family planning practice. A study in Kenya, Lasee and Becker

(1997) found that the wives' perception on her husband's approval was statistically significant in contraceptive use.

2.5. Programmatic Factors

Field Workers' Visit

Islam et al. (1995) in a study had shown that the respondents who had been contacted prior to previous six month period and during the previous six month period, ever uses were 60 per cent and 71.5 per cent respectively. The respondents who had never been contacted, ever used contraceptives only 26.5 per cent. Only 14.5 per cent of the clients who were currently using contraceptives methods never been contacted. Kamal and Sloggett (1996) in a study has shown that visitation of a field worker (family welfare assistant) in rural area during the previous three months (from the time of study) was the most significant determinant of contraceptive use in Bangladesh. Kuenning et al (1997) had pointed out that the female field workers' visit had a direct effect on family planning preferences. Islam et al. (1995) had shown that adolescent mothers were more likely to use contraception when family planning worker's visit them several times than those who were not visited at all. Service provider's visit interaction and spending time with the client had positive effect on contraceptive use (Kane et al., 1997). But in a study in Bangladesh, Janowitz et al. (1999) found that repeated home visits by field worker was not a possible indicator in convincing some women to accept family planning.

Knowledge on Contraception

Yethenpa (1999), in India, Narsingh (1997) in Nepal and Avleayern (1993) in Nigeria showed that women with high knowledge of modern contraceptive were more likely to use contraceptive methods. Knowledge measured in terms of the contraceptive methods respondent knows seems to be a positive relationship with contraceptive use. It was found that the more the respondents knew about methods of contraception, the higher the proportion of use among them (Leoprapai and Thongthai, 1987). Knowledge on contraceptive methods can play an important role in the acceptance and use of various contraceptive methods. Unless a woman knows about the different method of contraceptives it is unlikely that she will practice family planning. Various studies has shown that there is a strong relationship between the knowledge of methods, and its use. But a study by Regmi (1980) noted that higher knowledge did not necessarily lead higher level of contraceptive use, knowledge was a pre-requisite to contraceptive use. He urged by giving the example of Pakistan fertility survey and Bangladesh fertility survey where the higher level of knowledge on contraception was followed by relatively low use of contraception.

2.6 Summary of the Literature Review

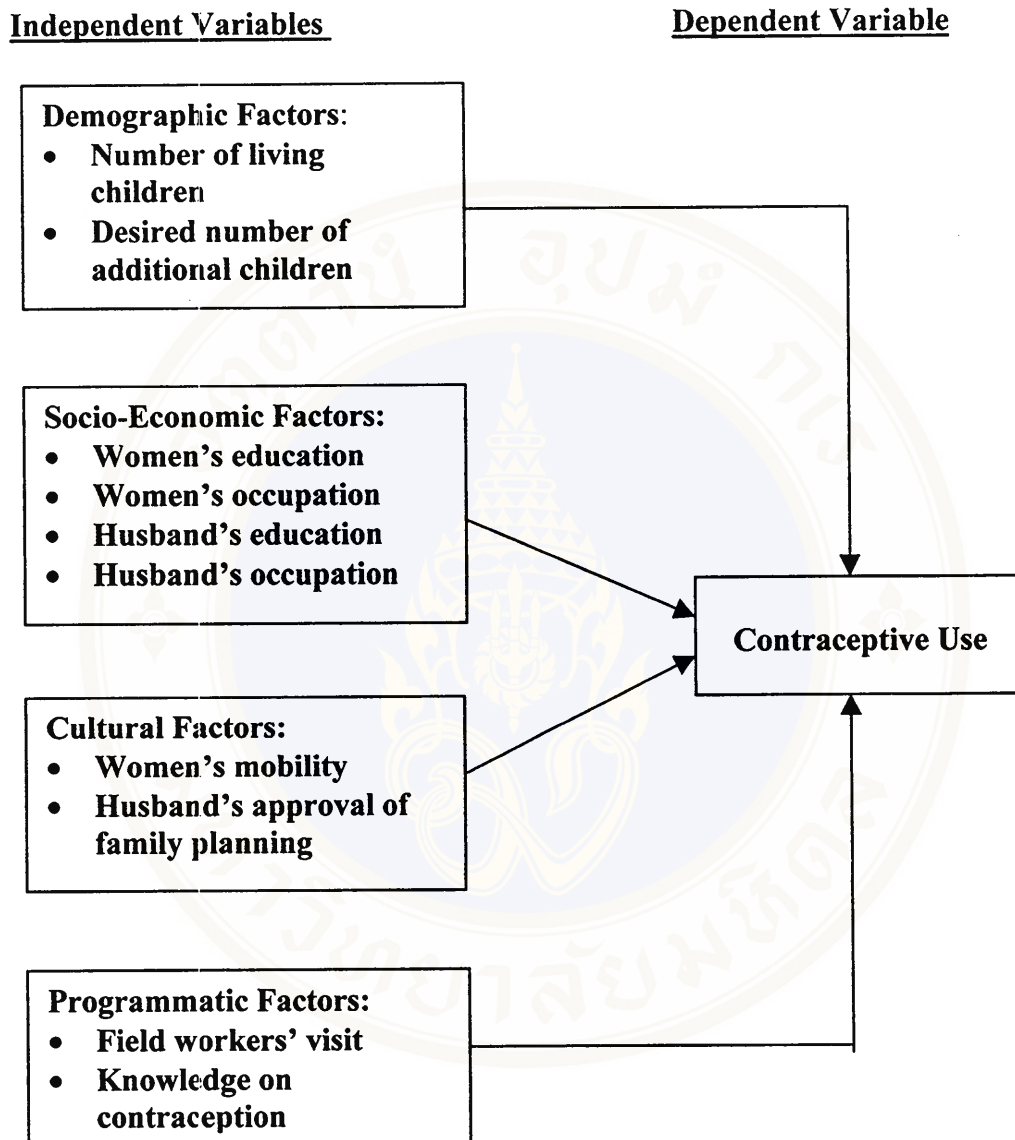
From the literature review, most of the past studies show that demographic , socio-economic, cultural, and programmatic factors have influence on the use of contraceptives among the married women. Previous studies have shown number of living children and desire for another children also one of the important variables to determine contraceptive use among the married female adolescents. The studies have

also shown that women's education plays an important role to use contraceptive. Contraceptive use rate also increases with an increase of level of education. Contraceptive use rate is higher among the married women with secondary education than primary education. Women's occupation has also affect on contraceptive use. Husband's educational level and type of occupation have influence on contraceptive use. Mobility of women has influence on contraceptive practice. It has revealed that husband's opposition or disapproval is the most obstacle of using family planning of women. Service provider's visitation with the client have positive effect to use of contraception. The knowledge on contraceptives is positively related to the contraceptive use.

2.7 Conceptual Framework

This study aims to determine the factors that affect contraceptive use among the married female adolescents in Bangladesh. All possible factors are grouped into four broader factors, namely demographic, socio-economic, cultural, and programmatic factors. The conceptual framework of this study is shown in the next page.

Figure 1: Conceptual framework of the study



2.8. Hypotheses

- a. Number of living children has positive effects on contraceptive use.
- b. Number of desired for additional children has negative effects on contraceptive use.
- c. Education of female married adolescent has positive effects on contraceptive use.
- d. Occupation of female married adolescent has influence on contraceptive use.
- e. Education of husband has positive effect on contraceptive use
- f. Occupation of husband has effect on contraceptive use.
- g. Mobility of women has positive effect on contraceptive use.
- h. Husband's approval of family planning has effect on contraceptive use.
- i. Field worker's visit has positive effects on contraceptive use.
- j. Knowledge on contraceptive has positive effect on contraceptive use.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Source of Data

This study used secondary data from the 1996-97 Bangladesh Health and Demography Survey (BDHS) conducted by National Institute for Population Research and Training (NIPORT) of the Ministry of Health and Family Welfare with the assistance of Mitra and Associates and Macro International Inc. The survey interviewed a total of 9,127 ever-married women within the reproductive age range 10-49 years old. A total of 1,222 currently married women age group 15-19 years were included as unit of analysis in this study. The data were collected from the six administrative divisions of Bangladesh following a systematic process. Each interviewee was asked a series of questions about her demographic, socio-economic, cultural, and service circumstances.

3.2. Operationalization of Variables

The dependent variable of this study is current contraceptive use among the female married adolescents in Bangladesh. The independent variables in the investigation are classified into four categories: demographic variables; socio-economic variables; cultural variables; and programmatic variables.

3.2.1. Dependent Variable

Contraceptive use: Contraceptive use refers here the use of modern methods (pill, condom, IUD, injectable, norplant, male and female sterilization) and traditional methods (withdrawal, abstinence) by currently married female adolescents for preventing pregnancy and spacing birth or limiting birth. It will be measured by asking question on contraceptive use or not use, either "yes" or "no" answers.

3.2.2. Independent Variables

Demographic variables

Number of living children: This variable refers to the total number of living children' (sons and daughters) of the couple at the time of the interview. It is grouped into 3 categories: no children, one children, two and more children.

Desired number for additional children: This variable means the desire for additional number of children' (sons and daughters) of the respondent at the time of interview. This variable is created by subtracting the number of living children from the ideal number of children. It is grouped into the four categories; one child, two children, three children and four and more than four children.

Socio-economic variables

Education: Education refers to the level of attainment in formal education by the individuals and it is grouped into three categories; no education, primary education

and secondary education and above. The same classification is used for men and women.

Women's occupation: The work done by married female adolescent is grouped into three categories; not working, work in agriculture and work in non-agriculture.

Husband's occupation: The worked done by husband are grouped in four categories; not working, working in agriculture, and working in non-agriculture sector.

Cultural variables

Women's mobility: It refers to married female adolescent can go out or can not go out of her house alone. It is grouped two categories; She can go alone any place and she can not move out alone from her house.

Husband's approval of family planning: It refers to husband has a favorable attitude to family planning or not. It is grouped as; husband's approval and husband's disapproval.

Programmatic variables

Field worker's visit: It means the visit made by the field worker to see the married female adolescent during last 6 months prior to the time of interview. The "yes" and "no" are answers to measure it.

Knowledge on contraception: Knowledge on contraception refers to the respondent's knowledge on any contraceptive methods. In the questionnaire, 10 questions were asked to check whether the respondent had recognized the 10 types of family planning methods. The variables are then counted to obtain a total knowledge

score. The score ranges from 0-10. The variable is then categorized into two groups. The score ranges from 0-4 are the "low knowledge on contraceptives" and range from 5-10 as "high knowledge on contraception". This type of score helps classifying the level of knowledge of the respondents.

3.3. Analysis of the Data

The SPSS program was used to analyze the data. Frequency distribution and descriptive statistics was used to explore the background characteristics of the sample population, such as demographic, socio-economic, cultural and programmatic factors and level of contraceptive use. Bivariate analysis such as, crosstabulation and chi-square test were applied to examine the association between independent variables and dependent variable. Next logistic regression was used to predict the possible relationship between dependent and independent variables.

3.4 Limitation of the Study

The study will use secondary data from BDHS 1996-97, which cover 10-49 years married women. The questionnaires were developed for all reproductive age group women not exclusive for adolescent married women. The findings can not reveal the reproductive health status of adolescents. In the data there is no question on either they have knowledge or they are aware on the risk of early pregnancy.

CHAPTER FOUR

RESULT AND DISCUSSION

4.1. Selected Background Characteristics of the Sample

4.1.1. Demographic Characteristics

Table 1 presents the frequency distribution of the sample population by selected demographic characteristics, such as number of living children and desired number of additional children. As for number of living children, it is found that a quite big group about 41 per cent of the age group 15-19 married female adolescents do not have any living children at the time of interviews. Among this group 49 per cent have one living child, and only 10 per cent have two or more than two children. The mean number of living children is 0.69.

When looking at the desired number of additional children, it is found that 83 persons are classified here as system missing or no information. So among the 1139 respondents it is discovered that the desired number for one additional child is 40 per cent, and 38 per cent of the respondents want two additional children. Only 9 per cent of the respondents' want 3 additional children and 8 percent want four or more additional children. It is reflecting the success of the promotion of the government on two-child policy. The mean number of desired for additional number children is 1.83. So from the data it shows that mean number of additional children is higher then the mean number of living children.

Table 1: Percentage distribution of married female adolescents aged 15-19 by selected demographic characteristics

Characteristics	Per cent	Number
Number of living children		
No child	40.8	498
One child	49.0	599
Two and more children	10.2	125
Total	100.0	1222
Mean = 0.69		
Desired number of additional children		
One child	42.5	484
Two children	40.6	463
Three children	8.6	98
Four and more children	8.3	94
Total	100.0	1139*
Mean = 1.83		

* 83 cases are classified as system missing.

4.1.2. Socio-economic Characteristics

Table 2 presents the frequency distribution of the sample population by selected socio-economic characteristics such as women's education, women's occupation, husband's education and husband's occupation. The data shows that about 40 per cent of married female adolescents have no education, about 35 per cent have primary education, and about 25 per cent have secondary education and higher education. It reflects the female's education is still very low in Bangladesh.

When looking at women's occupation, it is found that 2 persons are classified as system missing. So among the 1220 respondents, the majority of the married female adolescent, it is about 77 per cent at the time of interview are not working. They are mainly housewives. Only about 5 per cent are working in agriculture at the time of interview. It is observed that 19 per cent of married female adolescents are working in non-agriculture jobs such as animal raising, non-domestic labor and semi skilled job.

In the case of educational attainment of husbands, 17 persons classified as system missing. So among the 1205 cases data shows that about 44 per cent have no education at the time of interview. It indicates the low literacy rate in Bangladesh. The attainment of primary education of the husband is about 26 per cent, followed by about 31 per cent who completed secondary and higher education.

Compared with the educational attainment of wives and husbands it is found that the percentage of no education is higher among the husbands. The percentage of attainment in primary education is higher among the wives compared with the

husbands. But the percentage is higher in secondary and higher education among the husband's comparing with the wives.

Regarding the occupation of the husband only 1.4 per cent are not working at the time of interview. About 39 per cent are working in agriculture and about 59 per cent are working in non-agricultural sector, such as unskilled and semi skilled labor, business and professional works.

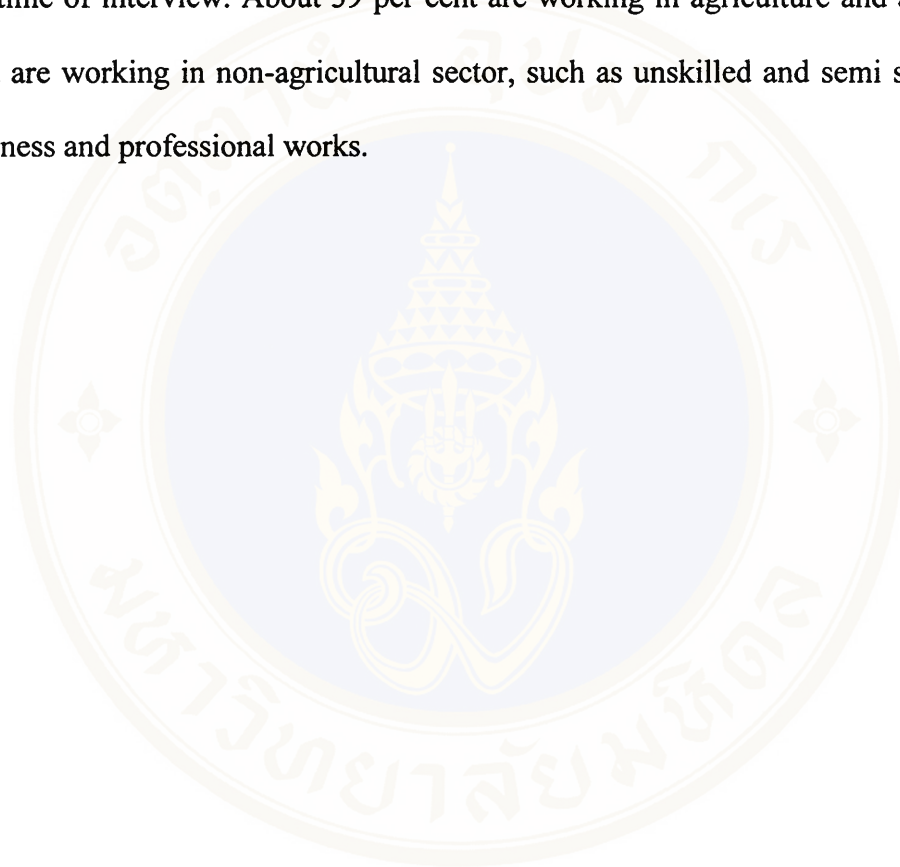


Table 2: Percentage distribution of married female adolescents aged 15-19 by selected socio-economic characteristics.

Characteristics	Per cent	Number
Women's education		
No education	39.6	484
Primary education	35.4	432
Secondary and higher	25.0	306
Total	100.0	1222
Women's occupation		
Not working	76.9	938
Agricultural	4.5	55
Non agricultural	18.6	227
Total	100.0	1220*
Husband's education		
No education	43.7	526
Primary education	25.6	309
Secondary and higher	30.7	370
Total	100.0	1205**
Husband's occupation		
Not working	1.4	17
Agriculture	39.2	479
Non agriculture	59.4	726
Total	100.0	1222

* 2 cases are classified as system missing.

** 17 cases are classified as system missing.

4.1.3. Cultural Characteristics

Table 3 presents the frequency distribution of the sample population by selected cultural characteristics, such as women's mobility and husband's approval of family planning. Regarding the women's mobility 1 person is classified as system missing. So among the total 1221 cases the findings shows that about 36 per cent of married female adolescents can not go out from their residence. But about 64 per cent of the respondents can go out alone or with their husband's or their children from their residence.

In the case of husband's approval of family planning 67 persons are classified as system missing. Among the 1155 respondent's only about 9 per cent husbands do not approve family planning, but the high portion of husbands approve the family planning, it is about 91 per cent.

Table 3: Percentage distribution of married female adolescents aged 15-19 by selected cultural characteristics.

Characteristics	Per cent	Number
Women's mobility		
Can not go out from residence	36.4	445
Can go out	63.6	776
Total	100.0	1221*
Husband's approval of family planning		
Disapproval	9.3	107
Approval	90.7	1048
Total	100.0	1155**

* 1 case is classified as system missing.

** 67 cases are classified as system missing.

4.1.4. Family Planning Programmatic Characteristics

Table 4 presents the frequency distribution of the under study sample population by selected family planning programmatic characteristics, such as family planning worker's visit, knowledge on contraception and current use of contraceptives. In the case of field worker's visit, 11 persons are classified as system missing. So among 1211 sample about 70 per cent of the respondents said that field worker did not visit them during the last 6 months, followed by only about 30 per cent of the sample population reported that field worker visit them during last 6 months at the time of interview.

Concerning knowledge on contraceptives, the table shows that about 93 per cent of the sample population knowledge level are high. Only about 7 per cent have low knowledge of contraceptives. So the data indicates that the knowledge of contraception is almost universal among the sample population.

However, when asking about the use of contraceptive methods it is quite astonishing that only 33 per cent are currently using contraceptives. About 67 per cent respondent non-user of any contraceptives. This finding reflects the large gap between knowledge and practice of contraceptives among the married female adolescents in Bangladesh.

Table 4: Percentage distribution of married female adolescents aged 15-19 by selected family planning programmatic characteristics.

Characteristics	Per cent	Number
Field worker's visit (last 6 months)		
No visit	70.4	852
Visit	29.6	359
Total	100.0	1211*
Knowledge on contraception		
Low knowledge	6.9	84
High knowledge	93.1	1138
Total	100.0	1222
Current use of contraception		
Do not use	66.9	817
Use	33.1	405
Total	100.0	1222

* 11 cases are classified as system missing.

The results of background characteristics of the sample population show that about 40 percent of female adolescents have no child at the time of interview. Highest percentages of the sample have one child and only low percentages or about one tenth have two or more children. Regarding the desired number of additional children, it is found that most of the young married female adolescents have desired for one or two additional children. This finding also reflects that married female adolescents in Bangladesh prefer small family.

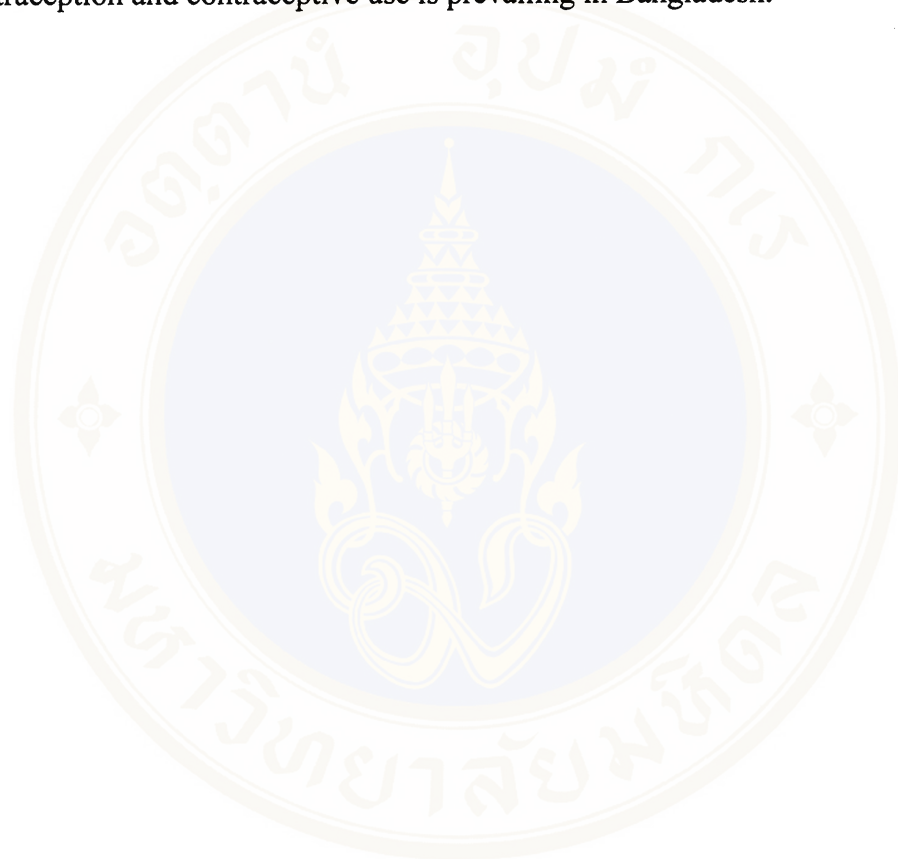
The result also shows that two fifths of the respondents have no education and about three fourths of the respondents are not working at the time of interview. It reflects the low level of women's education and women's occupation in Bangladesh. Regarding husband's education, the result shows that the no education group is still high, it is about 43 per cent. It reflects the overall low educational status of the sample population. When looking at husband's occupation, it is revealed that about 60 per cent of the respondents' husbands are working in non-agricultural sectors.

Regarding women's mobility, it is found that more than three-fifths of the respondents can go out from their residence. It indicates that at present women's mobility is liberal than before and husband's approval of family planning is very high, it is about 86 per cent. It reflects the favorable situation for enhancing contraceptive use among the married female adolescents.

The findings show that the field workers visit only 29 per cent of the respondents during last 6 months before the time of interview. It reflects that the field workers do not visit all the married female adolescents. The knowledge on contraception is very high and almost universal among the married female adolescents in Bangladesh. It is interesting to note that field worker's visitation is low but knowledge on contraception



is high. It reflects that for the majority of the respondents, field workers are not the source of knowledge on contraception. But at the same time it is astonished that though knowledge of contraception is high but only 33 per cent use contraceptives. So among the married female adolescents there is a large gap between knowledge of contraception and contraceptive use is prevailing in Bangladesh.



4.2. Factors Affecting Contraceptive Use

Results from the Bivariate Analysis

Bivariate analysis is conducted to explore the factors affecting the contraceptive use among the married female adolescents.

4.2.1. Demographic Factors

Number of Living Children

Table 5 shows the effect of demographic characteristics on current contraceptive use among the married female adolescents in Bangladesh. The table shows that contraceptive use increases with the increases of the number of living children. The contraceptive use rate is very low among the married female adolescents who have no living children, which are only 19 per cent. The contraceptive use rate is about 43 per cent among the respondents who have one child and use rate is about 45 per cent who have two or more children. It indicates that a very few young married females use contraceptive when they have no living children. The Chi-square test in this study shows the effect of number of living children on contraceptive use is statistically significant.

Desired for Additional Number of Children

In this study, the finding shows that about 46 per cent of married female adolescents who are using contraceptive have desired for one additional child. The percentage of contraceptive use among the respondents who have desired for two additional children is about 26 per cent, followed by about 13 per cent who have

desired for three additional children and about 6 per cent who have desired for four or more additional children. The findings show that the contraceptive use rate decreases with the increase in desire number of additional children. The Chi-square test shows that the effect of number of additional children and contraceptive use is statistically significant



Table 5: Percentage distribution of married female adolescents aged 15-19 who are currently using and not using contraceptive methods by selected demographic characteristics.

Characteristics	Not using	Using	Total (%)	Number
Number of living children				
No children	81.1	18.9	100.0	498
One children	57.4	42.6	100.0	599
Two and more children	55.2	44.8	100.0	125
Total	66.9	33.1	100.0	1222
p Value < 0.001				
Desire number of additional children				
One child	53.9	46.1	100.0	484
Two children	74.5	25.5	100.0	463
Three children	86.7	13.3	100.0	98
Four and more children	93.6	6.4	100.0	94
Total	68.4	31.6	100.0	1139
p value < 0.001				

4.2.2. Socio-economic Factors

Women's Education

Table 6 presents the effect of socio-economic characteristics on current contraceptive use among the married female adolescent in Bangladesh. Current use of contraceptives increases with the higher level of education. The contraceptive use rate is high among the women who have secondary education, which is about 43 per cent. In the same time only about 27 per cent married female adolescent use contraceptives those have no education, followed by about 34 per cent use contraceptives those have primary education. The Chi-square test also shows the effect of women's education on contraceptive use is statistically significant.

Women's Occupation

In this study, the highest percentages of married female adolescents' who are currently practicing contraceptive methods are engaged in non-agricultural sector, which is about 37 per cent. The married female adolescents who are not working, among them the contraceptive use rate is about 33 per cent and contraceptive use rate is low among those who are working in agriculture sector, which is only about 26 per cent. The contraceptive use rate is higher among who are working, which is about 66 percent compared with those who are not working, which is about 32 per cent. From the above evidence it is shown that the women who are currently working in non-agriculture job are more likely to use contraceptive than those who are working in agriculture. This means that women's occupation has effect on contraceptive use. Chi-square test has also confirms that the effect of women's occupation on contraceptive use is statistically significant.

Husband's Education

The findings shows that the current use of contraceptive increases with the higher level of husband's education. The current use of contraceptive s is very low whose husband has no education, which is about 29 per cent. With the attainment of husband's primary education, the contraceptive use rate was about 33 per cent and contraceptive use rate found about 40 per cent whose husbands have secondary and higher education. This result indicates that husband's educational attainment and level of education have influence on contraceptive use. The Chi-square test also shows the effect of husband's education on contraceptive use is statistically significant.

Husband's Occupation

From the table it is found that non agricultural job of husbands has more influence on contraceptive use, which is about 34 per cent whereas husband who are working in agriculture sector, among them the contraceptive use rate is about 31per cent. By comparing with the working and non-working husbands, the contraceptive use rate is high among the husbands who are working, which is about 66 per cent and only about 35 per cent for those husbands who are not working. So the results indicates that working status of husband has influence on contraceptive use than non-working husband. Those husbands who are working in non-agriculture sector have more influence on contraceptive use than those husbands who are working in agriculture. But Chi-square test shows that there are no differences in contraceptive use among women whose husbands hold different kinds of job.

Table 6: Percentage distribution of married female adolescents aged 15-19 who are currently using and not using contraceptive methods by selected socio-economic characteristics.

Characteristics	Not using	Using	Total (%)	Number
Women's education				
No education	73.1	26.9	100.0	484
Primary education	66.2	33.8	100.0	432
Secondary and higher	57.8	42.2	100.0	306
Total	66.9	33.1	100.0	1222
P value < 0.001				
Women's occupation				
Not working	67.9	32.1	100.0	938
Working in agriculture	74.5	25.5	100.0	55
Working in non agriculture	60.4	39.6	100.0	227
Total	66.8	33.2	100.0	1220*
P value = 0.044				
Husband's education				
No education	71.3	28.7	100.0	528
Primary	67.3	32.7	100.0	309
Secondary and higher	59.7	40.3	100.0	370
Total	66.7	33.3	100.0	1205**
P value = 0.001				
Husband's occupation				
Not working	64.7	35.3	100.0	17
Working in Agriculture	68.7	31.3	100.0	479
Working in non agriculture	65.7	34.3	100.0	729
Total	66.9	33.1	100.0	1222
P value = 0.550				

* 2 cases are classified as missing value

** 17 cases are classified as missing value

4.2.3. Cultural Factors

Women's Mobility

Table 7 shows that the married female adolescents who can not go out of their residence alone, among them contraceptive use rate is about 32 per cent. But who can go out of their residence, among them about 34 per cent use contraceptives. Thus mean there is no difference of contraceptive use rate between the two groups of married female adolescents those who can move out of the residence and those who can not move out. The Chi-square test shows that the effect of women's mobility on contraceptive use among the married female adolescents is not significant.

Husband's Approval of Family Planning

From the table, the findings show the effect of husband's approval of family planning on contraceptive use. The result shows that when the husbands do not approve the family planning, the contraceptive use rate is only about 6 per cent among the married female adolescents in Bangladesh. But when the husband approves the family planning, the contraceptive use rate is about 38 per cent. It proves that husband has great influence regarding decisions making on contraceptive use in Bangladesh. The Chi-square test shows that the effect of husband's approval and disapproval and contraceptive use is highly significant.

Table 7: Percentage distribution for married female adolescents aged 15-19 who are currently using and not using contraceptive methods by selected cultural characteristics.

Characteristics	Not using	Using	Total (%)	Number
Women's mobility				
Can not go out from the residence	68.1	31.9	100.0	445
Can go out	66.1	33.9	100.0	776
Total	66.8	33.2	100.0	1221*
P value = 0.479				
Husband's approval of family planning				
Disapproval	94.4	5.6	100.0	107
Approval	62.4	37.6	100.0	1048
Total	65.4	34.6	100.0	1155**
P value < 0.001				

* 1 case is classified as missing value.

** 67 cases are classified as missing value.

4.2.4. Programmatic Factors

Field Worker's Visit

Table 8 shows the effect of family planning programmatic factors on contraceptive use. The result shows that the percentages of using contraceptives for those married female adolescents who are not visited by field workers during last 6 months before the time of interview is about 24 per cent. But those married female adolescents who are visited by the field workers during the last 6 months is about 55 per cent. So the results indicate that field worker's visitation is closely associated with the increase of contraceptive use. The Chi-square test also shows that the association between field worker's visitation and contraceptive use is highly statistically significant.

Knowledge on Contraception

The table also displays the effect of knowledge concerning contraception on contraception use. The result shows that the respondents who have high knowledge on contraception among them about 35 per cent use contraceptives. The knowledge on contraception is low among those female married adolescents, only about 12 per cent use contraceptives. But from the data it is also shows that there is a gap between knowledge on contraception and contraceptives use. The Chi-square test shows that the effect of knowledge concerning contraception on contraceptive use statistically significant.

Table 8: Percentage distribution of married female adolescents aged 15-19 who are currently using and not using contraceptive methods by selected family planning programmatic characteristics.

Characteristics	Not using	Using	Total (%)	Number
Field worker's visit				
(Last 6 months)				
No visit	75.6	24.4	100.0	852
Visit	45.4	54.6	100.0	359
Total	66.6	33.4	100.0	1211*
p value < 0.001				
Knowledge on contraception				
High knowledge	65.3	34.7	100.0	1139
Low knowledge	88.1	11.9	100.0	84
Total	66.9	33.1	100.0	1222
p value < 0.001				

* 11 cases are classified as missing value.

From the bivariate findings it is revealed that less than one fifth of married female adolescents are using contraceptives when they have no children and use rate is highest among those who have two or more children. So it is revealed that married female adolescents are reluctant to use contraceptives when they have no children. It may be due to prevailing social norms or family pressure on young married females to have child after marriage. The findings also established that the contraceptive use rate increases with the number of living children. The findings also shows that contraceptive use rate is high when respondents have desired for one additional child and it decreases with the increase of desired number of living children.

Regarding the women's education it is found from the findings that a very few number of respondents (27 per cent) use contraceptives when they have no education. It increases with the level of education. The reason may be that education aware women regarding the benefit of use contraceptives. Women's occupation has also significant effect on contraceptive use. The finding shows that the percentage of contraceptive use is high among those who are working than who are not working. Among the working married female adolescents, about 65 per cent of the respondents use contraceptives and the percentage of using contraceptive is higher for those who are working in non-agricultural job. But who are working in agricultural job among them the percentage of contraceptive use is low, the reason is probably they think that more children can help them for their work.

Husband's education is also found has significant effect on contraceptive use among the married female adolescents. It is found that the percentage of using contraceptive is very low among those married female adolescents whose husbands have no education. Contraceptive use increases with the level of education of

husbands. It reflects the positive effect of husband's education on contraceptive use. In bivariate analysis it is found that husband's occupation has no significant effect on contraceptive use among the married female adolescents in Bangladesh. The effect of women's mobility is also found not significant on contraceptive use. The effect of husband's approval of family planning is found highly significant. More than one-third respondents use contraceptive when husband's approved the family planning. The percentage of use of contraceptive is very low when husbands do not approve family planning. It reflects that husband has strong influence regarding contraceptive decision-making.

The derived findings reflect that contraceptive use rate is higher among those married female adolescents who are visited by the field workers than who are not visited by the field workers during last 6 months prior to the time of interview. So the findings established that field workers visit has a strong effect on contraceptive use among the married female adolescents in Bangladesh. The findings also established that high knowledge of contraception has strong effect on contraceptive use. The findings shows that more than one third use contraceptive if they have high knowledge, but the use rate is very low if they have low knowledge.

4.3. Result of Multivariate Analysis

The logistic regression analysis examined all independent variables at the multivariate level. The variables that are significant at the bivariate level are reexamined controlling for other variables in the multivariate analysis for producing a clearer identification of the significant factors.

Table 9 presents the logistic regression coefficient in relation to current use of contraceptives. In the bivariate analysis among 10 independent variables, 8 independent variables are found significant, only 2 independent variables namely husband's occupation, and women's mobility are not found significant. But in multivariate analysis, it is found that only three variables namely number of living children, husband's approval of family planning, and field worker's visit are found significant.

Number of Living Children

It is found that the number of living children is statistically associated with the current use of contraceptives in bivariate analysis. Here in the multivariate analysis it is found that the married female adolescents with one child have higher odds of using contraceptives than who have no child and also significant. It is found that for two and more children the effect is also significant and they are more likely to use contraceptive than who have no living children. The odds of using contraceptives for married female adolescents with one child is 2.3 times higher and with the two and more children is 1.7 times higher compare with the married female adolescents who have no child after controlling all the independent variables in this study. From the

findings it reveals that married female adolescents with two and more children have less likely (1.77) to use contraceptives than those married female who has one child (2.35). The reason is may be due to the sex preference. In the cultural context of Bangladesh there is a strong son preference prevailing in the society. If couple have daughters and no son then they are less likely to use contraceptive. The result B coefficient shows the positive association between number of living children and contraceptive use among the married female adolescents and the findings also confirmed the hypothesis.

Husband's Approval of Family Planning

The findings derived from the bivariate analysis between husband's approval of family planning and contraceptive use is again found significant in the multivariate analysis after controlling other independent variables. The odd of using contraceptive is 7.8 times higher, among those husbands have approved of family planning compared with the reference group, than the husbands who have not approved of family planning. This means that the married female adolescents are more likely to use contraceptives if their husbands have approved than those whose husbands who have not approved. The B coefficient has also shows the positive effect of husband's approval of family planning on contraceptive use. Therefore the hypothesis on husband's approval of family planning has positive effect on contraceptive use is confirmed.

Field worker's visit

The findings derived from the previous bivariate analysis between field worker's visitation and contraceptive use is again found significant in multivariate analysis after controlling all others independent variables. The odds of using contraceptives is 3 times higher among the married female adolescents who are visited by the field workers during the last 6 months compared with the reference group who are not visited by the field worker in the last 6 months. This means that the adolescents who are visited by the field worker are more likely to use contraception than those who are not visited by the field workers. Therefore, the hypothesis on field worker visitation has positive effect on contraceptive use is confirmed.

In summary three independent variables namely number of living children, husband's approval of family planning and field worker's visit are found significant in multivariate analysis. So the hypotheses regarding these variables are confirmed. But other independent variables of this study namely desired of additional children, women's education, women's occupation, husband's education, husband's occupation, women's mobility, and knowledge on contraception are not found significant. So hypotheses regarding of these independent variables are rejected.

Table 9: Logistic regression coefficient of current using contraceptives by demographic, socio-economic, cultural and family planning program factors.

Variable	B	Sig.	Exp (B)
Number of living children			
no child (Ref.)			
One child	.8558	.0010	2.3534
Two and more children	.5743	.0002	1.7759
Desired number of additional children			
One child (Ref.)			
Two child	-.2042	.3560	.8153
Three child	-.9470	.0102	.3879
Four and more	-1.2900	.0119	.2753
Women's education			
No education (Ref.)			
Primary education	.2455	.1812	1.2783
Secondary and higher	.6981	.0027	2.0099
Women's occupation			
Not working (Ref.)			
Working in agriculture	-.4973	.2195	.6018
Working in non agriculture	.2859	.1230	1.3309
Husband's education			
No education (Ref.)			
Primary education	-.1580	.4148	.8539
Secondary and higher	.2588	.2230	1.2954
Husband's occupation			
Not working (Ref.)			
Working in agriculture	.7031	.3058	2.0201
Working in non agriculture	.7121	.2954	2.0382

Table 9: Logistic regression coefficient of current using contraceptives by demographic, socio-economic, cultural and family planning program factors (Continued).

Variables	B	Sig	Exp. (B)
Women's mobility			
Can not go out (Ref.)			
Can go out	-.1469	.3406	.8634
Husband's approval			
Disapproval (Ref.)			
Approval	2.0548	.0000	7.8052
Field worker's visit			
Not visit (Ref.)			
Visit	1.1201	.0000	3.0650
Knowledge on contraception			
Low knowledge (Ref.)			
High knowledge	.6994	.1181	2.0125

The findings from multivariate analysis show that the married female adolescents who already have living children are more likely to use contraceptives than those who have no children. The possible explanation is that, there is a strong pressure on married female adolescents to bear children after marriage is existing norms that favor an early establishment of family and that discouraging to use contraceptives before having children. Furthermore, the results also indicate that husband's approval of family planning has significant positive association to the use of contraceptives. The married female adolescents those husbands have approved of family planning they are much more likely to use contraceptives than the husbands do not approved family planning. The reason is may be that, Bangladesh are the male dominant society, so husbands have strong influence on contraceptive decision making. Field worker's visit has significant positive effect on contraceptive use among the married female adolescents in Bangladesh.

The results of multivariate analysis are different from the result from the bivariate analysis. It can be explained that in bivariate analysis we examine the association between dependent variable and one independent variable. But in logistic regression (multivariate analysis) we examine the probability of relationship of one independent variable between dependent variable after controlling other independent variables.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The purpose of this chapter is to summarize the major findings derived from the study and make the recommendations for policy formulations and take appropriate interventions for increasing the level of contraceptive use among the married female adolescents in Bangladesh. As well as to give suggestion for further research on this issue.

The study was undertaken to describe contraceptive use according to background characteristics of the respondents and to try to explore the factors effecting the contraceptive use among the married female adolescents in Bangladesh. For this purpose the study has analyzed the data from Bangladesh Demography and Health Survey (BDHS) 1996-97. The survey interviewed a total number of 9,127 ever-married women within the reproductive age range 10-49 years old. The study has considered only the age group of 15-19 years old currently married female adolescents. The sample size for the study is a total of 1,222 respondents from the main sample used in the BDHS.

The main purpose of the study is to investigate the factors affecting contraceptive use among the married female adolescents in Bangladesh. For this purpose this study has included 10 independent variables. The demographic variables

such as number of living children and desired number of additional children, socio-economic variables such as women's education, women's occupation, husband's education and husband's occupation. Moreover other independent variables including cultural variables such as women's mobility and husband's approval of family planning and family planning programmatic variables such as field worker's visit and knowledge on contraception, where as the dependent variable is current use of contraceptive.

For describing the status of contraceptive use, frequency distributions and cross tabulations have been used, whereas for assessing the impact of the independent variables on dependent variable, the Chi-square statistics and logistic regression technique have been used.

From the bivariate analysis among the 10 independent variables, eight are found significant but in multivariate analysis only three independent variables are found significant after controlling other variables. The results in the analysis confirm that number of living children has a positive effect on contraceptive use. Husband's approval of family planning and field worker's visit have also positive and significant effect on contraceptive use among the married female adolescents.

5.2 Conclusion

From the analysis of the study some major finding are observed: 1) most of the respondents have either no child or only one child, most of the married female adolescents have desire for one or two additional children. This finding reflects the intention to have small family among the married female adolescents.

2) Husband's approval of family planning is very high. The multivariate analysis also shows the significant positive effect of husband's approval of family planning on contraceptive use.

3) Field worker's visit is found to have a significant effect on current contraceptive use. However, only 29 per cent married female adolescents visit by the field worker's during last six months at the time of interview.

4) The education is very low among the married female adolescents as same as their husbands. As we know that low education is negative affect on contraceptive use.

5) The result of the study shows that agricultural occupation also related to low use of contraceptive.

6) The finding shows that knowledge on contraception is very high and almost universal among the married female adolescents but at the same time contraceptive prevalence is very low among the married female adolescents.

5.3. Recommendations

On the basis of the findings from the study some recommendations are formulated here for promoting contraceptive use among the married female adolescents in Bangladesh.

1) Field workers of family planning program need to make greater efforts to extend their service to married female adolescents. Strong instruction should be given for field workers to visit the house of married female adolescents and counsel the married female adolescents and their husbands on health and economic benefit of

small family, risk of early pregnancy of mother and child and detail information regarding contraception.

2) From the findings it is found that contraceptive use is low among who have no education and primary education and who are not working. So field worker should give more attention on this target group.

3) Women education is very low, so the government should take appropriate intervention for increasing education among the women.

4) The results show those married female adolescents who are not working among them contraceptive use rate is low, the government should create working opportunity for women.

5) As a short term basis informal education program can be launched for targeting the married female adolescent through mass media.

6) Further research will be needed to find out the current status of reproductive health of adolescents, premarital sex and knowledge of the risk of early pregnancy.

That will be help to take initiative for improvement of the overall reproductive health status of female adolescents in Bangladesh.

BIBLIOGRAPHY

- Abdullah, A.A. (1983). Determinants of Fertility Behaviour of Low-Income Countries, with Emphasis on Bangladesh, **Bangladesh Rural Development Studies**, Sep; 11(3): 1-139
- Amazigo, U., Silva, N., Kaulfman, J. and Obikeze, S.D. (1997). Sexual activity and contraceptive knowledge and use among in school adolescents in Nigeria. **International Family Planning Perspectives** 23: 28-33.
- Nazar-Beutclspecher, A., Molina-Rosales, D., Salvalierra-Lzaba, B., Zapata-Martelo, E. and Halperin, D. (1999). Education and Nonuse of Contraceptives among Poor Women in Chiapas, Mexico, **International Family Planning Perspectives**, 25(3): 132-138.
- Avbayeru, T. (1993). **Factors influencing contraceptives use in Nigeria**, MA, Thesis, Institute for Population and Social Research, Mahidol University, Thailand.
- Dharmalingam, A. and Morgan P. (1996). Women's work, autonomy, and birth control: Evidence from two South Indian villages. **Population Studies** 187-201, vol. 50, No.2.
- Donahoe, D. (1996). **Men and Family Planning in Bangladesh: A Review of the Literature**, Final report, Population council, Dhaka, Bangladesh.

Government of Bangladesh. (1998), **Adolescents Health and Development Issue and Strategies. Country Report, South Asia Conference on Adolescents**, New Delhi, Ministry of Health and Family Welfare, Bangladesh.

Government of Bangladesh. (1999). **Population and development, post-ICPD achievement and challenges**. Ministry of Health and Family Welfare, Bangladesh.

Gupta, R.B. and Joshi, S. (1995). **Strategy Formulation to Reduce Teenage Fertility in the Uttar Pradesh**. Paper presented in the workshop, Organized by UP Academy of Administration, Nainital, India.

Islam. M.M. and Mahmud, M. (1996). Marriage pattern and some issues related to adolescents marriage in Bangladesh, **Asia Pacific Population Journal**, Vol. 11, No. 3.

-----,M.M., Mahmud, M. (1995). Contraception among adolescents in Bangladesh, **Asia Pacific Population Journal**, Vol.10, No. 1.

Islam, M., Kane, T.T., Khuda, E.B., Hossain, M.B. and Reza. M.M. (1997). **Determinant of contraceptive use among the young and newly-wed couples**, Reproductive Health in Rural Bangladesh, Vol.1, ICDDR, Dhaka, Bangladesh.

Jacobson, J.L. (1992). **Improving women's Reproductive Health**. A Worldwatch Institute Report on Progress towards a Sustainable Society. New York, W.W. Norton, 83-99.

- Janowitz, B., Holtman, M., Johnson, L and Trottier, D. (1999). The impact of field workers in Bangladeshi Family Planning Programme. **Asia Pacific Population Journal**.
- Narshingh, D. (1997). **Factor effecting modern contraceptive use in Nepal**. MA Thesis. Institute for Population and Social Research, Mahidol University, Thailand.
- Kamal, N. and Sloggett, A. (1996). The Effect of Female Family Planning Workers on the use of Contraceptive in Bangladesh. **Asia Pacific Population Journal**, Vol. 11, No.3.
- Kane, T.T., Hossain, M.B. and Khuda, E.B. (1997). Quality of care, client satisfaction, and contraceptive use in rural Bangladesh. **Reproductive Health in rural Bangladesh**, vol.1. ICDDR, Dhaka, Bangladesh.
- Khan, Abdullah, H.T. and Racsid R. (1997). Factors affecting the most Recent fertility Rates in Urban rural Bangladesh, **Social Science and Medicine** 44, 3: 279-289.
- Kueninning, M.A., Hossain, M.B. and Khuda, E.B. (1997). The Effect of Family Planning Programme on Fertility Preferences; Evidence from Bangladesh, **Reproductive Health in Rural Bangladesh**, vol.2, ICDDR. Dhaka, Bangladesh.
- Lafferdo, S. (1994). **Global view: Adolescents**. Population Research Bureau. Washington, DC.
- Lasee, A. and Beakur, S (1997). Husband Wife communication about family planning and contraceptive use in Kenya. **International Family Planning Perspectives**, 23: 15-20 & 33.

- Leoprapai, B. and Varachai, T. (1987). **Contraceptive Practice of Thai Women.**
Institute for Population and Social Research, Mahidol University, Salaya,
Thailand.
- Mabud, M.A., Ali, M.A. and Rahman, H. (1991). **Evaluation of the Project: Use of
Women's Vocational Training Program for Population Activities on
Income, Contraceptive and Reproductive Behaviour of Rural Women.**
Dhaka : PDEU, Government of Bangladesh.
- Malhotra, A. and Thapa, S. (1991). Determinants of contraceptive methods choice in
Sri Lanka an update of a 1987 survey. **Asia Pacific Population Journal,**
Vol.6. No.3.
- Martin-Castro, T and Juzrez, F. (1995). The impact of women education on fertility in
Latin America : Searching for explanations: **International Family
Planning Perspectives, 21: 52-53 80.**
- Mitra, S.N., Ali, N., Islam, S., Cross, A.R. and Saha, T. (1994). **Bangladesh
Demography and Health Survey 1993-1994,** National Institute of
Population Research and Training (NIPORT), Mitra and Associates and
Macro International, Dhaka, Bangladesh and Calverton, Maryland USA.
- Al-Sabir, A., Cross, A.R. and Jamil, K. (1997). **Bangladesh Demography
and Health Survey 1996-1997** National Institute of Population Research
and Training (NIPORT), Mitra and Associates and Macro International,
Dhaka, Bangladesh and Calverton, Maryland USA.
- Mohammed, A. (1994). **Adolescent sexual and Reproductive health: A Reality,
not to be Ignored.** PSAY Network. 2(2), 4-5.

- Odhiambo, O. (1997). Men's participation in family planning decisions in Kenya, **Population Studies**, Vol. 51, No. 1.
- Regmi, G. (1980). Differentials in Contraceptive Knowledge in Nepal, in *Multivariate Analysis of World Fertility Survey Data for Selected ESCAP Countries*. **Asian Population Studies Series**, No. 49, ESCAP. United Nation.
- Shah, M., Nasra, S.A., and Makhdoom, R.Z. (1998). Pattern of desire fertility and contraceptive use in Kuwait, **Family Planning Perspective** Vol. 24, No. 3.
- Shapiro, D. and Tambashe, O.B. (1994). **The impact of women employment and education on contraceptive use and abortion in Kinhasa**, Pennsylvania State University, Population Research Institute, Working paper no.1994-05.
- Simmons, R. (1996). Women's lives in transition: A qualitative analysis of the fertility decline in Bangladesh. **Studies in Family Planning**, 27.5: 251-268.
- United Nations Population Fund (1997). **The State of World Population 1997**.
- , (1999). **The State of World Population 1999**.
- Warwick, D. (1986). The Indonesian Family Planning Program, government influence and client choice, **Population and Development Review**, 12.3: 453-490.
- World Health Organization, (1996). **Young Peoples Health-A Challenge for Society: Report of a WHO Study Group on Young People and Health for All by the Year 2000**, Geneva: World Health Organization, 1986 (WHO technical report series', 731).

Yethenpa, T. (1999). **Determinants of contraceptive use in the state of Uttar Pradesh, India**, MA, Thesis, Institute for Population and Social Research, Mahidol University.





BIOGRAPHY

Name	Syeda Selina Parveen
Date of Birth	1st June 1960
Place of Birth	Dhaka, Bangladesh
Present Address	Sec-11, Block-c, Road No-10, Lane No -5, House No.15, Mirpur, Dhaka 1221
Institution Attended	Master of Arts (M.A) in Mass Communication and Journalism from the University of Dhaka,1984.
Fellowship	World Health Organization (WHO)
Position & Office	Information officer Information, Education & Motivation (IEM) Unit Directorate of Family Planning Ministry of Health and Family Welfare Population Building Azimpur, Dhaka - 1205, Bangladesh