RESEARCH REPORT

189

SITUATIONAL ANALYSIS OF STRENGTHENING THE NATIONAL MENSTRUAL REGULATION (MR) PROGRAMME IN BANGLADESH

M. A. Mannan
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Contents

List of Tables and Figures *iv*
Abbreviations and Acronyms *viii*
Acknowledgements *ix*
Abstract *x*

CHAPTER 1 1
SITUATION ANALYSIS AND DESCRIPTION OF THE MENSTRUAL REGULATION PROGRAMME 1
1.1 Introduction 1
1.2 Status of Maternal Mortality 2
1.3 The EKN Initiative regarding MR Programme 3
1.3.1 Project Objectives 4
1.3.2 The Marie Stopes Clinic Society (MSCS) 5
1.3.3 The Family Planning Association of Bangladesh (FPAB) 6
1.4 Outline of the Report 6
CHAPTER 2 7
OBJECTIVES OF THE EVALUATION AND METHODOLOGY 7
2.1 Objectives and Research Questions 7
2.2 Data and Methodology 7
2.2.1 Study Design 7
2.2.2 Selection of Areas - Project and Control Area 8
2.2.3 Respondents of the Study 9
2.2.4 Selection of Respondents for Household Survey 9
2.2.5 Qualitative Data Collection Methods 13
2.2.6 Size of Sample for Facility Survey 13
2.2.7 Data Collection Instruments 13
2.2.8 Implementation of Fieldwork 14
2.3 Challenges and Limitations 14
CHAPTER 3 17
MENSTRUAL REGULATION (MR) PROGRAMME IN BANGLADESH: AN OVERVIEW 17
3.1 The Menstrual Regulation (MR) Programme in Bangladesh 17
3.2 State of Affairs regarding MR 19
3.3 Overview of MR Services 21
3.4 Marie Stopes Clinic Society and Family Planning Association of Bangladesh 24
3.4.1 Menstrual Regulation (MR) Programme of MSCS 24
3.4.2 Menstrual Regulation Project of the Family Planning Association of Bangladesh 25
CHAPTER 4 26
KNOWLEDGE AND ATTITUDES OF WOMEN REGARDING FP AND MR 26
4.1 Socio-economic Profile of the Respondents 26

4.2 Health Seeking Behaviour 30
4.3 Experience of Illness and Treatment Seeking Behaviour during Last Three Months 31
4.4 Type of Treatment Received during Last Sickness 31
4.5 Marriage and Reproductive Health 32
4.6 Family Planning 35
4.6.1 Knowledge and Awareness about Family Planning Methods 35
4.6.2 Advantages and Disadvantages of Family Planning Methods 36
4.6.3 Consequences of Frequent Pregnancies 36
4.6.4 Knowledge on Different Family Planning Methods 37
4.6.5 Current Use of Family Planning Methods 38
4.6.6 Ever Use of FP Methods 39
4.6.7 Consequences of Not Using Family Planning Methods 40
4.6.8 Attitude towards Abortion 41
4.6.9 Management of Unwanted Pregnancy 42
4.6.10 Knowledge about Early Marriage 43
4.7 Knowledge and Attitude towards Menstrual Regulation (MR) 44
4.7.1 Knowledge on MR 44
4.7.2 Timeline for MR 44
4.7.3 Assistance and Service Providers for MR 45
4.7.4 Attitude towards MR 46
4.7.5 Whether MR Is Considered a Right of Women? 47
4.7.6 Experience of MR 49
4.7.7 Service Providers for MR 50
4.7.8 Complications Faced after MR 51
4.7.9 Cost of MR 52
4.8 Results of Focus Group Discussions (FGDs) 52
CHAPTER 5 54
KNOWLEDGE AND ATTITUDES OF MALE HOUSEHOLD HEADS TOWARDS MR RELATED ISSUES 54
5.1 Introduction 54
5.2 Socio-economic Profile of the Respondents 56
5.3 Knowledge and Use of Family Planning 59
5.4 Management of Unwanted Pregnancy 59
5.5 Knowledge on MR 60
5.6 Timeline for MR 60
5.7 Assistance and Service Centre for MR 61
5.8 Attitude towards MR 62
5.9 Whether Male-heads Consider MR a Right of Women? 63
CHAPTER 6 65
EXPERIENCE OF MR CLIENTS: BARRIERS TO ACCESSING SERVICES 65
6.1 Background of the Clients 65

6.2. Knowledge about Family Planning Methods 66
6.3. Knowledge about MR 68
6.4 Assistance for MR 70
CHAPTER 7 79
ASSESSING THE IMPACT OF THE MR INTERVENTIONS 79
7.1 Introduction 79
7.2. Knowledge 79
7.3 Quality of Care 82
7.4 Concluding Remarks 83
REFERENCES 85
Annex 1: Summary of Statistical Analysis 88
Annex 2: Information on the Two Implementing Agencies and Family Planning Association of Bangladesh 101

List of Tables and Figures

List of Tables

Table 2.1	:	Sample Selection for the Household Survey	10
Table 4.1	:	Percentage Distribution of the Respondents according to Background Characteristics: by Area	27
Table 4.2	:	Distribution of Women by Main Occupation of Household Head	28
Table 4.3	:	Distribution of Households Monthly Income: by Area	29
Table 4.4	:	Distribution of the Respondents according to Their Usual Place of Treatment during Sickness: by Area	30
Table 4.5	:	Percentage Distribution of the Respondents according to the Type of Treatment Received for Sickness during Last Three Months: by Area	32
Table 4.6	:	Distribution of Women by Age at First Marriage: by Area	34
Table 4.7	:	Number of Children Born Alive and Currently Living by Area	34
Table 4.8	:	Decision regarding Last Pregnancy: Was it Mutual or Forced by Husband	35
Table 4.9	:	Percentage Distribution of Women Who have Heard about FP Methods: by Area	35
Table 4.10	:	Percentage Distribution of Respondents by Their Perception about Advantages of FP Methods: by Area (Multiple Responses)	36
Table 4.11	:	Percentage Distribution of Respondents by Their Perception about Disadvantages of FP Methods: by Area (Multiple Responses)	36
Table 4.12	:	Percentage Distributions of Respondents according to Their Opinion about Consequences of Frequent Pregnancies: by Area (Multiple Responses)	37
Table 4.13	:	Percentage Distribution of the Female Respondents Who Have Knowledge about Different FP Methods: by Area	37
Table 4.14	:	Whether the Woman or Her Husband is Currently Using Any FP Method: by Area	38
Table 4.15	:	Percentage Distribution of Respondents according to Their Current Use of FP by Methods	39
Table 4.16	:	Percentage Distribution of Women by Ever Use of FP Methods	39
Table 4.17	:	Percentage Distribution of Women according to the Type of FP Methods Ever Used: by Area	40
Table 4.18	:	Percentage Distribution of Women according to Their Perceptions about Consequences of Not Using Any FP Methods: by Area	41
Table 4.19	:	Percentage Distribution of the Respondents according to Their Perception on Management of Unwanted Pregnancy: by Area (Multiple Response)	42
Table 4.20	:	Percentage Distribution of the Women according to Their Knowledge about Minimum Age of Marriage for Girls and Boys: by Area	43
Table 4.21	:	Percentage Distribution of Women by their Perception about Impact/Consequences of Early Marriage of Girls by Area	43
Table 4.22	:	Percentage Distribution of the Respondents according to Their Knowledge about MR	45
Table 4.23	:	Percentage Distribution of Women according to Their Knowledge on Availability of Service Providers for MR in Their Locality: by Area	46
Table 4.24	:	Percentage Distribution of the Respondents according to Their Opinion regarding MR Issue	47
Table 4.25	:	Whether Respondents Consider MR a Right of Women: by Area	48

Table 4.26 : Percentage Distribution of Women according to Their Opinion regarding Abortion 49
Table 4.27 : Percentage Distribution of Women Having Relatives/Friends Who Had Experience of MR 50
Table 4.28 : Percentage Distribution of the Respondents according to the Timeline/ Duration of Pregnancy When Their Relatives/Friends Had the MR Performed 50
Table 4.29 : Percentage Distribution of Women according to the Service Providers Who Performed MR for Their Relatives/Friends 51
Table 4.30 : Percentage Distribution of Women according to the Type of Complications Faced by Their Relatives/Friends due to Unsafe MR 51
Table 4.31 : Percentage Distribution of the Women according to their Perceptions about the Cost incurred by Their Friends/Relatives for MR 52
Table 5.1 : Percentage Distribution of the Male Household Heads according to Their Background Characteristics: by Area 57
Table 5.2 : Distribution of Male Household Heads according to Monthly Income from All Sources: by Area 59
Table 5.3 : Percentage Distribution of Household Heads according to Their Perceptions on Management of Unwanted Pregnancy 60
Table 5.4 : Percentage Distribution of Household Heads according to Their Knowledge on MR 61
Table 5.5 : Percentage Distribution of Male Heads according to Their Knowledge on Availability of Service Providers for MR in Their Locality: by Area 62
Table 5.6 : Percentage Distribution of Male Heads according to Their Opinion regarding MR Issue: by Area 63
Table 5.7 : Whether Male Household Heads Consider MR a Right of Women: by Area 63
Table 5.8 : Percentage Distribution of Male Heads according to Their Opinion regarding Abortion: by Area 64
Table 6.1 : Percentage Distribution of MR Clients according to Their Background Characteristics: by Area 65
Table 6.2 : Percentage Distribution of MR Clients by Number of Children Born Alive and Currently Living: by Area 66
Table 6.3 : Distribution of Respondents by Number of Children Dead: by Area 66
Table 6.4 : Percentage Distribution of MR Clients by their Perceptions on Advantages of FP Methods (Multiple Responses): by Area 67
Table 6.5 : Percentage Distribution of MR Clients by Their Perceptions regarding Disadvantages of FP Methods (Multiple Responses): by Area 67
Table 6.6 : Percentage Distribution of MR Clients Who have Knowledge of Different FP Methods: by Area 68
Table 6.7 : Percentage Distribution of MR Clients according to Their Perceptions on Reasons/Advantages/Disadvantages of MR: by Area 69
Table 6.8 : Percentage Distribution of MR Clients by Duration of Pregnancy (Timeline) When the MR Was Performed: by Area 71
Table 6.9 : Percentage Distribution of MR Clients by Type of Complications Faced after Having the MR: by Area 72
Table 6.10 : Average Number of MR Done 72
Table 6.11 : Percentage Distribution of MR Clients by Type of Information Healthcare Provider Sought from Them before MR 73

Table 6.12 :	Percentage Distribution of MR Clients Who were Told of the Steps of MR and Who Received Advice on FP from the Provider: by Area	74
Table 6.13 :	Percentage Distribution of MR Clients by Type of Advice Received from the Provider: by Area	74
Table 6.14 :	Percentage Distribution of MR Clients Who Faced Problems/Barriers from Family/Society for Doing MR: by Area	75
Table 6.15 :	First Major Problems Faced after Coming to the Facility	75
Table 6.16 :	Suggestions to Overcome the Barriers	76
Table 6.17 :	Percentage Distribution of MR Clients by Amount of Cost Incurred for MR: by Area	76
Table 6.18 :	Percentage Distribution of MR Clients by Type of Provider and Average Amount of Cost Incurred: by Area	77
Table 7.1 :	Percentage Distribution of the Respondents Who Faced Problems/Barriers from Family/Society for Doing MR: by Area	83

List of Figures

Figure 4.1	:	Percentage Distributions of the Respondents according to Their Opinion regarding Abortion	41
Figure 6.1	:	Percentage Distribution of MR Clients Having Incorrect Knowledge about the Timeline of Safe MR	69
Figure 6.2	:	Percentage Distribution of MR Clients by Type of Provider Who Performed the Procedure: by Area	70
Figure 6.3	:	Percentage Distribution of MR Clients Who Faced Complications after MR: by Area	71
Figure 6.4	:	Percentage Distribution of the Respondents Who Received Advice/ Suggestions from Provider before MR	73
Figure 7.1	:	Percentage Distribution of the Women Respondents Who Have Knowledge about Different FP Methods: by Area	80
Figure 7.2	:	Percentage Distribution of MR Clients Who Know about Different Types of FP Methods	80
Figure 7.3	:	Percentage Distribution of the Respondents (women and MR clients) Having Correct Knowledge on the Timeline of Safe MR in Intervention and Control Areas	81
Figure 7.4	:	Percentage Distribution of the MR Clients according to the Timeline When They Had the MR Performed	81
Figure 7.5	:	Percentage Distribution of MR Clients Who Faced Complications after MR: by Area	82
Figure 7.6	:	Percentage Distribution of MR Clients Who Received Suggestion from Provider after MR Performed	83

Abbreviations and Acronyms

ADB	Asian Development Bank
ANC	Antenatal Care
BAPSA	Bangladesh Association for the Prevention of Septic Abortion
BBS	Bangladesh Bureau of Statistics
BCC	Behaviour Change Communication
BMMS	Bangladesh Maternal Mortality Survey
CCMRA, B	Coordination Committee of MR Associations in Bangladesh
DFID	Department for International Development
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
DH	District Hospital
ESP	Essential Services Package
FGD	Focus Group Discussion
FP	Family Planning
FPAB	Family Planning Association of Bangladesh
FWA	Family Welfare Assistant
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
HNPSP	Health, Nutrition and Population Sector Programme
HPSP	Health and Population Sector Programme
ICDDR, B	International Centre for Diarrhoeal Disease Research, Bangladesh
IPPF	International Planned Parenthood Federation
IUD	Intrauterine Device
KII	Key Informant Interview
MCWC	Mother and Child Welfare Centre
MDG	Millennium Development Goals
MMR	Maternal Mortality Rate
MR	Menstrual Regulation
MRTSP	Menstrual Regulation Training and Service Programme
MSCS	Marie Stopes Clinic Society
MVA	Manual Vacuum Aspiration
NGO	Non-governmental Organisation
PAC	Post Abortion Care
PNC	Post-natal Care
PSU	Primary Sampling Unit
RBA	Rights based Approach
RHP	Reproductive Health Promoter
SIDA	Swedish International Development Agency
UHC	Upazila Health Complex
UHFWC	Union Health and Family Welfare Centre
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
WHO	World Health Organisation

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Abstract

Several hundred thousand women in Bangladesh terminate their pregnancy either by menstrual regulation (MR) or through abortion. Government policy does not recognise abortion; but there exists a policy for MR, permitting termination of unwanted pregnancy up to 10 weeks from the last menstrual period. But access to safe MR is limited—unskilled and untrained providers mostly conduct termination of pregnancy- making unsafe abortion one of the leading causes of maternal deaths in Bangladesh. In order to reduce maternal mortality and morbidity in the country, an initiative was launched in 2008 (with financial support from the Embassy of the Kingdom of the Netherlands).The overall aim was to improve knowledge of and access to quality MR services for the prevention of unsafe abortion and unsafe MR. The present study was undertaken to examine the impact of the MR intervention, i.e. to assess the extent to which the implementing agencies-Marie Stopes Clinic Society (MSCS) and Family Planning Association of Bangladesh (FPAB) have achieved their desired objectives.

Three independent indicators have been used for the evaluation—how far the program has been successful in: (a) increasing awareness regarding timeline for safe MR, (b) enhancing access to services to get rid of unwanted pregnancy, and (c) reducing the incidence of unsafe abortions, early marriage, and violence against women. Findings suggest that,overall, the MR initiative has been successful in achieving the targets. Respondents in the intervention area are much better off in terms of awareness regarding timeline of safe MR (79 per cent of women and 88 per cent of the MR clients) compared to their control group counterparts (51 per cent and 74 per cent respectively), access to skilled provider for termination of unwanted pregnancy, and fewer incidences of unsafe abortions as a way of pregnancy termination. People belonging to different age groups (adolescents, adults, the aged) and socio-economic categories (rich/poor, educated/illiterate) get the relevant message regarding WHY, WHEN, WHERE, and by WHOM the MR procedure should be performed. The implementing agencies have played a crucial role in promoting safe MR in their respective working areas in the aspects of awareness creation, capacity development, infection prevention, standard guideline on MR, enabling environment, and rights based approach. However, there still remains scope to improve quality of care.

CHAPTER 1

SITUATION ANALYSIS AND DESCRIPTION OF THE MENSTRUAL REGULATION PROGRAMME

1.1 Introduction

The Millennium Development Goals (MDGs), the Global Fund to Fight AIDS, Tuberculosis and Malaria, the Global Alliance for Vaccines and Immunisation and the Global Alliance for Improved Nutrition all deal with essential global health issues and priorities like communicable diseases, maternal and child health and malnutrition. Indeed, health is at the core of the MDGs, which were endorsed by all United Nations Member States at the 2000 Millennium Summit and which provide ambitious targets for reducing poverty. Three of the eight MDGs, eight of the 18 targets and 18 of the 48 indicators are health related. Even though the MDGs do not provide a comprehensive list of health targets, these are important milestones in progress towards health for all.

Education and health are crucial determinants of economic development: the Millennium Development Goals (MDG-2, 4-6) call for universal primary school enrolment and substantial improvement of child mortality, maternal health, and combating communicable diseases by 2015. However, UNDP finds that while the progresses of reducing child mortality (MDG-4) and combating diseases (MDG-6) are on track, achievement of the MDG-5, i.e. reduction of maternal mortality ratio (MMR), is not achievable within the time limit.

One of the important goals of Health, Nutriton and Population Sector Programme (HNPSP) of the government of Bangladesh has been to improve the health and family welfare status of the most vulnerable groups- women, children and the poor. Bangladesh has achieved significant progress in health and population indicators over the last few years (due to increased access to health and FP services) through a combination of facility level, community and household level service provision strategies. The fertility transition is already underway in the country and the success of the immunisation programme is most impressive, including reductions in infant and child mortality. The contraceptive prevalence rate has already reached more than 50 per cent level. On an average, women in Bangladesh now give birth to only 2.3 children as compared to 6.3 children in the mid-1970s. More than 50 per cent of married couples of reproductive age have been protected by modern contraception now, as compared to only 8 per cent in the early 1970s. The expectation of life at birth for both sexes has increased from about 45 years in the mid 1970s to 66.7 years in 2008. These are some of the notable changes that have occurred in the demographic profile of Bangladesh. It is remarkable that despite adverse socio-economic environment, commendable success in reproductive and child health has been achieved over the period of three decades.

The infant mortality rate showed a steady decline from 150 deaths per 1000 live births in 1973 to 94 in 1991, 47 by 2007 (Bedford 2009) and 43 in 2011 (NIPORT *et al.* 2011), while the under five-mortality rate declined from around 260 deaths per 1000 live births to only 53 over the same period (NIPORT *et al.* 2011). Immunization coverage at the age of 12 months increased from as low as 54 per cent in 1990 to 82.5 per cent in 2011 (BDHS) and the country is expecting to attain polio-free status very soon (Moral and Rainis 2009).

1.2 Status of Maternal Mortality

According to MDG-5, the maternal mortality ratio should be reduced by three quarters between 1990 and 2015. In Bangladesh, MMR has been reduced from 574 per 100,000 live births in 1991 to 320 in 2001. There are two indicators for monitoring the reduction of maternal mortality–maternal mortality ratio and proportion of births–attended by skilled health personnel. In 2006, the estimated MMR was 290 (UNFPA), but according to Bangladesh Bureau of Statistics (BBS), the MMR is 315 for 2007, estimated from the Sample Vital Registration System (BBS 2008). According to government statistics, maternal deaths fell by, at least, 60 per cent from 1990 to 2010–2011(Liu *et al*. 2012). Further evidence in this regard comes from the two official government studies of maternal mortality (Bangladesh Maternal Mortality Surveys, or BMMS), which were conducted in 2001 and 2010 (NIPORT 2003,2011). Their findings offer further evidence of this steep decline: a drop in maternal mortality of two-fifths in less than one decade. In 2011, MMR was 194. To achieve the MDG-5, Bangladesh will need to meet the target MMR of 143 per 100,000 live births by 2015. It will also need to increase proportion of births attended by skilled health personnel from the level of 5 per cent in 1990 to 50 per cent by 2015. Maternal mortality has declined considerably in Bangladesh over the past few decades. Some of that decline—though precisely how much cannot be quantified—is likely attributable to the country's menstrual regulation (MR) programme, which allows women to establish non-pregnancy, safely after a missed period and thus avoid recourse to unsafe abortion (Hossain *et al.* 2012). Bangladesh is making solid progress towards meeting the MDG of reducing maternal mortality by three-quarters between 1990 and 2015 (UN 2015).

According to Hossain *et al.* (2012), Bangladesh has succeeded in reducing deaths during pregnancy and childbirth, by improving access to maternal health care and lowering fertility, especially births that pose above-average health risks (e.g., births occurring to high-parity women). What makes the country unique, however, is the potential contribution of an authorised procedure—known as menstrual regulation, or MR—to "establish non- pregnancy", after a missed period (Akhter 1988). Available evidence suggests that the share of maternal mortality due to complications from induced abortion has declined since initiation of the MR programme. For example, during the 1970s and 1980s, before the widespread availability of MR services, unsafe abortion was a major cause of maternal mortality

in Bangladesh. A national level survey conducted during 1978-79 found that complications from unsafe abortion played a major role in 26 percent of maternal deaths (Rochat *et al.* 1981). Similarly, a study of rural areas conducted during the 1980s found that the proportion of maternal deaths attributable to abortion was 15 per cent (Fauveau *et al*. 1988). However, there has been a substantial improvement in this regard over the last two decades, as will be clear from the following. Findings from first national maternal mortality survey of 2001 (NIPORT *et al.* 2003) found a substantially lower proportion of maternal deaths, attributable to abortion-only 5 per cent of maternal deaths were related to induced abortion (NIPORT *et al*. 2003). The 2011 BMMS found an even smaller percentage, merely 1 per cent of maternal deaths were attributable to abortion during 2008–2010. If this last estimate is accurate, it points to a steep decline in the proportion of maternal deaths due to unsafe abortion (NIPORT 2011). However, it needs to be emphasised that the various surveys used different methodologies, some methodologies were less rigorous than others. Again, surveys related to maternal mortality in general, and of abortion related mortality in particular, are likely to suffer from recall lapse and high levels of under-reporting (Liu *et al*. 2012).

It is to be noted that Bangladesh is a moderate Muslim country with some cultural values of conservative nature. Living together with partner, extramarital sex and getting children without being married are against the norm of the society. Such women are socially excluded and their children cannot be reared as other children in the society. Women, therefore, try to hide their relationship with their partner, and in case of pregnancy outside wedlock, they try to abort the child in secrecy. In this backdrop, MR is considered to be a tool to hide the "sin" of secret sexual relations, and therefore is socially unacceptable in Bangladesh. MR is also regarded as a sin from the religious point of view. "Children" are considered to be "gift of God" and any harm to them is not religiously acceptable. Moreover, there remains some misconception about the health hazards associated with MR, which makes it unpopular among general people. Social, cultural and religious norms along with some misconception make MR a sensitive issue in Bangladesh.

1.3 The EKN Initiative Regarding MR Programme

The recent Directorate General of Health Services (DGHS) 2007 report estimates approximately four million unwanted pregnancies annually in Bangladesh, of which 25 per cent are estimated to be attributed for terminations. The Maternal Mortality Survey 2001 indicates that illegal terminations due to unsafe practices account for 15 percent of maternal deaths. The latest Bangladesh Maternal Mortality and Health Survey (BMMS) 2010 indicates that maternal deaths due to induced abortions have declined from 5 per cent of MMR in 2001 to 1 per cent of MMR in 2010. However, many women currently coming for MR have already tried other methods or have waited too long, until a pregnancy could no longer be denied. It is likely that there is underreporting about illegal abortions and legal MR procedures.

While termination of pregnancy is legal only to save the life of the pregnant women, there is an increasing demand for pregnancy termination, despite a steady increase in contraceptive use rate.

A special project, "Strengthening the National Menstrual Regulation Programme for Reduction of Maternal Mortality and Morbidity in Bangladesh" was launched in June 2008. With financial support from the Netherlands Ministry of Development Cooperation and in partnership with the Government of Bangladesh and MR NGOs, the World Health Organization (WHO) launched the initiative in 2008 through the MR Project. A Challenge Fund of USD 273 million was established to fund innovative project proposals from MR NGOs, research institutions and interested parties on a competitive basis. In collaboration with the Directorate General of Family Planning (DGFP), the MR project was implemented and coordinated by WHO Bangladesh as the dedicated Management Agency (MA), which used to manage the project, including all liaisons, technical and supervisory aspects. The MR Project is jointly supervised by WHO and DGFP. As a result of project activities, women's access to safe services has significantly increased. However, gaps in equitable access and quality of care still persist.

It needs to be emphasised that given the sensitivity of the issue arising from social, cultural and religious norms (viz. the taboo on sexuality, the negative social attitude towards sexual activity without being married), the project focused mainly on currently married women who decide to do MR to get rid of an unwanted pregnancy.

1.3.1 Project Objectives

The overall objective of this initiative was to improve equitable access to services for unwanted pregnancy and the prevention of unsafe abortion, especially for poor and underserved women in rural, urban and hard-to-reach areas of Bangladesh.

The project addresses four closely inter-linked components:

Component 1	Scaling-up delivery of quality MR services;
Component 2	Generating rights-based demand from underserved women for quality MR services;
Component 3	Improving the knowledge/evidence base;
Component 4	Strengthening the policy response.

The MR Project was implemented in six of seven divisions of Bangladesh. The activities were implemented across 36 Upazilas in 16 districts. The project was implemented by several NGOs having undertaken different projects–each with its own objectives, budget and activities. The partner NGO collectively addressed 606,975 direct beneficiaries and 1,932,190 indirect beneficiaries.

The initiative has been reviewed in 2011 and overall, the seven projects were considered successful. Almost all envisioned activities had been completed according to the plans and most targets were achieved. The projects succeeded in ensuring equitable menstrual regulation services for poor and difficult to reach groups and the uptake of temporary and permanent family planning methods had increased. The Ministry of Health GoB provided good stewardship and overall project management was satisfactory. However, a critical remark was placed regarding the time-consuming and not cost-effective bidding procedure. Another critical remark is related to the menstrual regulation practices: the service delivery in the public sector was not sufficient to fulfill the increasing demand created by the projects, and infection prevention practices were not carried out properly.

The present impact study is complementary to this review and assesses more precisely the net-effect of the MR programme. The present study was limited to project areas of Sylhet division, which are being implemented by Marie Stopes Clinic Society (MSCS) and Family Planning Association of Bangladesh (FPAB). Detailed description of project activities undertaken by MSCS and FPAB is provided in chapter two. However, a brief overview of their activities is provided in the following sections.

Ideally, an impact evaluation of this nature requires the study of relative change of performance indicators on intervention group with respect to those of the control group overtime. However, this was not within the scope of the present study, since there was no baseline survey of the aforementioned programme whatsoever. This limitation was dealt with, by allowing a commendable sample size in both the control and the intervention areas, and including as many socio-economic and cultural indicators as are recommended in standard studies of this nature.

1.3.2 The Marie Stopes Clinic Society (MSCS)

The Marie Stopes Clinic Society has been providing a wide range of SRH services, including MR in Bangladesh since 1988. Under the EKN support, the following districts have been covered: Narayanganj of Dhaka division; Maulvibazar of Sylhet division; Feni under Chittagong division, and Sherpur under Dhaka division. The main purpose of MSCS was to increase awareness on prevention of unwanted pregnancy and MR services and to improve quality of safe MR services.

The community awareness strategy used by MSCS involved different sectors of the community: NGO field workers, male key decision makers, locally elected male and female leaders, female community support groups (FCSG), micro-credit NGO field workers, college and school teachers, and the DDFP. In order to assess the impact of the MR programme in Moulvibazar, MSCS conducted a baseline survey amongst the target population in 2010 and an end-line survey in 2011.

1.3.3 The Family Planning Association of Bangladesh (FPAB)

The Family Planning Association of Bangladesh is a member of the International Planned Parenthood Federation (IPPF) and has been working in Bangladesh since 1953. It is the oldest NGO in Bangladesh and provides a range of reproductive health and family planning services, including MR services.

The project has been implemented at six FPAB clinics in six districts: Barisal, Chittagong, Sylhet, Jhalakati, Magura and Netrokona. In order to promote community awareness, reproductive health promoters (RHPs) have been used to disseminate the key messages to the community. The organisation has carried out a base line survey and an end line KAP survey in all project locations, including Sylhet division.

1.4 Outline of the Report

The report is organised into seven chapters. Chapter one begins with an overall situation analysis and a description of the menstrual regulation programme. Chapter two specifies the evaluation objectives and research questions and describes the study design and data collection. Chapter three provides a brief literature review and state of affairs regarding MR programme in Bangladesh, including activities of two implementing agencies (FPAB and MSCS). Chapter four outlines background characteristics and socio-economic profile of sample women and analyses the differentials in knowledge, attitude and practice with regard to FP and MR in the intervention and control area, while chapter five presents the findings regarding attitude of male household heads towards FP and MR related issues. The experience of MR clients regarding access to and utilisation of services is analysed in chapter six. The overall impact of the MR intervention related to the objectives is presented in chapter seven.

CHAPTER 2

OBJECTIVES OF THE EVALUATION AND METHODOLOGY

2.1 Objectives and Research Questions

The main purpose of the present impact study is to assess whether and to what extent the interventions of the implementing agencies (i.e. MSCS/FPAB) have had an impact in terms of quality and utilisation of services. The study also aims to identify barriers that women face in accessing and utilising reproductive health services. Therefore, data were also collected from male heads of households. Taken into consideration the power relation within a family, they may inhibit women from accessing services.

The research questions are:

(i) How far has the project been successful in increasing awareness regarding MR among women and in increasing knowledge on safe timeline and appropriate place for performing MR?

(ii) To what extent has the intervention been effective in increasing the social awareness regarding MR and abortion issues and removing misconceptions related to MR?

(iii) What are the opinions and perceptions of male-heads, the key decision makers in the household, with regard to MR?

(iv) Has the project led to an increased use of MR services?

(v) Are women going for MR at the right time and to the right person?

(vi) Is the quality of services adequate?

2.2 Data and Methodology

2.2.1 Study Design

The present impact study was limited to project areas of Family Planning Association of Bangladesh (FPAB) and Marie Stopes Clinic Society (MSCS) being implemented in Sylhet division–FPAB in Sylhet district and MSCS in Maulvibazar district. The catchment area of the FPAB project in Sylhet district is the peri-urban area of the city of Sylhet and the surrounding rural areas (covering Sylhet Sadar Upazila and South Surma Upazila), while the catchment area of the Marie Stopes project in Maulvibazar is the whole of Maulvibazar district. Two upazilas from each district were covered, which are considered "intervention" area. For comparison purposes, two upazilas from Habiganj district were selected as "control area." The present evaluation has been designed to facilitate an assessment of the impact of the MR programme in the intervention area. And in order to allow

statistically significant comparisons between the two areas, it was required to collect data from a substantial number of households.

To this end, household surveys were conducted in both areas. Interviews with key persons and focus group discussions (FGDs) have been held in order to explain and complement the findings from the surveys. In the pursuit of satisfying the objectives, the study employed a two-track methodology:

The first track consisted of analysis of secondary sources of data as given below:

- Documents/reports of donors/evaluation reports;
- Documents/reports of implementing agencies (baseline and end line-surveys of MSCS); ICDDR,B also carried out several studies on MR;
- Reports of other agencies (if available).

The second track consisted of primary data collection, including:

- Household survey;
- Exit survey of clients;
- Key Informant Interview (KII);
- Focus Group Discussion (FGD);
- Discussion with different stakeholders (relevant agencies/organisations).

To address the issues of the impact study, the methodology and relevant tools were finalised, based on comments and feedback from Operations and Evaluation Department, Ministry of Foreign Affairs, the Netherlands, before administering fieldwork. Both quantitative and qualitative data were used for the evaluation.

2.2.2 Selection of Areas –Project and Control Area

The benefits of a programme on its participants may not be reflected accurately in a comparison of the relevant indicators of the beneficiary at the initiation of the programme i.e., benchmark, and at the completion of the programme due to some autonomous changes or various other interventions that may affect the programme beneficiaries. Hence, comparable non-participants in the programme, the "control" group, were selected. The rationale for selecting "control" group is that it would better indicate the impact of the programme on the beneficiary households.

In order to be able to assess the impact of the programme in the project area, we need to compare the beneficiaries/project participants with a control group. Both the programme (Sylhet and Maulvibazar) and control (Habiganj) areas are homogeneous–having similar socio-economic characteristics where literacy is still low, access to information is limited, and marriage at early age and misconception is common. Compared to other parts of the country, level of fertility is relatively high and use of family planning is lower.

2.2.3 Respondents of the Study

In an attempt to address the research questions from various perspectives, the study methodology was designed to obtain data from three categories of study population at different levels. The first group, at the macro level, included policy makers at the apex and programme managers/project directors of FPAB and MSCS, and civil surgeon of district hospital.

The second group, at micro level, comprised the households/population living in catchment areas of FPAB and MSCS intervention areas and control area of Habiganj district, including the women who have undergone MR procedures during the last 12 months preceding the survey. Face to Face interview, using a structured questionnaire, was conducted with:

- Women aged 15-49 years
- Male-heads of household
- MR clients

The third group, which lies in between, consisted of the health and family planning workers working at the sample health facilities.

2.2.4 Selection of Respondents for Household Survey

The household survey covered 400 households in project/intervention area and 200 households in control area. From each district, a total of 200 households were selected as follows. For the intervention area in Sylhet Sadar upazila and South Surma upazila, two unions (rural area) and two wards (covering peri-urban areas) were selected at random. From each selected union/ward, two villages/mohallas were selected. Finally, 50 households from each village/mohalla were selected at random. This gave a total of 200 households from Sylhet Sadar and Surma upazila (FPAB area). Similarly, two upazilas from each of Maulvibazar (MSCS area) and Habiganj district (Control group) were selected, as shown in Table 2.1. A structured questionnaire was used to obtain relevant information. In each household, the women aged 15-49 were asked to respond on questions related to reproductive health, and, in particular, on (long term) family planning methods and on the knowledge and practice concerning safe MR.

In addition, as mentioned before, males living in the households are assumed to have an important role in the decision making process. Therefore, 300 male household heads were also included in the household survey. A total of 1,200 respondents were interviewed for this study.

Table 2.1: Sample Selection for the Household Survey

District	Upazila	Union/Ward	Village/Mohalla	No. of Households
Sylhet	Sylhet Sadar and South Surma upazila	Two rural unions-one from each upazila	One village from each union	50 households from each village were selected at random i.e. 100 households from two unions
		Two urban wards	One *mohalla* from each ward	50 households from each *mohalla* were selected randomly i.e. 100 households from two *Mohallas* in the peri-urban area of Sylhet Sadar upazila
Moulavibazar	Two upazilas, including sadar upazila	Two rural unions	One village from each union	50 households from each village i.e. 100 households from two unions
		Two urban wards	One *mohalla* from each ward	50 households from each *mohalla* i.e. 100 households from two *mohallas* in the peri-urban area of Moulavibazar Sadar upazila
Habiganj	Two upazilas, including sadar upazila	Two rural unions	One village from each union	50 households were selected at random from each village i.e. 100 households from two unions
		Two urban wards	One *mohalla* from each ward	50 households from each *mohalla* i.e. 100 households from two *mohallas* in the peri-urban area of Habiganj Sadar upazila
3 districts	Six upazilas	6 unions and 6 wards	600 households from 12 villages/ *mohallas*	

Sample Selection - Project and Control Area

A multi-stage, simple random sampling approach was adopted. Six villages (two each from Sylhet, Maulavibazar and Habiganj district) and six *mohallas*/wards (two from each district) were randomly selected as the Primary Sampling Units (PSUs). After selecting the sample villages/*mohallas* as the PSUs, 50 households were selected at random from each ward/village. We followed a cluster approach for

selecting households. At first, two street blocks were randomly chosen from each village/ward. A starting point of one street block was selected at random and the first house was identified followed by a systematic cluster sampling technique to survey the next 24 households. Thus, 25 households were selected from each street block and a total of 50 households were selected from two street blocks. In this way, a total of 600 households from the three districts were selected–400 from intervention area and 200 from control area. Finally, from each household, one currently married woman (aged 15-49 years) was selected for interview.

A structured questionnaire was used to obtain relevant information. In each household, the women aged 15-49 were asked to respond on questions related to reproductive health, and, in particular, on (long term) family planning methods and on the knowledge and practice concerning safe MR.

In addition, as males of household heads are assumed to have an important role in decision making, data were also obtained from male-heads to have an idea about the role of men and their influence on pregnancy termination through MR. A highly patriarchal society, Bangladesh is mired by gender inequalities. Within households, women are highly dependent on men who control resources and mediate women's extra-household relationships. Even though limited, available research shows that men have multiple roles in decisions and actions related to reproductive health and MR. These roles are usually positive as they help their wives make the decision and then proactively seek information and services. In limited cases, men still take a dominant role, forcing their wives to terminate a pregnancy and seeking potentially harmful services.

In view of their importance in the household decision making process, 300 male-heads (100 each from each district) were also covered during the household survey. From each sample village/*mohalla*, 25 male-heads were selected randomly. Thus, there were a total of 300 male household heads from the three districts–200 from intervention area and 100 from control area. Finally, 300 married women who have undergone MR procedure were selected, using the following methodology.

Selection of MR Clients

The key aspect of the methodology was its participatory nature and the active involvement and participation of various stakeholders, including key informants. MR clients were selected using Key Informants working in the study area.

i. A critical aspect of the study was the selection of MR clients from the intervention and control areas. MR clients were identified following two different procedures. First, attempts were made during the household survey to identify MR clients known to the women (sisters/friends/relatives/ neighbours). Second, MR clients were identified with the help of service

providers working in the study area (FWV/FWA, field level workers of FPAB/MSCS).

ii. Since a survey among 600 households is expected to include only a few women who have undergone the MR procedure in the last 12 months preceding the survey, efforts were made by the study team to identify MR clients with the help of Key Informants residing in the study locations.

iii. MR clients were identified using two types of key informants. First, during the Household Survey, women were asked whether any of their sisters/friends/relatives have undergone MR procedure during the last 12 months. Second category of Key Informants included health workers working in the study areas.

iv. Key informants were selected on the basis of their knowledge of the phenomenon studied. The second category of key informants was persons with adequate knowledge and experience in the domain of the study. The key informants in the control area included FWV/FWA, traditional healers/village doctors, TBA and midwives working in the sample areas. Key informants were working and living in the study area with knowledge of women who have undergone MR procedures during the last 12 months preceding the survey. Overall, there were 130+ MR clients in each of the surveyed union/ward. Out of this, 100 MR cases were selected for interview.

v. During the fieldwork for the household survey, out of 600 respondent women who were interviewed, 179 (30 percent) said that they knew someone who has undergone MR procedure during the last 12 months. However, out of the 179 MR clients, only 90 women (50 percent) could be successfully interviewed during the field survey. They included 30 from Sylhet, 24 from Maulvibazar and 36 from Habiganj. This means that majority of the MR clients (two-thirds) were identified through health workers working in the study locations.

The major contents of the questionnaire included information on the timeline of MR, service providers who performed the MR procedure, side effects or complications resulting from MR procedure, etc.

Quantitative Data Collected from Household/Client survey	Number		
	Intervention Area	Control Area	Total
Women aged 15-49 years	400	200	600
Male household heads	200	100	300
MR Client Survey	200	100	300
All	800	400	1,200

2.2.5 Qualitative Data Collection Methods

- Focus Group Discussion (FGD)
- Key Informant Interview (KII)

The study also examined the role of service providers to assess their knowledge on job responsibility, opinions on the quality of MR services, extent of follow-up services and so on. In-depth interviews were conducted with managers in health facilities and health care providers at different levels. In-depth interview of programme managers included: Civil Surgeons at the district hospital (DH) and Programme Managers/Project Directors of FPAB/MSCS, Upazila Health and Family Planning Officer (UHFPO) at the Upazila Health Complex (UHC), Sub-Assistant Community Medical Officer (SACMO) at the UHFWC, etc; while interview of service providers included: doctors, nurses and health assistants/ FWVs/FWAs working at the health facilities in study locations. Information was obtained on constraints regarding hospital management and improving efficiency of service delivery, and other related aspects of quality of care.

2.2.6 Size of Sample for Facility Survey

The study is based on primary data collection and interviews from three districts of Sylhet division. In each distric, the sample comprised one district hospital (DH), two Upazila Health Complexes (UHCs) and four Union Health and Family Welfare Centres (HFWCs). Total facilities covered 3 district hospitals (DHs), 6 UHCs and 12 HFWCs. In addition, FPAB clinic in Sylhet and MSCS clinic in Maulvibazar have also been covered.

3 Districts * 2 UHCs per district =6 UHCs

6 Upazilas * 2 HFWC per upazila =12 HFWCs

FPAB Clinic/district office in Sylhet

MSCS Clinic/district office in Maulvibazar

2.2.7 Data Collection Instruments

For the questionnaire survey, a pre-tested structured questionnaire was used. The questionnaire was developed to obtain information on socio-economic and demographic characteristics (age, education, occupation, income, etc.); knowledge and attitude regarding FP and MR; opinion regarding timeline and service providers for MR, etc. An effort was made to assess the improvement in knowledge and attitude towards MR in the programme area. The perception of male heads towards MR was also assessed. For the client survey, information was collected on timeline of MR procedure, providers of MR, cost incurred for MR, opinions on the quality of MR services, extent of follow-up services and so on. Guidelines were prepared and pre-tested for FGD and KII.

2.2.8 Implementation of Fieldwork

Field work for the present survey took place from June through August 2012 in three districts of Sylhet division. The study team consisted of one PI, three Co-PIs, two coordinators, three supervisors and 12 research investigators. The field staff consisted of 12 research investigators (RIs), three supervisors and two coordinators/quality control officers (QCOs), recruited for the study. One week of training was provided to the field staff. The PI and Co-PIs periodically visited the field to liaise with government officials and implementing agencies, and to check the quality of the data collected by the RIs. In addition, survey activities were headed by a responsible senior staff member (field coordinator) who continuously supervised and monitored the research team. The RIs were grouped into three teams– one team for each of the three districts. Each supervisor was assigned to monitor and supervise one team on a daily basis.

2.3 Challenges and Limitations

The study has been carried out based on a survey of 1,200 respondents, consisting of 600 currently married women aged 15-49 years, 300 male household heads and another 300 MR clients. In addition, a facility survey was conducted in three districts, covering 3 district hospitals, 6 UHCs, 12 UHFWCs, including FPAB district office in Sylhet and MSCS district office in Maulvibazar.

The methodological approach and data used in this study have some limitations. As a sample survey, it necessarily has a margin of sampling error. In addition, these data will also have other types of errors. These errors were minimised because every effort was made to make the sample representative and the respondents were given the assurance that the information provided by them will be strictly confidential and will be used for research purposes only.

Data limitations, as far as access to MR and quality of services are concerned, must be acknowledged at the outset. The sample location has been selected in such a manner that it yields a representative sample of the district under study. Data collected covers a wide range of issues, including knowledge and attitude towards MR, opinion regarding timeline and service providers, including costs of MR and post MR complications faced by clients. The data will permit an analysis about the success of the MR intervention in increasing access to safe MR and quality of MR services.

However, only an insignificant proportion of MR clients, interviewed, visited the sample facilities for performing MR procedure during the field work. Most of the MR clients, who were interviewed, had the MR procedure sometime during the last 12 months preceding the survey. This might introduce a bias in the sense that there might be recall lapse in the answers provided by the respondents. If all the MR clients could be interviewed during their visit to the providers for MR procedure, this would have contributed to a better understanding of the barriers

faced by clients in accessing MR services, including management of post-MR complications. We used the most up-to-date lists of MR clients available from the key informants (service providers working in the study area including women who were interviewed during the household survey).

Approximately, one in every 10 women, who had an MR and was approached by the investigators, refused to be interviewed. Again, during the interview process, some of the MR clients stopped at the middle of the interview and did not want to continue. Overall, out of the total, there were 25 such cases (16 from intervention area and 9 from control area), who were ultimately dropped from the list and were replaced by new interviewee from the preliminary list of MR clients.

Questions were posed to respondents/MR clients regarding complications and side effects resulting from MR. It is possible that some cases of complications may not be accurately reported because of stigma associated with MR (due to social and cultural reasons, some of the women with MR experience may not feel free to share the complications they have faced after the procedure). If this is the case, our findings may be an underestimate of the proportions of clients facing post-MR complications or the severity of complications faced by women.

Nation-wide data on the extent of MR complications are scarce. In a recent study, it was shown that the rate at which MR complications are treated in a health facility 2.2 per 1,000 women aged 15-44, was just one-third that of clandestine abortion complications (6.5 cases per 1,000 women aged 15-44). As a result, the extent and nature of complication, as reported in the study, are approximate figures only, and, in fact, may be somewhat conservative as well.

Ideally, this type of impact evaluation should have included both "before-after" and "with-without" comparisons. Impact evaluation requires the study of relative change of performance indicators on intervention group with respect to those of control group over time. This was not possible in the present study since there was no baseline survey before the initiation of the programme. For this reason, we have used the "with-without" comparison for the present analysis. This is a limitation of the study. However, this limitation was dealt with by allowing a commendable sample size in both the control and the intervention areas, and including as many socio-economic and cultural indicators as is usually done in standard studies of this nature. Again, instead of relying only on quantitative data, we have used the mixed method approach of quantitative (household survey and exit survey of MR clients covering 1,200 respondents) and qualitative instruments (FGD and KII). Qualitative data can point towards intangible outcomes such as empowerment of women, and access to and utilisation of reproductive health care, especially with respect to safe MR, which are not easily captured through quantitative indicators. This type of data can also serve to bring out beneficiary judgment on the significance of MR programme intervention within the larger dynamics of the household and the

community. Such judgments may be missed out in quantitative outcome indicators. In view of this, we have given adequate emphasis on qualitative data.

The study team strongly believes that significant information relating to the critical issues of concern under the present evaluation has been gathered through questionnaire survey, KII and FGD. Information thus obtained is expected to bring out diverse views and useful pointers relating to the study objectives and to draw important conclusions and useful lessons.

Despite these limitations, the data does permit an analysis of a number of topics, including women's sources for MR, the proportion of women who experience serious complications, the proportion of women needing care who receive it and the average cost of MR by type of providers. These estimates are likely to provide an approximate, but valuable, profile of conditions of MR clients. The validity of the data rests on the fact that the respondents interviewed come from a wide range of perspectives (rich/poor; illiterate/educated; urban/rural) who were geographically dispersed across the sample districts.

Logistically, the study was managed excellently, with superb cooperation from the Policy and Operations Evaluation Department (IOB), Ministry of Foreign Affairs, Netherlands, and the Embassy of the Kingdom of the Netherlands in Dhaka. This helped enormously in meeting the needs of the assignment.

CHAPTER 3

MENSTRUAL REGULATION (MR) PROGRAMME IN BANGLADESH: AN OVERVIEW

3.1 The Menstrual Regulation (MR) Programme in Bangladesh

Menstrual regulation (MR) is defined as "...an interim method of establishing non- pregnancy for a woman who is at risk of being pregnant, whether or not she is pregnant in fact" (Akhter 1988, Dixon-Mueller and Anker 1988). On the other hand, abortion is defined as the interruption or termination of pregnancy after the implantation of the blast cyst in the endometrium and before the resulting fetus has attained viability. Induced abortions are caused by deliberate interference, initiated voluntarily with the intention to terminate a pregnancy; all other abortions are called spontaneous abortion (Tietze *et al.* 1975).

Bangladesh is unique in South Asia in making menstrual regulation (MR) services available to women at the community level. Menstrual regulation involves evacuation of the uterus by vacuum aspiration within 6-10 weeks of a missed menstrual period. Although abortion is prohibited in Bangladesh, except to save a woman's life (derived from the Penal Code of India 1860 and the British Offences against the Person Act 1861), menstrual regulation is not prohibited as it is considered to be an "interim method to establish a state of non- pregnancy in a woman who is at risk of being pregnant." Hence, it is usually done without a pregnancy test.

Under the Bangladesh Penal Code of 1860, abortion is permissible only to save the life of a woman. In all other circumstances, abortion—self-induced or otherwise—is a criminal offense punishable by imprisonment, fines or both. MR—officially recognised as an interim method for establishing non-pregnancy—has been available free of charge in the government's family planning programme as a public health measure since 1979.

During the early 1970s, the government of Bangladesh introduced MR services in a few urban family planning clinics and district hospitals under the guidance of an expert team from Bangladesh, India, the United Kingdom and the United States. In 1978, the Pathfinder Fund initiated and funded the Menstrual Regulation Training and Service Programme (MRTSP) in seven government medical colleges, located throughout the country, two district hospitals and one family planning clinic. This was the start of what was to become the Menstrual Regulation Training and Services Programme (MRTSP). In 1979, MR was legalised and incorporated into the National Family Planning Programme. The government stated unequivocally that MR services were to be available in all government hospitals and health and family planning complexes at the district and upazila levels.

In order to promote this programme the government issued a circular, including MR in the national family planning programme and encouraging service providers to offer service in all government hospitals and health and family planning complexes (the present day UHCs) (Akhter 1986). The programme was designed to train government doctors, a few private doctors, and female family planning workers (Family Welfare Visitors, or FWVs, employed at upazila/union level health posts) in MR techniques.

MR is widely available in Bangladesh through public, NGO and private sector facilities, even though abortion is illegal except to save a woman's life. For more than two decades, the MR programme was run as a vertical programme. However, in1998, the Government of Bangladesh introduced the Health and Population Sector Programme (HPSP), incorporating menstrual regulation into the essential services package (ESP).

MR is allowed up to 10 weeks after the last menstrual period (LMP) if performed by a physician (NIPORT, Mitra and Associates and Macro International 2009). FWVs and paramedics, such as sub-assistant community medical officers (SACMOs), are permitted to provide MR services up to eight weeks after the LMP. The predominantly female FWVs, have a minimum of 10 years of schooling and receive at least 18 months' training in reproductive and child health services, including training in how to perform MRs (Johnston *et al*. 2011). It may be mentioned here that SACMOs have similar levels of general schooling as FWVs but take three years of basic courses in primary care and reproductive and child health services. Given the limited number of physicians in the country, allowing FWVs to provide MRs not only expands access to an essential service but also costs less; having FWVs the backbone of the programme is a further plus in a predominantly Muslim culture such as Bangladesh, where many women—and their husbands—feel most comfortable when women get care from other women (Johnston *et al*. 2011). FWVs are posted at primary care facilities across the country, particularly at union health and family welfare centres (UH&FWCs). These facilities are located primarily in rural areas, where three-quarters of Bangladeshis live.

MR procedures, which are officially provided by the government free of charge, are safe uterine evacuations that meet governmental criteria and, at least as of 2012, have been primarily done using manual vacuum aspiration (MVA). They are practiced widely throughout the country at all levels of the health system, from primary care clinics to tertiary care medical college hospitals and district hospitals. From the late 1970s through the mid-1990s, the government and international donors continuously supported the recruitment and training of FWVs to perform MRs. However, recruitment was stopped in 1994 (Mridha *et al*. 2009) and has only recently resumed. Unfortunately, the interruption in recruitment has left the programme playing catch-up in terms of having sufficient numbers of trained FWVs: As of the end of 2011, the total number of health professionals

trained in MR stood at approximately 10,600 doctors and 7,200 paramedics, primarily FWVs (and among these, about 4,700 paramedics have received refresher training).

Available evidence shows that each year several hundred thousand Bangladeshi women undergo MR procedure. For example, according to the Bangladesh Demographic and Health Survey of 1999-2000 (NIPORT 2001), 5 per cent of currently married women had had an MR procedure. Similarly, an estimate published in 1997 found that close to 500,000 MR procedures are performed annually in Bangladesh (Akhter 2001). More recent figures also show that there has not been any significant change in this trend and each year hundreds of thousands of women are having MR procedures. A national study has estimated that there were 653,000 MRs and 647,000 induced abortions in Bangladesh in 2010 (Singh *et al.* 2012). These values translate to respective national annual rates of 18.3 and 18.2 per 1,000 women of reproductive age. This type of evidence suggests that unsafe induced abortion continues to be widespread, even though MR is available. This may be due to inadequate access to good quality MR services—that too few facilities offer the service, that the service is not of adequate quality, that it is unaffordable, that women may not know where to obtain MR, or that they may be unaware that it is permitted by the government.

If MRs were universally accessible in Bangladesh, they could greatly reduce the potential need for women to have an unsafe clandestine abortion. Currently, a lot of women who would like to get an MR face barriers to obtain one; many of them resort to unsafe abortion as a result. Because induced abortions are legally restricted in Bangladesh, they are often practiced clandestinely in unhygienic settings, performed by untrained providers, or both. By averting unsafe abortions and their associated health complications, MR could have a positive impact on women's health and survival (Hossain *et al.* 2012).

3.2 State of Affairs regarding MR

The unique contribution of MR to women's health care in Bangladesh dates back to the early 1970s. MR services were introduced in Bangladesh in 1974 on a small scale to assess the feasibility of providing them nationally; in 1979, a training programme was initiated in seven medical college hospitals and two district hospitals (Akhter 2001). In the years since, service provision has expanded and is now national in scale. MR is included within the family planning programme not as a contraceptive method, but rather as a backup for ineffective use of contraceptives, as no contraceptive is completely successful in preventing unwanted pregnancy (Oliveras *et al*. 2008).

As already mentioned, under the Bangladesh Penal Code of 1860, abortion is permissible only to save the life of a woman. In all other circumstances, abortion—self-induced or otherwise—is a criminal offense punishable by imprisonment, fines or both. Menstrual regulation (MR)—officially recognised as an interim method for establishing non-pregnancy—has been available free of charge in the government's family planning programme as a public health measure since 1979.

The original impetus for introducing MR services came from scientists, government and international leadership. Support for provision of this reproductive health service is broad based and includes these as well as other stakeholders such as service providers and women's rights organisations (Akhter 2001). Nevertheless, studies have suggested that there is room and need for improvement in access to quality MR services. In addition, a recent review of the MR programme has argued that it has been marginalised within overall health policy in Bangladesh over the last decade (Johnston *et al* 2011).

A government authorisation rule regulates MR (Akhter 1988), which is generally performed with manual vacuum aspiration (MVA). The rule gives specific guidance for the provision of MR services, covering the types of providers who can offer the service, namely, doctors, family welfare visitors (FWVs) and paramedics (include providers, such as SACMO and medical assistants); the context of service provision, either outpatient or inpatient; and the maximum number of weeks permitted since the last menstrual period (LMP). Although MR is allowed up to eight weeks after LMP, when performed by FWVs and paramedics, and up to 10 weeks after LMP when performed by a physician, providers sometimes perform the procedure later as well (Chowdhury and Moni, 2004, Hossain *et al*. 1997).

In spite of wide availability, barriers such as distance to health facilities and transportation costs, unofficial fees, lack of privacy, confidentiality and cleanliness in public health facilities, and, in some cases, attitudes of service providers are limiting access to MR services.

Quality of care is compromised by inadequacies in infection control and in provider training and counseling. Health system weaknesses include gross under-reporting of cases by providers who do not wish to share unofficial fees, which affects monitoring and adequate provision of supplies. The HPSP has caused uncertainty regarding supervision in public sector facilities, and adversely affected training by NGOs and government-NGO coordination. Services, in part, of the NGO sector have also been affected by funding changes. To make the programme as a whole more effective, all these issues have to be addressed.

The latest evidence with regard to MR situation comes from the findings from a recent survey by Vlassoff *et al*. (2012), which can be summarised as follows:

- About 12 per cent of MR clients—or 78,000 women—were treated for complications, a rate many times higher than expected if manual vacuum aspiration procedures are done under hygienic conditions by trained providers. Complications may arise, for example, from inadequate training and failure to properly sterilise equipment.
- Approximately 231,000 women were treated in facilities for complications of induced abortion in 2010. In addition, health professionals estimated that 60 percent of all women with complications did not get medical care.

- The public sector accounted for about two-thirds of all MRs performed; non- governmental organisations provided about one-quarter, and private clinics about one-tenth. The public and private sectors each accounted for about half of post abortion care patients.
- Only 57 per cent of public and private facilities that would be expected to provide MR services actually did so, with a wide range across divisions (37–76 per cent). Shortages of trained providers, lack of equipment and religious and cultural sectors are the key reasons for not providing MR.
- Only two-thirds of Union Health and Family Welfare Centres provided MR in 2010, yet these facilities are especially important because they are located in rural areas where most women live.
- An estimated 26 per cent of women seeking MR services were rejected. The most common reason was exceeding the official limit of weeks since the last menstrual period. However, respondents gave several additional reasons for rejection that went beyond government criteria.

Vlassoff *et al*. (2012) recommended policy and programmatic actions in three areas : increasing availability of MR services, reducing rejections of women for MR services, and improving quality of care.

3.3 Overview of MR Services

As already mentioned, the Government of Bangladesh (GoB) introduced MR services on a limited scale in 1974 in a few isolated urban government family planning clinics. In 1978, the Pathfinder Fund began a training and service programme for MR in seven medical colleges and two government district hospitals. This was the start of what was to become the Menstrual Regulation Training and Services Programme (MRTSP). In 1979, the government included MR in the national family planning programme and instructed doctors and paramedics to provide MR services in all government hospitals and in health and family planning complexes.

Currently, MR is widely practiced throughout the country and is available at all tiers, from district and higher level hospitals down to union (consisting of 15-20 villages) level health centres. It is also available in a limited number of NGO clinics and in the private sector. Both doctors and paramedics provide MR, but at the union level, female paramedics are the only trained providers.

Maternal health services in Bangladesh are provided at community and facility levels through a national network of public-sector facilities, ranging from Union Health and Family Welfare Centres (UH&FWCs), which are rural clinics staffed by FWVs and paramedics, to larger clinics called Mother and Child Welfare Centres (MCWCs) and *Upazila* Health Complexes (UHCs), and district hospitals. FWVs are important actors in the provision of MR services, especially

in rural areas. At the community level, female family welfare assistants (FWAs) mainly provide family planning services and some maternal health services to rural women.

Several donors, USAID, Ford Foundation, Population Crisis Committee (now PAl) and Swedish International Development Authority (SIDA) have supported the MR programme. SIDA was the principal donor from 1989 to 1999. The programme was managed jointly by the government and the Coordination Committee of MR Associations in Bangladesh (CCMRA,B). Three NGOs, Bangladesh Women's Health Coalition (BWHC), Menstrual Regulation Training and Services Programme (MRTSP) and Bangladesh Association for the Prevention of Septic Abortion (BAPSA) have provided MR services and training and have worked together with the government and donors to maintain good standards of care within their own organisations, and the coordination of training and logistical support for the national programme. There is also a National Technical Committee for MR which sets standards and takes policy decisions on technical issues related to MR.

Over time, MR training and service facilities were extended in phases, and services are now available throughout the country. As of 2011, about 10,600 doctors and 7,200 paramedics trained in MR were posted in government clinics at national, district, upazila and union levels (Hossain 2011). Additionally, NGO clinics provide MR services throughout Bangladesh, and many private physicians obtain MR training from specialised centres and offer services in their private practices. However, inadequate action by the government over the last several years has led to a situation where FWVs trained in MR provision are reaching retirement age without adequate numbers of newly trained providers being added to replace them (Oliveras *et al*. 2008).

Two important justifications for introducing and then scaling up MR were the high rates of hospitalisation due to complications of induced abortion and the high levels of maternal mortality resulting from septic abortion. Before MR became widely available, a substantial proportion of admissions to gynecology units of large hospitals were due to complications of induced abortions. For example, in the 1980s, an estimated 15.4 per cent of maternal deaths were due to abortion (Fauveau and Blanchet 1989). Studies have documented the progress that was made in the years immediately after the MR programme was initiated. The proportion of patients having abortion complications with severe infections, meaning infections that had spread beyond the reproductive tract, fell from 29 per cent in 1977 to 18 per cent in 1994 based on data for Dhaka Medical College Hospital (Akhter *et al.* 1998). According to the authors, during the same time, the case fatality rate from abortion complications in this facility decreased from 5 per cent to 0.2 per cent (case fatality was defined as the number of deaths per 100 abortion cases). Similar findings are also available from ICDDR,B study area. In the Matlab demographic surveillance area of ICDDR,B, the number of abortion related deaths

(per 100,000 women of reproductive age) fell drastically, from about 17 deaths in 1976–1985 to slightly more than two deaths in 1996–2005 (Johnston *et al.* 2011).

A 2002 situation analysis conducted in five districts and at the central level found that despite the wide availability of MR services in Bangladesh, many barriers persist when it comes to access to MR services and post-abortion care (PAC) services (Chowdhury and Moni 2004). According to the authors, barriers such as distance to health facilities and transportation costs, unofficial fees, lack of privacy and confidentiality, lack of cleanliness in public facilities and, in some cases, attitude of service providers are limiting access to MR services. The study demonstrated that dissemination of information on safe MR services was difficult; many government facilities were not women friendly; the layout of government facilities was not conducive to good patient-provider interaction; and, due to space constraints, most facilities had no separate space for the recovery of the patients. Inadequate facilities were especially prevalent in rural areas. NGO clinics provided better services but tended to charge substantial fees to the clients. The study further discovered that providers were often judgmental, imposed unnecessary preconditions such as spousal or parental consent, refused services on religious grounds and denied MR services at public facilities so that they could provide the same privately at their homes.

The study pointed out a number of other shortcomings in the MR programme as well. No training and service delivery manuals and guidelines were available at any of the sample public health facilities (Chowdhury and Moni 2004). Many providers were not conversant with medical standards regarding the use of MR syringes (the maximum number of times recommended for reusing one set is 50 procedures) and often performed more than double the recommended number with one syringe. Providers frequently did not adhere to standard practices regarding infection prevention or provide antibiotics after MR. Gross underreporting of up to 70 per cent of the true number of MRs carried out resulted in poor monitoring and led to shortages of drugs and materials, including MR syringes. Additionally, the study showed that post-MR family planning counselling in government facilities was almost non-existent, and that government facilities also lacked information on either post-MR follow-up or MR complications.

A recent qualitative study found that poor Bangladeshi women were forced to seek out informal providers for their reproductive health care needs (Rashid *et al.* 2011). Results suggested that the country's existing health workforce faced mounting challenges, including staff shortages and poor geographic coverage—specifically, professionals unwilling to work in rural areas; skill mix imbalances, whereby too many or too few workers had specific skills; and a weak knowledge base. This particularly affected maternal and other reproductive health care services, which 85 per cent of the population obtained from informal providers. Except for some specific family planning and maternal health services, the public sector was poorly equipped to address sexual health problems, and the gap thus created, the study

noted, had been largely filled by unregulated, informal providers. Another qualitative study described brokers or middlemen who intercept potential MR clients and steer them toward informal facilities of questionable quality (Rashid 2010).

Overall, available studies of MR provision in Bangladesh have highlighted several barriers to access: cost of service, distance to facilities, preference for providers in the informal sector, poor quality of care (including punitive behaviours of providers and discrimination against poor women), gender-based stigma at the community and family levels, poor quality clinical services (including lack of a standard protocol for infection prevention), shortages of drugs and supplies, including MR syringes, and insufficient training of providers.

3.4 Marie Stopes Clinical Society and Family Planning Association of Bangladesh

This section presents a succinct overview of the MR services provided by Marie Stopes Clinic Society (MSCS) and the Family Planning Association of Bangladesh (FPAB) that are evaluated. Both organisations have played an instrumental role in strengthening the national MR programme in Bangladesh and more detailed information on this role is provided in Annex 2.

3.4.1 Menstrual Regulation (MR) Programme of MSCS

The Marie Stopes Clinic Society provides a wide range of reproductive health services, including menstrual regulation. The project, evaluated in this study, aimed at intensifying these MR services. The overall objective of the project was to increase demand and utilisation of quality MR services in public-NGO-private service delivery facilities in some selected districts of Bangladesh i.e. Feni (in Chittagong Division), Maulvibazar (in Sylhet Division), and Narayanganj and Sherpur (both in Dhaka). The specific objectives were to increase awareness on prevention of unwanted pregnancy and unsafe MR services and to improve quality of safe MR services in the public-NGO-private service delivery outlets. This included that information on the timeliness of the procedure (within 10 weeks after the last menstrual period) and on the proper service providers (Family Welfare Visitors, Female Sub Assistant Community Medical Officers/Medical Assistant and Paramedics up to 8 weeks of cessation of menstruation; MBBS or equivalent doctors up to 10 weeks of cessation of menstruation). It also included up-scaling services in order to avoid complications.

The intervention was designed as a pilot model, covering the entire four districts with around 2.1 million people in each district (i.e. a sum total of 8.4 million people approximately). The final beneficiaries of the project were around 109,000 women of reproductive age in the rural areas and the poor and vulnerable women in the urban area of each of the districts. This translates into a total number of about 427,000 women in the intervention areas. The indirect beneficiaries therefore

were the whole population of more than eight million men and women of all the four districts as well as other relevant stakeholders, including service providers of GO-NGO-Private sectors and decision makers.

3.4.2 Menstrual Regulation Project of the Family Planning Association of Bangladesh

The 'Family Planning Association of Bangladesh' is a member of the International Planned Parenthood Federation (IPPF) and has been working in Bangladesh since 1953. FPAB aims to improve the quality of lives of individuals, by campaigning for sexual health and reproductive right through advocacy and services, especially for poor and vulnerable people. The organisation defends the right of all young people to enjoy their sexual lives free from ill-health, unwanted pregnancy, violence and discrimination. FPAB supports a woman's right to choose to terminate her pregnancy legally and safely. FPAB strives to eliminate Sexually Transmitted Infections and to eradicate HIV-AIDS, and FPAB carries its work in partnership with other organisations and donors to achieve its goals more efficiently and effectively.

The FPAB project that is evaluated in this study is: Access to quality MR services as a women's right. It aimed at improving knowledge on MR and facilitating access to MR services, especially among underserved population groups.

CHAPTER 4

KNOWLEDGE AND ATTITUDES OF WOMEN REGARDING FP AND MR

4.1 Socio-economic Profile of the Respondents

As already mentioned in the methodology section, a total of 600 women aged 15-49 years–200 each from Sylhet, Maulvibazar and Habiganj– were covered by the present survey. The survey has collected data regarding age, level of education, occupation, family income, reproductive health, and on the knowledge, attitude and practices concerning family planning and MR. Sylhet and Maulvibazar districts are regarded as "intervention (programme) area" and Habiganj district as "control area."

Age

As far as the age of the women is concerned, most of the women belong to the age group 20-29 years–around 60 per cent in Sylhet, 50 per cent in Maulvibazar and 56 per cent in Habiganj. About 11 per cent of the respondents belong to the 15-19 year age group in Sylhet and Maulvibazar compared to 7 per cent in Habiganj. The age distribution of women in the study area was more or less similar– the mean age was 28.3 years in Sylhet, 29.3 years in Maulvibazar and 28.9 years in Habiganj.

Education

Distribution of the respondents by educational level (Table 4.1) shows that there is some difference in the literacy level of women in the intervention and control areas. About a quarter of the respondents in Sylhet (27 per cent) and Maulvibazar (26 per cent) were illiterate compared to only 13 per cent in Habiganj. About one-third of the respondents in Sylhet (37 per cent), Maulvibazar (37 per cent), and Habiganj (38 per cent) had primary school education (up to class V). The distribution of the respondents by educational status shows that the proportion of women belonging to class VI-IX group is relatively higher in Habiganj (40.5 per cent) compared to Sylhet (28.6 per cent) and Maulvibazar (22.1 per cent). About half (48.7 per cent) of the women in Habiganj compared to 35.2 per cent in Sylhet and 29.8 per cent in Maulvibazar had education beyond six years of schooling.

Occupation

The distribution of the women by their occupation in all three sample areas is almost similar. For example, an overwhelming proportion of respondents reported them as housewives–91.5 per cent in Sylhet, 93.5 per cent in Maulvibazar and 95 pe rcent in Habiganj. The proportion belonging to other occupation category for three districts is small.

Table 4.1: Percentage Distribution of the Respondents according to Background Characteristics: by Area

Indicators	Percentage			
	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Age (in years)				
15-19	11.0	10.0	10.5	7.0
20-24	29.0	24.5	26.8	28.0
25-29	31.0	26.5	28.8	28.5
30-34	16.0	17.0	16.5	19.0
35-39	7.0	13.5	10.3	14.5
40-44	4.5	7.5	6.0	2.5
45+	1.5	1.0	1.25	0.5
Mean Age	28.34	29.3	28.8	28.9
Level of Education				
Illiterate	27.0	26.2	26.6	13.3
Can read and write only	0.5	6.7	3.6	0.0
Primary (I-V class pass)	37.2	37.4	37.3	37.9
Secondary (VI-IX class pass)	28.6	22.1	25.4	40.5
Secondary completed or more (X or more class pass)	6.6	7.7	7.15	8.2
Occupation				
Agriculture/farming	0.0	0.5	0.3	0.5
Day labourer	1.5	0.5	1.0	0.0
Small business/petty trading	0.0	0.5	0.3	0.5
Service/salaried job	0.5	2.5	1.5	2.5
Self-employed	1.5	1.0	1.3	0.5
Handicraft	1.0	0.0	0.5	0.0
Housewife	91.5	93.5	92.5	95.0
Student	1.0	0.0	0.5	1.0
Servant/maid servant	3.0	1.0	2.0	0.0
Others	0.0	0.5	0.3	0.0
Household Income				
Average monthly income of the household head from main occupation	10,718	8,835	9,777	9,183
Average monthly income of the other household members	1,390	2,495	1,942.5	3,269
Average monthly income of households from other sources	133	1,964	1,048.5	1,021
Average household monthly income	12,240	13,293	12,766.5	13,473
Per capita monthly income	2,915	2,684	2,800	2,654

Table 4.2: Distribution of Women by Main Occupation of Household Head (per cent of Households)

Main Occupation	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Agriculture/farming	1.0	4.0	2.5	14.5
Day labourer (agriculture)	0.0	2.0	1.0	3.5
Day labourer (Non-agriculture)	21.5	20.0	20.8	10.5
Small business/petty trading	25.5	31.0	28.3	25.5
Business	6.5	3.0	4.8	8.0
Service/salaried job	15.5	13.5	14.5	13.0
Self-employed	11.0	2.0	6.5	8.5
Rickshaw/Van puller	7.5	4.0	5.8	1.0
Transport worker	10.5	6.5	8.5	6.5
Sick/disabled	0.0	0.0	0.0	2.5
Housewife	0.5	4.5	2.5	1.5
Unemployed (more than 14 years and not student)	0.0	1.0	0.5	1.5
Others	0.5	8.5	4.5	3.5

Occupational Status of the Household Head

Distribution of women by occupation of husbands shows that about a fifth of the respondents in the intervention area have husbands who are engaged as either agricultural wage labourer or non-agricultural wage labourer, the corresponding figure for control group women is only 10.5 per cent. Again, about a quarter of the husbands in all the three sample areas are engaged in small business/petty trading. The data show that only an insignificant proportion of the husbands in the intervention area are farmers (1 per cent in Sylhet and 4 per cent in Maulvibazar), the corresponding figure is 14.5 per cent for the control group. About 15 per cent of the husbands in Sylhet and Maulvibazar are working as transport workers (rickshaw/van/driver/helper, etc.) compared to only 7.5 per cent in Habiganj. About 15 per cent of husbands of the respondent women in the three study locations are salaried employees (either with the government or in the private sector).

The occupational distribution of husbands of the respondents shows that the proportion having farming/agriculture as the main occupation is much lower than found in the previous surveys in Bangladesh. This might be partly explained by the fact that out of the 600 households from the three study areas, 50 per cent of them belong to urban areas. A significant proportion of the males are engaged in non-farming occupations either in business/trading or non-farm wage labour or having salaried jobs. Even in rural areas, agriculture no more represents the major source of income in the study areas as well as in Bangladesh, the importance of farming as the main source of livelihood has decreased over the last two decades or so.

Household Income

In terms of monthly household income, there is no major variation in the study areas. About 5 per cent of the respondents in both the intervention and control areas belonged to the poorest category (with monthly income not exceeding Tk. 5,000),

while a quarter of the respondents had monthly income between Tk. 5,000 and Tk. 7,500. Again, slightly more than a quarter of the respondents had monthly income between Tk.10,000 and Tk. 20,000. Only a small minority of the respondents came from the richest income group (monthly income more than Tk. 20,000) – 11.5 per cent in Sylhet compared to 15.5 per cent and 16.5 per cent in Maulvibazar and Habiganj respectively. The average monthly household income was the lowest in Sylhet (Tk.12,240) followed by Tk.13,293 in Maulvibazar and Tk.13,473 in Habiganj. On the other hand, per capita monthly income was the highest in Sylhet (Tk. 2,915), followed by Maulvibazar (Tk. 2,684) and Habiganj (Tk. 2,654).

Table 4.3: Distribution of Households Monthly Income by Area

Monthly Household Income	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	n	%	n	%
Up to Tk. 2,000	0	0.0	0	0.0	0	0.0	0	0.0
Tk. 2,001–3,000	1	0.5	2	1.0	3	0.8	0	0.0
Tk. 3,001–5,000	8	4.0	14	7.0	22	5.5	13	6.5
Tk. 5,001–7,500	48	24.0	54	27.0	102	25.5	55	27.5
Tk. 7,501–10,000	60	30.0	44	22.0	104	26	44	22.0
Tk. 10,001–15,000	48	24.0	37	18.5	85	21.3	35	17.5
Tk. 15,001–20,000	13	6.5	18	9.0	31	7.7	20	10.0
Tk. 20,000+	22	11.0	31	15.5	53	13.3	33	16.5
Mean income	12,240		13,293		12,767		13,473	
Minimum	3,000		3,000		3,000		4,000	
Maximum	62,000		100,000		81,000		55,000	

Overall, it can be concluded that the population in the intervention areas, Sylhet and Maulvibazar, does not differ significantly from the control area of Habiganj regarding the total income from all sources per household; neither the number of respondents without work. There are, though the following differences: statistically significant lower education for both male and female respondents in intervention areas than in the control area; statistically significant higher total income for male respondents in the intervention areas than in the control area; statistically significant higher percentage of male and female Muslim respondents in the intervention areas than in the control area; statistically significant lower number of male agricultural workers in intervention areas than in the control area; statistically significant higher number of male informal workers in intervention areas than in control area; statistically significant lower number of male formal workers in intervention areas than in the control area; statistically lower number of house owners in the intervention areas than in the control area (Annex 1).

In the statistical analysis, the findings have been controlled for these differences. Overall, it can be said that the positive findings in the intervention group cannot be explained by better education, because educational level is lower in intervention areas than in the control group.

4.2 Health Seeking Behaviour

The respondents were asked about the places where they usually visit for treatment during sickness. When getting ill, a person may use professional or lay health care practices, depending on the tradition of his/her family and the type of the illness. In the case of a mild illness, a person may use family based practices only, or buy some drugs from the pharmacy or consult unqualified practitioners. In the case of service or long lasting illness, s/he may consider using either professional or lay care remedies, or both of them.

In Sylhet, 84.5 per cent of the respondents mentioned that they generally go to the district hospital for the treatment of household members during sickness, while 60 per cent and 65 per cent go to the UHC and FWC respectively for treatment purposes. However, 33.5 per cent of the respondents mentioned that they consult MBBS doctors, while another 21.5 per cent go to the village doctors/medicine sellers as their preferred place of treatment in case of sickness. The health seeking behaviour in the other intervention area (Maulvibazar) was more or less similar.

By contrast, the pattern in the control area is such that a majority of the households (62 per cent) consult unqualified doctors/traditional practitioners/medicine sellers for treatment purposes; about a quarter of them also go for homeopathy treatment. Compared to the intervention areas, lesser number of households from control area visit public health facilities (DH, UHC and FWC) for treatment purposes (ranging between 28.5 per cent and 42.5 per cent).

Table 4.4: Distribution of the Respondents according to Their Usual Place of Treatment during Sickness: by Area

Type of Facility	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
District Hospital	84.5	53.0	68.8	39.5
UHC	60.0	71.0	65.5	42.5
FWC	65.0	63.5	64.3	28.5
MBBS doctor/private chamber	33.5	20.0	26.8	18.5
NGO/private clinic	15.0	11.0	13.0	11.5
Unqualified allopath/village doctor/ medicine seller	24.0	25.5	24.8	62.0
Homeopath	10.5	38.0	24.3	28.0
Kobiraj /Hekim	4.0	15.5	9.8	8.0
Spiritual Healer	1.5	2.5	2.0	-
Self Medication	-	1.0	0.5	-
Don't go anywhere	-	-	-	-

4.3 Experience of Illness and Treatment Seeking Behaviour during Last Three Months

In this section, an attempt has been made to give an overview of the morbidity pattern and treatment seeking behaviour of the surveyed households. In order to have an idea about the proportion of households with incidence of sickness in the study area, the respondents were asked whether any member of the household suffered from any sickness during the last three months prior to the survey. The findings show that out of the 600 surveyed households, 72 per cent of the households in Sylhet, 88 per cent in Maulvibazar and 95 per cent in Habiganj had at least one episode of illness in their households during the last three months preceding the survey, while the rest of the households did not experience any illness during the reference period.

Again, among the households reporting illness, some of the households had more than one sick member/illness episodes in the households. On the whole, there were 244 illness episodes suffered by 144 households in Sylhet, compared to 278 and 441 illness episodes in Maulvibazar and Habiganj respectively. This implies that for households having incidence of sickness during the last three months, on the average, there were 1.7 episodes of illness per household in Sylhet, 1.6 in Maulvibazar and 2.3 in Habiganj.

The illness/morbidity reported in this study, however, was based on the respondents' replies (or by showing the lay symptoms); but this does not necessarily constitute clinically confirmed cases. Thus, the morbidity pattern, as reported in the survey, may not correspond precisely to the number of illness episodes suffered by the households, since many of the respondents may have vague idea/wrong impression about which constitutes a disease. Thus, it is more likely that many respondents would under-report about morbidity in their respective households during the reference period. However, the morbidity pattern that emerges will more or less reflect the prevailing sickness pattern in the study area.

4.4 Type of Treatment Received during Last Sickness

The respondents were asked about the type of treatments received by the households during the last three months. The findings show that among the 510 households having 963 illnesses during the last three months, one-fifth of the respondents from both intervention and control areas visited district hospitals. However, with regard to utilisation of UHC and FWC, there was major difference between control and intervention areas. Two-thirds of the programme area households visited the UHC, the corresponding figure was only 25 per cent in control area. Similar differential between programme and control area was also observed in the case of utilisation of FWC (46 per cent vs 10 per cent). Again, the highest proportion of patients in Habiganj (72 per cent), compared to less than a quarter in the intervention area, received treatment from unqualified practitioners/ medicine sellers.

The findings show that people in the intervention areas have better access to quality treatment compared to their counterparts from control area. Bangladesh's disease burden continues to be enormous, much more than in many other developing countries with similar economies, and, of course, significantly higher than that in the developed nations of the world.

The most unfortunate aspect of this burden is the fact that a large number of illnesses and compromised health situations that people find themselves in are treated by unqualified allopaths/homeopaths or medicine sellers. Most of these practitioners do not have the required skill to provide effective and quality treatment.

Table 4.5: Percentage Distribution of the Respondents according to the Type of Treatment Received for Sickness during Last Three Months: by Area

Type of Facility	Intervention Areas						Control Area	
	Sylhet (n=144)		Maulvibazar (n=176)		Both (N=320)		Habiganj (N=190)	
	n	%	n	%	n	%	n	%
District Hospital	31	21.5	41	23.3	72	22.5	40	21.1
UHC	99	68.8	110	62.5	209	65.3	48	25.3
FWC	71	49.3	76	43.2	147	45.9	19	10.0
MBBS doctor/private chamber	22	15.3	20	11.4	42	13.1	46	24.2
NGO/private clinic	10	6.9	7	4.0	17	5.3	5	2.6
Unqualified allopath/Village doctor/medicine seller	33	22.9	41	23.3	74	23.1	137	72.1
Homeopath	11	7.6	20	11.4	31	9.7	34	11.9
Kabiraj/Hekim	1	0.7	13	7.4	14	4.4	16	8.4
Spiritual Healer	1	0.7	1	0.6	2	0.6	6	3.2
Self Medication	-	0.0	2	1.1	2	0.6	-	0.0

4.5 Marriage and Reproductive Health

Age at Marriage

Respondents were asked about their age at first marriage. According to data presented in Table 4.6, about a fifth of the women in Sylhet (19 per cent) and Maulvibazar (18.5 per cent) were married by age 14, the corresponding figure for Habiganj was 14 per cent. Similarly, 31 percent of women in Sylhet, 34 per cent in Maulvibazar and 27.5 per cent in Habiganj were married by age 15.

The findings show that an overwhelming proportion of women in the sample areas (58 per cent in Sylhet, 66 per cent in Maulvibazar and 54 per cent in Habiganj) were married before they were 18 years of age (i.e. before the legal minimum age at marriage for girls). This implies that more than half of the marriages in the study areas were, in fact, child marriages, which are forbidden by law. The average age at first marriage is found to be 16.9, 16.8 and 17.1 years in Sylhet, Maulvibazar and Habiganj respectively.

Consequences of Early Marriage

Historically, Bangladeshi women are married early. The 1979 "Convention on the Elimination of All Forms of Discrimination against Women" and the 1990 African Charter on the "Rights and Welfare of the Child" suggest a minimum age of marriage of 18 years (for girls), consistent with the definition of childhood articulated in the "Convention on the Rights of the Child." Accordingly, the minimum age at marriage for girls in Bangladesh is 18 years and any marriage of girls below 18 years is illegal.

Despite these national laws and international conventions and the efforts of various national and international organisations, many young women in Bangladesh are still subject to early marriage. According to our findings, more than half of the women in the study area were married before they were 18 years of age (i.e. before the legal minimum age at marriage for girls).

Often these young women have little choice over the age at which they marry, much less the partner they marry, because marriage is typically arranged or orchestrated by the parents/other guardians. Thus, the issue of early marriage and consent of the girl/woman are often intertwined; in fact, in most societies, no contract of any type entered into by a minor is legally binding, since young persons are less capable of understanding the implication of long-term decisions and do not have the full autonomy and independence or the mental and emotional maturity required for such decision-making. However, in Bangladesh, each marriage is legally binding, although it is a violation of the basic rights of the girl (child), by legal definition, a child cannot give consent.

Early marriage is a real cause of concern because of the potential adverse consequences for women's physical, mental and emotional development and well-being. In particular, women who marry early may be less capable of asserting themselves and establishing their position in the household. As a result, they may have less power, status and autonomy within the household. Women who marry young tend to have less education and begin childbearing earlier and have less decision making power in the household. Consequently, women who marry early become mother at an early age and are more likely to experience higher morbidity and mortality compared to those who marry after their teens.

Number of Children Born Alive and Living Children

Respondents were also asked about the number of children born alive and currently living. It is evident from Table 4.7 that in Sylhet, the average number of children born alive per woman and currently living are 2.58 and 2.29 respectively. Similarly, in Maulvibazar, the mean number of children born alive is 2.62 and the number of children currently alive is 2.32, while in Habiganj the corresponding figures are 2.78 and 2.51 respectively. The data show that mean number of children born alive and currently living is slightly higher in Habiganj compared to the intervention area.

Table 4.6: Distribution of Women by Age at First Marriage: by Area

Age at first marriage (years)	Intervention Areas			Control Area
	Sylhet (N=200)	Maulvibazar (N=200)	Both	Habiganj (N=200)
Up to 12	4.5	1.5	3.0	0.5
13	7.0	9.0	8.0	7.0
14	8.5	8.0	8.3	6.5
15	12.0	15.5	13.8	13.5
16	14.5	17.5	16.0	13.5
17	11.5	14.0	12.8	12.5
18	17.0	14.0	15.5	20.5
19	7.0	6.0	6.5	10.5
20 +	18.0	14.5	16.3	15.5
Mean age at Marriage	17.0	16.8	16.9	17.1

Table 4.7: Number of Children Born Alive and Currently Living by Area

	Intervention Areas		
	Rural	Urban	Total
	Sylhet		
Children born alive	2.66	2.50	2.58
Children currently living	2.33	2.25	2.29
	Maulvibazar		
Children born alive	2.66	2.57	2.62
Children currently living	2.41	2.23	2.32
	Intervention (Mean)		
Children born alive	2.66	2.54	2.6
Children currently living	2.37	2.24	2.31
	Control Area (Habiganj)		
Children born alive	2.99	2.56	2.78
Children currently living	2.61	2.40	2.51

Regarding the last pregnancy, respondents were asked about the way how the decision of being pregnant was taken-whether husband-wife decided mutually, or it was due to contraception failure. An overwhelming proportion of women (ranging between 70 and 87 per cent) mentioned that decision was made by mutual understanding of the couple (Table 4.7).

However, about a quarter of the women in intervention area (23.9 per cent) maintained that pregnancy occurred due to failure of FP method (7.75 per cent), or it was unplanned pregnancy (14.6 per cent). The corresponding figure was 10.7 per cent in control (Habiganj) area. An insignificant proportion of women said that pregnancy occurred due to husband's own decision in both areas. (Table 4.8)

Table 4.8: Decision regarding Last Pregnancy: Was it Mutual or Forced by Husband

Indicators	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Mutual understanding of the couple	70.0	75.3	72.7	87.2
Husband's own decision/Compelled by husband	3.5	2.5	3.0	0.5
Unplanned	12.5	16.7	14.6	2.0
Lack of FP methods	1.0	2.0	1.5	3.6
Unwanted/failure of FP method	13.0	2.5	7.8	5.1
Other	0.0	1.0	0.5	1.5

4.6 Family Planning

4.6.1 Knowledge and Awareness about Family Planning Methods

Information on knowledge of family planning was obtained by asking women whether they have ever heard of family planning method. It is evident that knowledge about family planning is universal 100 per cent respondents in both the intervention and control areas possess this knowledge. Knowledge was also assessed for different methods of family planning (Pill, condom, injection, IUD, implant/norplant, ligation, vasectomy, *azol/* withdrawal, safe period, etc.)

Table 4.9: Percentage Distribution of Women Who have Heard about FP Methods: by Area

Knowledge about FP methods	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Total	Habiganj
Yes	100.0	100.0	200	100.0
No	0.0	0.0	0.0	0.0
N	200	200	400	200

It may be mentioned that Bangladesh has achieved a remarkable progress in raising the contraceptive prevalence rate from less than 8 per cent in 1975 to about 56 per cent in 2007–a seven-fold increase over a period of three decades. The steady increase in the use of contraception has been the major determinant of fertility decline in Bangladesh. Other socio-economic factors like rising levels of education, influence of mass media, continuing urbanisation, declines in infant and child mortality, and advocacy works by Government and NGOs have also contributed to the increased use of contraception.

For many years, the government of Bangladesh has been using electronic and other mass media to promote family planning**.** As a result, knowledge of contraception is nearly universal–99.9 per cent of currently married women know at least one modern family planning method (BDHS 2011). The unmet need is 12 per cent, a decrease compared to the 2007 data (17 per cent).

4.6.2 Advantages and Disadvantages of Family Planning Methods

The respondents were asked about their perceptions regarding advantages/demerits of FP methods. About 91 per cent of respondents in intervention area stated about "solvency of the family," followed by "easier to provide education for children" (maintained by 70.5 per cent), "mother's health and nutrition is ensured" (reported by 69.5 per cent), and "better health and nutrition of children" (mentioned by 60.3 per cent). Regarding disadvantages of FP methods, the various responses included "side effects" (ranging between 72 and 94 per cent), "risk of infertility" (ranging between 35 and 70 per cent), "husband does not like" (ranging between 26 and 49 per cent), etc.

Table 4.10: Percentage Distribution of Respondents by Their Perception about Advantages of FP Methods: by Area (Multiple Responses)

Advantages of FP methods	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Solvency of the family increases	91.0	90.0	90.5	70.5
Easier to provide children with education	61.5	79.5	70.5	89.5
Children have better health and nutrition	78.5	42.0	60.3	82.0
Mother's health and nutrition is ensured	68.5	70.5	69.5	53.5
Others	0.0	1.5	0.8	0.0

Table 4.11: Percentage Distribution of Respondents by Their Perception about Disadvantages of FP Methods: by Area (Multiple Responses)

Disadvantages of FP methods	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Side effects	90.0	94.0	92.0	71.5
Risk of infertility	70.0	44.0	57.0	34.5
Husband does not want	48.5	31.0	39.8	26.0
No disadvantage	0.5	3.0	1.8	20.5
Others	7.5	13.0	10.3	0.5

4.6.3 Consequences of Frequent Pregnancies

Respondents were also asked about their opinion regarding consequences of large family and frequent pregnancies. Regarding adverse consequences of repeated pregnancies, 96.3 per cent respondents of intervention area mentioned about poor health of mother and children, followed by financial burden (89.8 per cent) and inadequate birth spacing (62.8 per cent). Similar observations were also made about adverse consequences. However, more than a half of the respondents in control area (58 per cent) mentioned about positive aspects of frequent pregnancies i.e. the benefits of a large family, compared to one-fourth of the respondents in the intervention area who mentioned about benefits of large family.

Table 4.12: Percentage Distributions of Respondents according to Their Opinion about Consequences of Frequent Pregnancies: by Area (Multiple Responses)

Consequences of frequent pregnancies	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Benefits of a large family	35.5	15.0	25.3	58.0
Leads to poor health of mother and children	100.0	92.5	96.3	95.5
Financial burden	95.0	84.5	89.8	94.0
Inadequate birth spacing	62.5	63.0	62.8	33.5
Others	2.0	6.0	4.0	1.0

4.6.4 Knowledge on Different Family Planning Methods

The respondents were asked to mention some of the specific family planning methods they know about. It is evident that pill, condom, injection and female sterilisation are almost universally known (more than 90 per cent in the study area), while knowledge of other methods like IUD, implant/norplant and vasectomy varies between 70 per cent and 90 per cent. By contrast, knowledge of traditional methods like safe period, *Azol*/withdrawal ranges between 23 per cent and 68 per cent. Surprisingly, regarding emergency pill very few women possess this knowledge only 15.8 per cent women in intervention area compared to 5.5 per cent in control area ever heard of emergency pill.

Table 4.13: Percentage Distribution of the Female Respondents Who Have Knowledge about Different FP Methods: by Area

Methods of FP	Intervention Areas			Control Area	Findings from end line survey MSCS (N=700)*
	Sylhet n=200	Maulvibazar n=200	Both N=400	Habiganj N=200	
Pill	99.5	100.0	99.8	100.0	98.9
Emergency pill	11.5	20.0	15.8	5.5	-
IUD/Copper T	70.0	92.0	81.0	80.0	17.3
Injection	98.5	99.5	99.0	97.0	92.6
Condom	99.5	99.0	99.3	97.0	67.6
Implant/ Norplant	79.5	96.0	87.8	88.0	43.6
Safe period	67.5	67.5	67.5	38.5	1.7
Azol/withdrawal	46.5	48.0	47.3	23.0	-
Ligation/Tubectomy	93.5	98.5	96.0	90.5	80.7
Vasectomy/NSV	73.0	91.0	82.0	78.5	14.7

Note:* Since findings from other areas are not available, the finding of End Line survey of MSCS was used as an example.

Our results compare favourably with the findings obtained by end-line survey of MSCS at Maulvibazar. There has been a significant improvement in the knowledge about some specific methods compared to the end line survey because of the intervention, for example, knowledge regarding IUD/copper T, implant/norplant and vasectomy/NSV.

4.6.5 Current Use of Family Planning Methods

Family planning plays a crucial role in safeguarding the health of women, particularly in a developing country like Bangladesh, where they are often forced to carry an unplanned and unwanted pregnancy. With respect to current use of contraception, it is evident from the findings (Table 4.14) that between 59 and 75 per cent of the unmarried women in the intervention area are currently using any family planning method (the figure of current use is 16.5 per cent higher in Sylhet than in Maulvibazar). By contrast, two-thirds (66 per cent) of control group women (66.8 per cent) are current users of any family planning method.

The method-mix of current users ranges between 56 and 72 percent for pill and 10 and 20 per cent for injection in both the intervention and control areas. However, pill users were higher (72 per cent) in the control area than in the intervention area (58 per cent), while use of injection was lower (9.8 per cent) in control area than in intervention areas (19.4 per cent). Surprisingly, 12 per cent of the current users in control area are still using traditional methods (safe periods, withdrawal) where failure rate may be quite high this proportion in intervention area almost non-existent. The end line survey of MSCS found 76 per cent of the respondents as current users. The most frequently used family planning method was pill, followed by injection, condom and ligation.

Table 4.14: Whether the Woman or Her Husband is Currently Using Any FP Method: by Area

Using any FP methods	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Yes	75.0	58.5	66.8	66.0
No	25.0	41.5	33.3	34.0

A further statistical analysis of the data points to the fact that the intervention did not influence the decision of neither male nor female respondents to use family planning. However, the intervention did increase both male and female respondents' knowledge on several family planning methods. It appears that the female respondents benefitted from the intervention regarding their knowledge of the emergency pill, safe period and azol/withdrawal. Furthermore, the intervention helped male respondents increasing their knowledge about implants, ligation and,

again, safe periods. The male knowledge on vasectomy and IUD, however, decreased.

Table 4.15: Percentage Distribution of Respondents according to Their Current Use of FP by Methods

Current use by methods	Intervention Areas						Control Area		Findings from End Line survey
	Sylhet		Maulvibazar		Both		Habiganj		
	n= 150	%	n= 117	%	N= 267	%	N= 132	%	N=700
Pill	91	60.7	65	55.6	156	58.2	95	72.0	35.7
Condom	5	3.3	11	9.4	16	6.4	6	4.5	3.4
Injection	30	20.0	22	18.8	52	19.4	13	9.8	26.9
IUD/Copper T	16	10.7	14	12.0	30	11.4	2	1.5	0.6
Implant/ Norplant	0	0.0	1	0.9	1	0.5	0	0.0	2.6
Traditional method	2	1.3	0	0.0	2	0.7	16	12.1	-
Ligation/Vasectomy	6	4.0	0	0.0	6	2.0	0	0.0	0.3
Other	0	0.0	4	3.4	4	1.7	0	0.0	-

4.6.6 Ever Use of FP Methods

Regarding past use of contraception, the respondents were asked whether they have ever used any contraceptive method and, if yes, what methods they have used. The findings show that between 71 and 82 per cent of the respondents have ever used any FP methods. The method-mix of ever users has more or less similar pattern like the current users. The pill was the most frequently used method (ranging between 70 and 78 per cent), followed by injection (ranging between 11 per cent and 17 per cent) and condom ranging between 12 and 13.5 per cent. However, 3.5 per cent women in control area were found to have ever used traditional method. The corresponding figure was nil for the intervention area.

Table 4.16: Percentage Distribution of Women by Ever Use of FP Methods

Whether ever use any method	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	n	%	n	%
Yes	164	82.0	143	71.5	307	76.8	142	71.0
No	36	18.0	57	28.5	93	23.3	58	29.0

Table 4. 17: Percentage Distribution of Women according to the Type of FP Methods Ever Used: by Area

Types of FP methods ever used	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	N	percent	N	percent	N	percent	N	percent
Pill	115	70.1	110	76.9	225	73.5	110	77.5
Condom	15	9.1	9	6.3	24	7.7	8	5.6
Injection	27	16.5	15	10.5	42	13.5	17	12.0
IUD/Copper T	5	3.0	7	4.9	12	3.95	0	0.0
Implant/ Norplant	0	0.0	2	1.4	2	0.7	2	1.4
Traditional method	0	0.0	0	0.0	0	0.0	5	3.5
Ligation/Tubectomy	1	0.6	0	0.0	1	0.3	0	0.0
Others	1	0.6	0	0.0	1	0.3	0	0.0

4.6.7 Consequences of Not Using Family Planning Methods

Respondents were asked about their perception regarding consequences of not using family planning method. Data show that a vast majority of respondents in both the programme and control areas are aware of the adverse effect of not using family planning method. Among the different responses, "economic burden" was mentioned by the highest proportion (81 per cent to 94 per cent), followed by "frequent pregnancies" (77 per cent to 82 per cent) and "burden of large family" (55 per cent to 77 per cent). There is no major difference in the perception of respondents in the two areas about the consequence of not using family planning method. Since family planning programme in the country has been in operation over the last five decades or so, and continued advocacy programme has been going on, most of the people are aware of the socio-economic consequences of not using family planning method.

The End Line survey shows that an overwhelming majority of respondents (98.4 per cent) stated that pregnancy is the ultimate consequence of not using family planning. In our study also, more than 75 per cent of the respondents mentioned about pregnancy. However, our questionnaire was designed to capture multiple responses, while the end line survey had only one option. Thus, other consequences mentioned in our survey are not strictly comparable because of differences in methodology adopted in these two studies.

Table 4.18: Percentage Distribution of Women according to Their Perceptions about Consequences of Not Using Any FP Methods: by Area

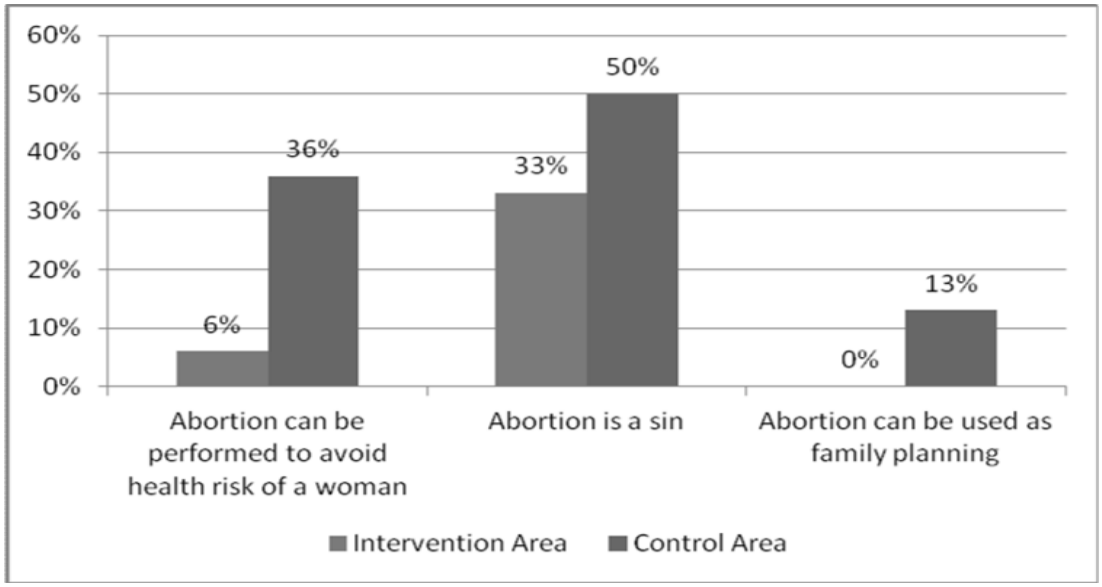
Consequences of not using FP methods	Intervention Areas			Control Area	Findings from End line survey of MSCS (N=700)
	Sylhet	Maulvibazar	Both	Habiganj	
May conceive/frequent pregnancies	84.5	80.0	82.3	77.0	98.4
Burden of large family/too many children	59.5	50.5	55.0	77.0	0.1
Economic burden	86.5	75.5	81.0	93.5	0.3
Short spacing of birth	34.0	25.0	29.5	21.5	-
Poor health of mother and children	33.0	54.0	43.5	27.5	-
Don't know	0.0	0.0	0.0	0.0	1.1
Others	0.0	1.5	0.8	0.0	-

4.6.8 Attitude towards Abortion

Women were asked about their perception regarding abortion. It was found that the proportion of women who considered abortion can be performed: 'if the health of a woman is at risk due to pregnancy', 'abortion as a sin' and 'abortion as a FP method,' was considerably higher in control area than in intervention areas (Figure 4.1).

Figure 4.1: **Percentage Distributions of the Respondents according to Their Opinion regarding Abortion**

(***In the figure the left side bars in each category on the horizontal axis represent the situation in the intervention area while the right side bars represent the scenario of the control area***)



4.6.9 Management of Unwanted Pregnancy

Although use of family planning method has been increasing continually, the cases of unwanted pregnancy are still high. Lack of knowledge on available family planning methods, ideal ways of using them and negative perception on use of family planning methods are some of the causes of unwanted pregnancy.

Respondents were asked about their perception on different ways of termination of unwanted pregnancies. In the intervention area, 95.3 per cent respondents mentioned MR as the way of pregnancy termination. By contrast, only 64 percent women in Habiganj said that they would go for MR in case of an unwanted pregnancy. The evidence suggests that a higher proportion of respondents in the intervention area are aware of modern and scientific method of unwanted pregnancy termination. The impact of the intervention is clearly visible in the sense that an overwhelming majority of respondents in the intervention area mentioned about MR to terminate an unwanted pregnancy. By contrast, about a quarter (24 per cent) of women in control area compared to only 5.5per cent in intervention areas mentioned abortion to get rid of unwanted pregnancy, which has enormous health risk for women. Surprisingly, one- fourth (25 per cent) of the women in control area compared to 3.5 per cent in intervention area (3 per cent in Sylhet and 4 per cent in Maulvibazar) said that they would seek advice from hekim/kabiraj/herbalist for the purpose. About a tenth of the (10.8 per cent) women in intervention areas and a quarter of the (23.5 per cent) women in control area said that they would opt for homeopathy medicine to get rid of unwanted pregnancy. This implies that a sizeable proportion of respondents in the control area still prefer to go to herbalist or homeopathy medicine to terminate unwanted pregnancy.

If these findings are compared with those of end line survey of MSCS, the highest proportion (78.6 per cent) of end-line respondents mentioned MR as the way of pregnancy termination, while 16.7 per cent stated about abortion. Here again, there was scope for multiple responses in our survey. By contrast, the End Line survey had only one option.

Table 4.19: Percentage Distribution of the Respondents according to Their Perception on Management of Unwanted Pregnancy: by Area (Multiple Response)

Indicators	Intervention Areas			Control Area	Findings from End line survey of MSCS (N=700)
	Sylhet	Maulvibazar	Both	Habiganj	
MR	96.5	94.0	95.3	64.0	78.6
Abortion	6.0	5.0	5.5	24.0	16.7
Taking advice from doctor	91.5	76.5	84	45.0	1.1
Take herbal medicine	3.0	4.0	3.5	25.0	-
DNC	5.5	44.0	24.8	12.5	2.3
Homeopath treatment	11.0	10.5	10.8	23.5	-
Do not know	0.5	0.0	0.3	0.5	2.0
Others	0.5	1.0	0.8	0.0	-

4.6.10 Knowledge about Early Marriage

Respondents were asked whether they know about minimum age at marriage for girls and boys. In the intervention area, 76.5 and 36 per cent of respondents know about minimum age at marriage for girls and boys respectively. However, a much lower proportion of women in control area (69.0 per cent) know about minimum age at marriage for girls and boys (31.5 per cent) respectively.

Table 4.20: Percentage Distribution of the Women according to Their Knowledge about Minimum Age of Marriage for Girls and Boys: by area

Indicators	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	n	%	n	%
Know about minimum age at marriage for girls	176	88.0	130	65.0	306	76.5	138	69.0
Know about minimum age at marriage for boys	87	43.5	57	28.5	144	36.0	63	31.5

Respondents were asked about their perception regarding impact of early marriage on the girl. The various consequences mentioned by both intervention and control group women, shown in Table 4.21, are more or less similar. The main consequences included "early pregnancy" (intervention area: 87 to 91.5 per cent; control area: 79 per cent), "adverse effect on health" (intervention: 78 to 81 per cent; control: 87.5 per cent),"can`t look after family properly" (intervention: 46 to 52 per cent; control: 37 per cent), and "can`t take proper care of children" (intervention: 24.5 to 28.5 per cent; control: 26.5 per cent).

Table 4.21: Percentage Distributions of Women by their Perception about Impact/Consequences of Early Marriage of Girls: by Area

Consequences of early marriage	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	n	%	n	%
Early pregnancy	183	91.5	174	87.0	357	89.3	158	79.0
Adverse effect on health	156	78.0	162	81.0	318	79.5	175	87.5
Break in education	58.0	29.0	81	40.5	139	34.8	127	63.5
Can't look after family properly	104	52.0	93	46.5	197	49.3	74	37.0
Can't take proper care of children	57	28.5	49	24.5	106	26.5	53	26.5
Can't adjust with husband properly	21	10.5	14	7.0	35	8.8	4	2.0
More chances of violence by husband	3	1.5	4	2.0	7	1.8	2	1.0
No demerits	-	-	3	1.5	3	0.8	-	-
Others	-	-	1	0.5	1	0.3	-	-

4.7 Knowledge and Attitude towards Menstrual Regulation (MR)

The women aged 15-49 were asked to respond on questions related to family planning methods and MR to explore their level of knowledge, attitude, beliefs, and perceptions about MR.

4.7.1 Knowledge on MR

Currently, MR is the most reliable (and government approved) method to get rid of an unwanted pregnancy. Respondents were asked whether they have ever heard of MR. The responses are summarised in Table 4.22. It is evident that knowledge about MR is almost universal in the intervention areas–all of the responding women in Sylhet (99.5 per cent) and Maulvibazar (100 per cent) have heard of MR. However, only 68 per cent of the women in control area have ever heard of MR. This variation in awareness level between the intervention and control areas is in the expected direction because, over the years, FPAB and MSCS have been trying to promote awareness regarding MR in their programme areas, and they have been highly successful in their endeavours. Our results are consistent with those obtained by the end-line survey of MSCS, which shows that 93.9 per cent of the respondents have heard about MR.

4.7.2 Timeline for MR

According to government policy in Bangladesh, the MR procedure can be performed within eight weeks from the first day of last menstrual period (LMP) or within ten weeks from the first day of the LMP if performed by a trained medical doctor.

The data show that even though knowledge about MR is universal in the intervention area, among women who have heard of MR– not all of them know about the correct timeline for MR. More than three-fourths of the women in the intervention area–80.9 per cent in Sylhet and 76.5 per cent in Maulvibazar–possess the knowledge regarding the appropriate timing of performing MR. On the other hand, only half of the control group women who have heard of MR do have the correct knowledge (regarding timeline of MR). It may be noted that the End line survey also found that 85.5 per cent of the respondents have correct knowledge on the timeline for safe MR.

Table 4.22: Percentage Distribution of the Respondents according to Their Knowledge about MR

Ever heard of MR	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Yes	99.5	100.0	99.8	68.0
No	0.5	0.0	0.3	32.0
N	200	200	400	200

Percentage distribution of the respondents according to their knowledge regarding the timeline of MR

Indicators	Intervention Areas				Intervention		Control Area	
	Sylhet n=199		Total N=399		Total N=399		Habiganj N=136	
	N	%	N	%	N	%	N	%
Correct knowledge on the timeline	161	80.9	153	76.5	314	78.7	69.0	50.7
Incorrect knowledge on the timeline	38	19.1	47	23.5	85	21.3	67	49.3

As will be explained in chapter 6, the difference in knowledge on the timeliness of the procedure is statistically significant.

4.7.3 Assistance and Service Providers for MR

Respondents were asked about their perception regarding the place where MR service is available, in the intervention area, or their knowledge on availability of service providers for MR in their locality. The data presented in Table 4.23 show that in Sylhet, 77 per cent of respondents mentioned about FPAB, followed by district hospital (64.8 per cent), FWC (62 per cent), UHC (60 per cent), MSCS (44 per cent), private clinic (33 per cent), MCWC (24.4 per cent) and other NGO clinics (24.4 per cent). In Maulvibazar, the pattern was more or less similar, where the highest proportion mentioned about FWC (75.9 per cent), followed by Marie Stopes Clinic (68.4 per cent), DH (58.8 per cent) and UHC (58.8 per cent). In the control area, Habiganj, a lesser proportion of respondents mentioned about public facility/skilled personnel (23 to 48 per cent), while a much higher proportion mentioned about traditional practitioners like kabiraj/hekim (34.6 per cent) or homeopathy medicine (13.5 per cent). Our results are consistent with those obtained by end-line survey, which shows that the most frequently mentioned places for safe MR are UHC (69.6 per cent), FWC (57.9 per cent) and district hospital (39.4 per cent).

The categories of staff who perform MR services include: qualified doctor, nurse/paramedic, FWV, trained health worker, TBA, village doctor, kabiraj/herbalist, etc. However, due to the advocacy and awareness raising programme of FPAB and MSCS, a higher proportion of respondents in the intervention area possess the knowledge regarding skilled personnel who perform MR in their respective areas.

Table 4.23: Percentage Distribution of Women according to Their Knowledge on Availability of Service Providers for MR in their Locality: by Area

Whether know about service provider of MR	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Yes	97.0	93.5	190.5	76.5
No	3.0	6.5	9.5	23.5
N	199	200	399	136

Service provider/center	Intervention Areas						Control Area	
	Sylhet (n=193)		Maulvibazar (n=187)		Both (N=380)		Habiganj (N=104)	
	N	%	N	%	N	%	N	%
District hospital	125	64.8	110	58.8	235	61.8	49	47.1
MCWC	47	24.4	61	32.6	108	28.5	24	23.1
FWC	120	62.2	142	75.9	262	69.1	50	48.1
UHC	116	60.1	110	58.8	226	59.5	50	48.1
Marie Stopes Clinic	85	44.0	128	68.4	213	56.2	-	-
Other NGO Clinics	47	24.4	24	12.8	71	18.6	2	1.9
Private Clinic	63	32.6	13	7.0	76	19.8	24	23.1
Medicine Seller	1	0.5	2	1.1	3	0.8	2	1.9
Kabiraj/Hekim	26	13.5	24	12.8	50	13.2	36	34.6
Homeopath	3	1.6	10	5.3	13	3.5	14	13.5
Doctor/Nurse	26	13.5	7	3.7	33	8.6	28	26.9
Village doctor	-	-	-	-	-	-	2	1.9
TBA/*dai*	2	1.0	-	-	2	0.5	2	1.9
FPAB	149	77.2	-	-	149	38.6	-	-
Pir/Fakir	-	-	-	-	-	-	3	2.9

4.7.4 Attitude towards MR

Respondents were asked about their opinion on when one should go for performing MR. The various responses given by respondents include "poor parents with too many children should go for MR" (86.5 per cent in intervention and 69.1 per cent in control area); "unwanted pregnancy should be terminated through MR" (76.9 per cent versus 84.6 per cent). Respondents also mentioned that "pregnancy at a very late stage of life should be terminated through MR" (32 per cent in intervention and 49 per cent in control area)"; "If the health of the woman is at risk because of pregnancy, then MR can be performed" (37 per cent in intervention and 32 per cent in control area). However, one-third of women in Habiganj (32.4 per cent) said that MR can be used as family planning method, while only 1.8 per cent of the respondents in intervention area mentioned MR as a method of family planning. This implies that only a very small minority of women in the intervention area have the wrong perception about MR, which clearly indicates the success of the MR intervention in the study area. However, a significant proportion of respondents consider MR as a sin having the fear of incurring the "curse of God." Such proportion was as high as 28 per cent in the control area compared to 10 per cent in the intervention area.

Table 4.24: Percentage Distribution of the Respondents according to Their Opinion regarding MR Issue

Opinion regarding reasons for performing MR	Intervention Areas						Control Area	
	Sylhet (n=199)		Maulvibazar (n=200)		Both (N=399)		Habiganj N=136	
	n	%	n	%	n	%	n	%
Poor parents with too many children should go for MR/For financial well-being	170	85.4	175	87.5	345	86.5	94	69.1
Pregnancy at a very late stage of life should be terminated through MR	74	37.2	55	27.5	129	32.4	67	49.3
Pregnancy outside wedlock should be terminated through MR	86	43.2	80	40.0	166	41.6	60	44.1
Unwanted pregnancy should be terminated through MR	163	81.9	144	72.0	307	76.9	115	84.6
If the health of the woman is at risk because of pregnancy then MR can be performed	80	40.2	69	34.5	149	37.4	43	31.6
Terminating pregnancy through MR is a sin/against religion	19	9.5	22	11.0	41	10.3	38	27.9
MR can be used as family planning	4	2.0	3	1.5	7	1.8	44	32.4

4.7.5 Whether MR Is Considered a Right of Women?

Respondents were asked whether they consider MR a right of women to get rid of unwanted pregnancy. The findings show that four-fifths (80 per cent) of the women in the intervention area consider MR a women's right to terminate unwanted pregnancy. By contrast, only half of the control group women (52.5 per cent) have similar attitude towards MR. The findings imply that a much higher proportion of women are concerned about women's rights and they have developed favourable attitude towards termination of unwanted pregnancy through MR compared to their counterparts in the control area. The control group women are found to hold more conservative attitudes towards MR than their counterparts in the intervention area. Differences are found to be statistically significant. Religion also appears to play a role. The Muslim women are more tolerant than Hindu women. Regarding the influence of the intervention on the two groups, a separate analysis shows that the difference in magnitude of the coefficients is quite strong; however, creating an intervention variable points out that the differences between the effects of the intervention of the two religious groups are only significant at the 90 per cent confidence level.

Table 4.25: Whether Respondents Consider MR a Right of Women: by Area

Indicators	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Considers MR a right	82.5	79.0	80.8	52.5
Do not consider MR a right	17.5	21.0	19.3	47.5

Respondents were also asked about their opinion regarding abortion as a method of termination of pregnancy. Only 10 per cent of the respondents in the intervention area with too many children were in support of abortion as a way of pregnancy termination for financial well-being. Only in the case of pregnancy outside wedlock, a large majority of respondents in the intervention area were in support of abortion. The data show that a vast majority of the respondents in the intervention area were against abortion irrespective of poverty of households or age at pregnancy, or on health grounds.

The picture was quite different in the control area, where most of the respondents mentioned that "poor parents with too many children" should go for abortion (57 per cent), "unwanted pregnancy" should be terminated through abortion (61.5 per cent). Respondents in control area also mentioned that pregnancy at a very late stage of life should be terminated through abortion (35.6 per cent), or if the health of the woman is at risk because of pregnancy, then abortion can be performed (36.3 per cent). The findings imply that a vast majority of the women in the control area are not aware about the difference between "MR" and "abortion." Pregnancy termination through abortion is a risky procedure, involving life threatening risks for women, including the risk of "dying" because of abortion. Unfortunately, a significant proportion of women in the control area are not aware of the health risk associated with abortion. More than a tenth of the control group women (12.6 per cent) still maintain that abortion can be used as a method of family planning. This needs immediate attention by planners and policy makers.

It is also observed from Table 4.26 that about a third (32.8 per cent) of the women in the intervention area and one-half (50.4 per cent) of the women in the control area are of the opinion that such an act is a great sin and would debar them from heaven.

Table 4.26: Percentage Distribution of Women according to Their Opinion regarding Abortion

Opinion regarding reasons for performing MR	Intervention Areas						Control Area	
	Sylhet (n=193)		Maulvibazar (n=185)		Both (N=378)		Habiganj (N=135)	
	n	%	n	%	n	%	n	%
Poor parents with too many children should go for abortion/For financial well- being	18	9.3	21	11.4	39	10.4	77	57.0
Pregnancy at a very late stage of life should be terminated through abortion	20	10.4	18	9.7	38	10.1	48	35.6
Pregnancy outside wedlock should be terminated through abortion	149	77.2	135	73.0	284	75.1	54	40.0
Unwanted pregnancy should be terminated through abortion	15	7.8	13	7.0	28	7.4	83	61.5
If the health of the woman is at risk because of pregnancy then abortion can be performed	12	6.2	9	4.9	21	5.55	49	36.3
Terminating pregnancy through abortion is a sin/against religion	62	32.1	62	33.5	124	32.8	68	50.4
Abortion can be used as family planning							17	12.6

4.7.6 Experience of MR

The respondents were also asked whether they know any MR clients i.e. whether any of their relatives/friends had an MR, and, if so, at what stage of pregnancy the MR was performed. It is evident from Table 4.27 that a fourth of the respondents in intervention area (23.3 per cent) said that they personally know women who have undergone MR, while the corresponding proportion of such women was 43.9 per cent in control area.

Regarding the timeline when MR was performed, a much higher proportion of respondents in the intervention area maintain that MR was performed within 10 weeks from last day of menstrual period (LMP)–83.3 per cent in intervention area, while less than two-thirds (63.2 per cent) of the MR cases in the control area were performed within the safe time limit of 10 weeks. Thus, according to the responses given by women, a sizeable proportion of MR cases in control area were performed after the expiry of prescribed timeline for safe MR. The proportion of unsafe MR cases was 12.8 per cent in the intervention area, while the proportion of such cases was about three times higher (36.8 per cent) in control area. The findings suggest that in the intervention area, a larger proportion of MR was performed within the safe time period of 10 weeks from LMP, compared to women from the control area. This is clearly an indication of the success of MR intervention in the study area in raising the awareness of people towards safe MR.

Table 4.27: Percentage Distribution of Women Having Relatives/Friends Who Had Experience of MR

Indicators	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	n	%	n	%
Yes	48	24.5	44	22.1	92	23.3	87	43.9
No	148	75.5	155	77.9	303	76.7	111	56.1

Table 4.28: Percentage Distribution of the Respondents according to the Timeline/ duration of Pregnancy When Their Relatives/Friends Had the MR Performed

Duration of pregnancy when MR was performed	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	n	%	n	%
1-8 weeks	34	70.8	18	40.9	52	61.4	43	49.4
9-10 weeks	8	16.7	19	43.2	27	21.9	12	13.8
11-12 weeks	6	12.5	6	13.6	12	12.3	16	18.4
12+ weeks	0	0.0	1	2.3	1	0.5	16	18.4
Overall	48	100.0	44	100.0	92	96.0	87	100.0
Minimum	2		2		2		4	
Maximum	12		14		13		24	

4.7.7 Service Providers for MR

According to the government policy, safe MR needs to be performed either by a trained medical doctor (within 10 weeks from LMP) or by a trained paramedic/FWV (within 8 weeks). Judged on this criterion, a vast majority of MR cases in both the intervention areas were performed by skilled personnel–83.4 per cent in Sylhet and 75 per cent in Maulvibazar. However, the picture was not that much encouraging for the control area, only half of the MR cases (54 per cent) in Habiganj were attended by skilled personnel. Again, one-fourth (26.3 per cent) of MR cases in the control area were performed by unskilled professional (kabiraj/herbalist/homeopath, etc.) compared to only 6.4 per cent in the intervention area.

This is really unfortunate that after 3 decades of MR programme in Bangladesh, a sizeable proportion of MR clients in the control area sought help from traditional practitioners/herbalists or untrained providers to terminate their pregnancies. This issue deserves due attention by the programme managers and policy makers, so that women stop going to unskilled providers for performing the MR.

Table 4.29: Percentage Distribution of Women according to the Service Providers Who Performed MR for Their Relatives/Friends

Service providers	Intervention Areas						Control Area		Findings from End line survey (MSCS)
	Sylhet		Maulvibazar		Both		Habiganj		
	n	%	n	%	n	%	n	%	N=700
Skilled Doctor	21	43.8	10	22.7	31	33.3	15	17.2	80.3
Nurse/Paramedic/FWV	19	39.6	23	52.3	42	45.9	42	48.3	81.1
Public facility/NGO clinic	5	10.4	7	15.9	12	13.2	7	8.0	0.3
Kabiraz /Hekim/Herbalist	2	4.2	2	4.5	4	4.4	21	24.1	0.7
Homeopath	0	0.0	0	0.0	0	0.0	1	1.1	-
Pharmacist /Village doctor	1	2.1	2	4.5	3	3.3	0	0.0	1.6
Other	0.	0.0	0	0.0	0	0.0	1	1.1	-
Total	48	100.0	44	100.0	92	100.0	87	100.0	-

4.7.8 Complications Faced after MR

Respondents were asked whether they know of any complications their friends/relatives have suffered because of undergoing MR. Out of 179 MR cases, 80 MR clients (44.7 per cent) faced some complications after having an MR. However, there were major variations between the two areas in the proportion of MR clients who suffered complications after MR. The proportion ranged from 58 per cent in Sylhet to 48 per cent in Maulvibazar (intervention area), and to 36 per cent in control area. Since a higher proportion of MR in the control area was performed by unskilled personnel (and also after the expiry of safe time period), it was expected that a higher proportion of MR clients would suffer from post-MR complications in the control area. However, our results were in the opposite direction a higher proportion of MR cases in the intervention area reportedly suffer from post-MR complications. This might be partly explained by the fact that a higher number of respondents in the control area are likely to have under-reported the incidence of post-MR complications suffered by their friends/relatives; or the probability of recall lapse was higher in the case of control area respondents compared to their counterparts in the intervention area.

The various complications mentioned by women from both intervention and control areas include: “excessive bleeding” (mentioned by around 54 per cent of intervention and 77 per cent of control group of respondents), “abdominal pain” reported by (21.5 per cent) of women in the intervention area compared to 45 per cent in the control area.

Table 4.30: Percentage Distribution of Women according to the Type of Complications Faced by Their Relatives/Friends due to Unsafe MR

Complications	Intervention Area						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n=28	%	n=21	%	N=49	%	N=31	%
Excessive bleeding	14	50.0	12	57.1	26	53.6	24	77.4
Senseless/Unconscious	0	0.0	1	4.8	1	2.4	2	6.5
Vomiting	1	3.6	1	4.8	2	4.2	0	0.0
Abdominal pain/uterus infection	8	28.6	3	14.3	11	21.5	14	45.2

4.7.9 Cost of MR

Respondents were asked about the cost of having an MR procedure. In the intervention area, 45.8 per cent mentioned that the cost of MR was within Tk. 500, 18.3 per cent stated that the cost was between Tk. 500 and Tk.1,000, while 20.8 per cent said that the cost was more than Tk.1,500. There was only a minor variation in the average cost of MR between intervention and control areas. On an average, Tk.1,346 is required to conduct an MR in intervention areas, while the corresponding figure was Tk.1,221 in control area. The average cost of MR was the lowest in Sylhet and the highest in Maulvibazar, and the cost in Habiganj was in between Sylhet (Tk. 1,119) and Maulvibazar (Tk. 1,221).

Table 4.31: Percentage Distribution of the Women according to Their Perceptions about the Cost Incurred by Their Friends/Relatives for MR

Cost of MR	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	n	%	n	%
Up to Tk. 500	21	43.8	21	47.7	42	45.8	27	31.0
Tk. 500 to Tk. 1,000	11	22.9	6	13.6	17	18.3	29	33.3
Tk. 1,000 to Tk. 1,500	6	12.5	3	6.8	9	9.7	14	16.1
Tk. 1,500 +	10	20.8	14	31.8	24	26.3	17	19.5
Total	48	100.0	44	100.0	92	100.0	87	100.0
Average cost (taka)	1,119		1,573		1,346		1,221	

4.8 Results of Focus Group Discussions (FGDs)

Focus group discussions were conducted in order to complement the findings from the surveys. Key findings were:

i. Awareness creation and mobilisation programme among the community people on safe timeline for MR, service providers for safe MR, VAW, and demerits of early marriage through focus group discussion, courtyard discussion/meetings, film shows, etc. have contributed to the results obtained.

ii. The advocacy programmes/seminars organised by government agencies, religious leaders, health professionals and community leaders, in order to recognise, protect and fulfill women's rights have also contributed to the results obtained.

iii. Both organisations developed need based BCC and advocacy materials that helped to improve knowledge levels.

iv. Adequate measures were taken for provision of post-MR complications, post MR contraceptive services, creation of functional referral mechanism, and referral of high risk cases to higher level public/NGO facilities.

The intervention also changed the perceptions of community leaders/male household heads. Key findings include:

- All classes of people, belonging to different age groups (adolescents, adults, and aged) and socio-economic categories (rich/poor, educated/illiterate), get the relevant message regarding WHY, WHEN, WHERE, and by WHOM the MR should be performed. This has contributed to increased mass awareness regarding FP and MR related issues.
- Women and male-heads have come out of religious dogma because of the intervention. Their mental horizon has broadened and now they understand better the importance of performing MR within the safe timeline and by skilled provider.
- Religious dogma/superstitions among people regarding MR have been reduced. Their knowledge and awareness regarding the need for MR (and avoiding abortion) to terminate unwanted pregnancy has increased significantly. Moreover, their awareness regarding consequences of not using family planning and adverse impact of frequent pregnancies has increased tremendously.

Women reported that early marriage and violence had reduced in the intervention area, though this could not be sustained by data from the surveys. Women reported that in cases where violence still continues, the incidence of physical violence has been reduced or has transformed into other forms of abuse, reported as more subtle psychological forms of violence. Almost all the female participants in the FGD told that there was an increase in confidence and empowerment that can be attributed to the intervention.

Women also reported that the implementing agencies have been able to achieve, especially in addressing the norms around violence. The most obvious and critical community norms being challenged and reshaped is that of violence being a private/ personal issue. Women believe violence is wrong and that it is their right to protest against violence. The activities of implementing agencies have also promoted a heightened sense of responsibility among community members regarding violence, early marriage and teenage pregnancy.

Finally, women in the intervention area perceived that they received more respect and were more consulted regarding resolving crucial family situations. Women in the intervention area reported increase in self-worth, confidence and competence that they often translate into redefining social customs and rituals for themselves and their children. Women from poor households and marginalised communities now can have easy access to RH services, including access to safe MR. Women also have gained positively in their ability to seek help from skilled provider in case of unwanted pregnancy.

CHAPTER 5

KNOWLEDGE AND ATTITUDES OF MALE HOUSEHOLD HEADS TOWARDS MR RELATED ISSUES

5.1 Introduction

In most of Bangladesh, the family is mainly patriarchal, patrilocal and patrilineal and the South Asia region is well known for the kinds of inegalitarian gender relations that are related with gender discrimination. Women are defined as inferior; most husbands assume to "own" women, and to have the right to dominate them, including through the use of force.

The social system in Bangladesh is patriarchal and, therefore, fosters women's dependence on men. Traditionally, women's activities are limited within the household campus, and since birth, they are primarily trained to perform the role of a docile daughter, a compliant wife and a dependent mother (Chaudhury and Ahmed 1980). From the early childhood, the girl is trained to fit into the only socially acceptable role that of a wife and mother (Jahan 1975). The majority of women are married by age 18 and a good marriage is regarded as the goal of a woman's life. For women, early and frequent pregnancies are a way of life, and bearing and rearing children becomes the main purpose of their lives.

Due to prevailing socio-cultural factors, rural Bangladesh is characterised by marked sexual stratification. The mobility of rural women is strictly influenced and curtailed by the practice of purdah, that is, the traditional seclusion of women. The overall low level of economic development, strong cultural norms defining the role of women, sex segregation and the structures of purdah have all combined to exclude women from all the major decision making in the household, including family planning. Male heads (husbands) are likely to have more say in decisions regarding whether or not to go for MR to get rid of an unwanted pregnancy. Although urban educated women are gradually exercising their power in major decision making along with their husbands, most of the rural women are dependent on their husbands for such decisions. Majority of rural women perform tasks such as cooking, cleaning and child rearing; none of their work is considered productive and they remain economically dependent on their male kins (Cain *et al.* 1979, Khuda 1980, Mannan 1988, Greeley 1982, Farouk and Ali 1975, Hamid 1989, 1994). This total reliance on men creates in women a condition of extreme economic and social dependence.

Because her very real contributions to the family's economic well-being are ignored and, because her labour is unpaid and unseen, her status is correspondingly the lowest. Thus, a woman spends her life as a dependent. First, she is dependent on her father, then on her husband, and finally on her son(s). According to Flockson (1975), women in Bangladesh are raised as dependents and learn to fear independence. The only relatively independent women are the middle-aged or elderly widowed, divorced or abandoned women without sons to support. "Here is a sad and desperate independence." Even though the situation is improving slowly, if one visits a Bangladesh village, one finds the women still confined to the house and farmyard. Again, only the poorest and thus most despised go to work in the fields. They are prisoners in their own homes, allowed only to thresh and husk rice, but never, as in China, to share in the work of transplantation, harvesting or irrigation.

The central argument here is that the practice of anti-female bias in almost all spheres of life (education, health and nutrition, income earning activities, etc.) and the concept of woman as a dependent, without independent rights, is further compounded in certain categories of women, particularly those women who are widowed and divorced or abandoned by their husbands. The prevailing socio-cultural norms (purdah for example), discrimination in employment and the notion that women's income is secondary and complementary have not only contributed to women's dependence on men in Bangladesh, but also led to a sharp rise in dowry related practices and violence against women.

In view of the above, it is imperative to understand the attitude of male members, especially male household heads, towards family planning and MR, particularly about termination of unwanted and unplanned pregnancies. MR is the safest method of removal of accidental pregnancies, but if MR is not performed within the right time by the right providers, it might result in some major complications.

Again, there are a lot of misconceptions about the procedure of MR and its adverse impact on health of mothers, including the risk of becoming infertile. Most of these misconceptions arise from lack of knowledge and awareness as well as wrong perceptions based on stories/tragic experiences of friends, relatives, neighbours, who have suffered because of having an MR. However, from whichever side the complications might occur, i.e. ignorance about the safe timeline and skilled provider from the client's end or lack of adequate skill from providers' end, there is also the risk of social barriers that might discourage potential clients not to terminate unwanted pregnancy through MR. The role of male household head as a key decision maker in the household is quite crucial in this regard.

5.2 Socio-economic Profile of the Respondents

As mentioned in the methodology section, the present study has covered 300 male-heads of household from three districts—Sylhet, Maulvibazar and Habiganj–taking 100 from each district. A brief description of socio-economic characteristics of the respondents is given below.

In the survey area, most (54 per cent on average) of the male household heads are in the age group of 25 to 34 years (55 per cent in Sylhet, 50 per cent in Maulvibazar and 58 per cent in Habiganj). There is some variation in the age group of 40-44 years, with 6 per cent of the male heads in Sylhet, 8 per cent in Maulvibazar and 14 per cent in Habiganj. In addition, we observed major variations in the age group of 50 years and above. Only 4 per cent of the household heads in Sylhet compared to 10 per cent in Maulvibazar belong to age group of 50 years and above. In Habiganj, there was not even a single household belonging to the 50+ age group. The mean age of household heads was 35 years in the intervention areas as against 34 years in the control area.

In terms of literacy and education, most of the respondents were illiterate or with no formal schooling. About two-fifths of the household heads in the study area (38.7 per cent) were illiterate. The rate of illiteracy was higher in the intervention area compared to control area (47.5 per cent vs 18 per cent). One-fifth (18.25 per cent) of the male household heads in intervention areas had primary level education with 1-5 years of schooling, compared to one-third (32.6 per cent) of the household heads in control area.

In terms of literacy and education, the situation was worse in intervention areas. This trend was observed to be similar in the case of secondary (6-9 class pass) and higher level of education as well. One-fourth (25.6 per cent) of the household heads in intervention area have completed at least six years of education compared to two-fifths (42.7 per cent) in control area. Less than one-tenth (9 per cent) of the household heads in intervention area had 10 or more years of education, the corresponding figure was 14.6 per cent in the control area.

Occupation

The distribution of household heads by principal occupation shows that the predominant occupation is small business/petty trading (28.7 per cent) or non-agricultural wage labour (19 per cent). The highest percentage of respondents are engaged in small business in Habiganj (37.0 per cent), while in the intervention area about a quarter of the household heads are engaged in small business/petty trading (25 per cent in Sylhet and 24 per cent in Habiganj). About a quarter of the male household heads in the control area have salaried jobs (23 per cent), whereas only 10 per cent of the male-heads are reported to be service holders in Sylhet compared to 5 per cent in Maulvibazar.

The other occupational category shows a heterogeneous mix of work activities self-employment (9.3 per cent), rickshaw/van pulling, transport work (5 per cent) and agriculture/farming (47 per cent). Together, they constitute another 27 per cent of major occupation of household heads. However, there are some variations in the occupational distribution of male-heads in the three study areas.

Table 5.1: Percentage Distribution of the Male Household Heads according to Their Background Characteristics: by Area

Indicators	Intervention Areas			Control Area Area	All/Total N=300
	Sylhet n=100	Maulvibazar n=100	Both N=200	Habiganj N=100	
Age (in years)					
15-19	0.0	1.0	0.5	0.0	0.3
20-24	12.0	6.0	9.0	3.0	7.0
25-29	23.0	24.0	23.5	32.0	26.3
30-34	32.0	26.0	29.0	26.0	28.0
35-39	17.0	14.0	15.5	23.0	18.0
40-44	6.0	8.0	7.0	14.0	9.3
45-49	6.0	11.0	8.5	2.0	6.3
50-54	3.0	5.0	4.0	0.0	2.7
55-59	1.0	4.0	2.5	0.0	1.7
60 and above	0.0	1.0	0.5	0.0	0.3
Mean age of household head	33.9	36.3	35.1	34.5	34.9
Level of Education					
Illiterate	25.3	69.7	47.5	18.0	38.7
Can read and write only	15.4	2.0	8.7	6.7	7.9
Primary (1-5 class pass)	26.4	10.1	18.3	32.6	22.6
Secondary (6-9 class pass)	23.1	10.1	16.6	28.1	20.1
Secondary completed or more (10 or more class pass)	9.9	8.1	9.0	14.6	10.8
Occupation					
Agriculture/Farming	1.0	3.0	2.0	10.0	4.7
Day labourer (Agri.)	-	5.0	2.5	2.0	2.3
Day labourer (Non-Agri)	9.0	39.0	24.0	9.0	19.0
Small business/Petty trading	25.0	24.0	24.5	37.0	28.7
Business	7.0	5.0	6.0	4.0	5.3
Service/Salaried job	10.0	5.0	7.5	23.0	12.7
Self-employed	16.0	5.0	10.5	7.0	9.3
Rickshaw/Van puller	21.0	1.0	11.0	2.0	8.0
Transport worker	5.0	5.0	5.0	5.0	5.0
Handicraft	-	2.0	1.0	-	0.7
Sick/disabled	-	3.0	1.5	-	1.0
Unemployed (more than 14 years and not student)	-	1.0	0.5	-	0.3
Others	6.0	2.0	4.0	1.0	3.0

(Contd. Table 5.1)

Indicators	Intervention Areas			Control Area Area	All/Total N=300
	Sylhet n=100	Maulvibazar n=100	Both N=200	Habiganj N=100	
Average monthly income of the household head from main occupation	11,091	8,260	9,676	8,258	9,203
Average monthly income of other household members	1,461	5,315	3,388	1,711	2,829
Average monthly income of households from others sources	615	665	640	1,610	963
Average monthly income from all sources	13,167	14,240	13,704	11,579	12,995
Per capita monthly income	3,261	2,832	3,047	2,581	2,891

Household Income

Monthly income is an important indicator of poverty. With regard to monthly household income, the findings show that most of the households in the sample area belong to the broad income group of Tk.7,501-15,000 per month. About a fourth of the household heads in the intervention (26 per cent) and control area (27 per cent) belong to the monthly income group of Tk.7,501-10,000. Similarly, another fourth of the households in intervention (24 per cent) and control area (25 per cent) belong to the income group of Tk. 10,001-15,000. Just over a tenth of the households in intervention area (14.5 per cent) and control area (11 per cent) belong to the highest income group of above Tk. 20,000 per month.

The data presented in Table 5.2 show that, on the whole, respondents in the control area come from relatively poorer households compared to the intervention area. Twelve per cent of control area households live on a monthly income not exceeding Tk 5,000 compared to 2.5 per cent in intervention area.

Overall, average monthly income of the household heads from all sources was Tk.12,995 per month. However, mean monthly income of households in the intervention area was somewhat higher (Tk.1,3167 in Sylhet and Tk.14,240 in Maulvibazar) than that of the control area (Tk. 11,579).

Among the three districts, average per capita monthly income is the highest in Sylhet (Tk.3,261), followed by Maulvibazar (Tk.2,832) and the lowest of Habiganj (Tk. 2,531) in the control area.

Table 5.2 : Distribution of Male Household Heads according to Monthly Income from All Sources: by Area

Income of HH	Intervention Areas						Control Area		All	
	Sylhet		Maulvibazar		Both		Habiganj			
	n	%	n	%	n	%	n	%	n	%
Up to TK 2000	1	1.0	-	-	1	0.5	1	1.0	2	0.7
Tk. 2001-3000	-	-	-	-	-	-	1	1.0	1	0.3
Tk. 3001-5000	3	3.0	1	1.0	4	2.0	10	10.0	14	4.7
Tk. 5001-7500	22	22.0	14	14.0	36	18.0	20	20.0	56	18.7
Tk. 7501-10000	26	26.0	30	30.0	56	28.0	27	27.0	83	27.7
Tk. 10001-15000	23	23.0	25	25.0	48	24.0	25	25.0	73	24.3
Tk. 15001-20000	11	11.0	15	15.0	26	13.0	5	5.0	31	10.3
Tk. 20000+	14	14.0	15	15.0	29	14.5	11	11.0	40	13.3
Average monthly income	13,167		14,240		13,704		11,579		12,995	

5.3 Knowledge and Use of Family Planning

The family planning programme in Bangladesh seeks to promote responsible parenthood with two children as the norm, through the voluntary choice of a family planning method best suited to the acceptor.

The findings of the present evaluation show that the extent of knowledge regarding family planning in the study area is universal (almost 100 per cent have heard about FP). A large majority of the male-heads or their wives are current users of contraception (around two-thirds). Similarly, about 70 per cent of the male-heads or their wives in the intervention areas have ever used any FP method, the corresponding figure for the control group respondents was a bit lower- around 65 per cent. Again, a large majority of the male-heads are aware of the benefits of small family, and consequences of large family and frequent pregnancies. Incidentally, there is no major difference between the intervention and control area as far as knowledge and use of family planning method is concerned. However, it is critical to understand their knowledge and attitude towards MR and whether there is any difference between the intervention and control areas. The following section presents the relevant data in this regard.

5.4 Management of Unwanted Pregnancy

Male-head respondents were asked about their perception on ways of termination of unwanted pregnancies. About four-fifths (79.5 per cent) of the household heads in intervention areas mentioned about MR as the way of pregnancy termination, the corresponding figure was 54 percent in control area (Table 5.3).

Again, about one-sixth (16 per cent) of male heads in control area compared to only 9 per cent in intervention area mentioned abortion as a way to get rid of unwanted pregnancy, which has enormous health risk for women.

Surprisingly, more than two-fifths (45 per cent) of the male heads in control area compared to 13 per cent in intervention area said that they would seek advice from Hekim/Kabiraj/Herbalist for the purpose. Again, about a tenth of the males in intervention area (13 per cent) and a quarter (27 per cent) in control area said that they would opt for homeopathy medicine to get rid of unwanted pregnancy.

Table 5.3: Percentage Distribution of Household Heads according to T heir Perceptions on Management of Unwanted Pregnancy

Indicators	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
MR	81.0	78.0	79.5	54.0
Abortion	8.0	10.0	9.0	16.0
Taking advice from doctor	95.0	89.0	92.0	84.0
Take herbal medicine	12.0	14.0	13.0	45.0
DNC	4.0	10.0	7.0	7.0
Homeopathy treatment	13.0	13.0	13.0	27.0

5.5 Knowledge on MR

In response to the question whether they have ever heard of MR, a vast majority of male–heads replied in the affirmative. The responses are summarised in Table 5.4. It is evident that knowledge about MR is almost universal in the intervention area; almost all of the male–heads in the intervention areas have heard of MR, compared to 74 per cent in the control area. This variation in awareness level between intervention and control areas may be attributed to the advocacy and awareness raising activities of FPAB and MSCS.

5.6 Timeline for MR

Data show that more than four-fifths of the male heads in the intervention areas possess the correct knowledge regarding the appropriate timing of performing MR. On the other hand, only half of the control group male-heads (51.4 per cent) who have heard of MR do have the correct knowledge regarding timeline of MR.

Table 5.4: Percentage Distribution of Household Heads according to Their Knowledge on MR

Indicators	Intervention Areas			Control Area
Ever heard of MR	Sylhet	Maulvibazar	Both	Habiganj
Yes	98.0	100.0	99.0	74.0
No	2.0	0.0	1.0	26.0
N	100.0	100.0	100.0	100.0

Percentage Distribution of Male Heads according to Their Knowledge regarding the Timeline of MR

Income of HH	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n=98	%	n=100	%	N=198	%	N=74	%
Correct knowledge on	85	86.7	89	89.0	174	87.9	38	51.4
Incorrect knowledge on the timeline	13	13.3	11	11.0	24	12.1	36	48.6

5.7 Assistance and Service Centre for MR

Respondents who are aware of MR were asked about the place where MR services are available or their knowledge on availability of service providers for MR in their locality. The data as presented in Table 5.5 show that 95 per cent of the respondents in the intervention area compared to 70 per cent in the control area know about the service providers of MR in their locality. In Sylhet, 69 per cent of respondents mentioned FPAB, other responses included district hospital (75.5 per cent), FWC (55.3 per cent), UHC (51.1 per cent), private clinic (5.3 per cent), MCWC (73.4 per cent) and other NGO clinics (20.2 per cent). In Maulvibazar, the pattern was more or less similar where 78 per cent of respondents stated about Marie Stopes Clinic. In Habiganj, fewer proportion of respondents mentioned about public facility/skilled personnel (46 per cent to 59 per cent), while much higher proportion mentioned about traditional practitioners like kabiraj/hekim (25 per cent) or homeopathy medicine (21.2 per cent). The intervention raised the knowledge of the respondents about the availability of the MR service providers in their locality, all else equal (See Annex 1).

Table 5.5: Percentage Distribution of Male Heads according to Their Knowledge on Availability of Service Providers for MR in Their Locality: by Area

Indicators	Intervention Areas						Control Area	
Knowledge of availability of service provider	Sylhet		Maulvibazar		Both		Habiganj	
	n=98	percent	n=100		N=198	percent	N=74	percent
Yes	94	95.9	95	95.0	189	95.4	52	70.3
No	4	4.1	5	5.0	9	4.6	22	29.7

Indicators	Intervention Areas			Control Area
Service Provider for MR	Sylhet (n=94)	Maulvibazar (n=95)	Both (N=189)	Habiganj (N=52)
District hospital	75.5	66.3	70.9	55.8
MCWC	73.4	64.2	68.8	46.2
FWC	55.3	51.6	53.5	59.6
UHC	51.1	69.5	60.3	48.1
Marie Stopes Clinic	38.3	77.9	58.1	-
Other NGO Clinics	20.2	9.5	14.9	1.9
Private Clinic	5.3	4.2	4.8	38.5
Medicine Seller	-	1.1	0.6	15.4
Kabiraj/Hekim	6.4	10.5	8.5	25.0
Homeopath	2.1	2.1	2.1	21.2
Doctor/nurse	22.3	4.2	13.3	3.8
Village doctor	-	6.3	3.2	11.5
TBA	2.1	-	1.0	15.4
FPAB	69.1	-	34.6	-

5.8 Attitude towards MR

Respondents were asked about their opinion regarding MR. The various responses given by male-heads include “poor parents with too many children should go for MR,” “unwanted pregnancy, should be terminated through MR,” “pregnancy at a very late stage of life should be terminated through MR,” and “if the health of the woman is at risk because of pregnancy, then MR can be performed.” However, one-fourth (27 per cent) of male-heads in control area said that MR can be used as a method of family planning, which is a wrong perception regarding MR, while less than one-tenth (7.6 per cent) of the respondents in intervention areas mentioned MR as a method of family planning. A significant proportion of respondents also consider MR a sin, “an act against the will of God,” such proportion was as high as 32.4 per cent in control area compared to 7.6 per cent in the intervention areas.

Table 5.6: Percentage Distribution of Male Heads according to Their Opinion regarding MR Issue: by Area

Indicators	Intervention Areas			Control Area
Opinion regarding MR	Sylhet n= 98	Maulvibazar n= 100	Both N=198	Habiganj N= 74
Poor parents with too many children should go for MR/For well being of the family	90.8	79.0	84.9	51.4
Pregnancy at a very late stage of life should be terminated through MR	61.2	60.0	60.6	44.6
Pregnancy outside wedlock should be terminated through MR	86.7	90.0	88.4	60.8
Unwanted pregnancy should be terminated through MR	84.7	79.0	81.9	50.0
If the health of the woman is at risk because of pregnancy, then MR can be performed	48.0	51.0	49.5	58.1
Terminating pregnancy through MR is a sin/against religion	15.3	10.0	12.7	32.4
MR can be used as family planning	8.2	7.0	7.6	27.0

5.9 Whether Male-heads Consider MR a Right of Women?

Respondents were asked whether they consider MR a right of women to get rid of unwanted pregnancy. The findings, as depicted in Table 5.7, show that 80.5 per cent respondents in intervention area consider MR a women's right to terminate unwanted pregnancy. By contrast, only one-third (38 per cent) of the control group male-heads have similar attitude towards MR. The findings imply that a much higher proportion of male-heads in the intervention area are concerned about women`s rights, and health and well-being of mothers with favourable attitude towards termination of unwanted pregnancy through MR. The male-heads in the control area are found to be much more conservative in this regard.

Table 5.7: Whether Male Household Heads Consider MR a Right of Women: by Area

Indicators	Intervention Areas			Control Area
	Sylhet	Maulvibazar	Both	Habiganj
Consider MR a right of women	73.0	88.0	80.5	38.0
Do not consider MR a right of women	27.0	12.0	19.5	62.0

Table 5.8: Percentage Distribution of Male Heads according to Their Opinion regarding Abortion: by Area

Indicators	Intervention Areas			Control
Opinion regarding abortion	Sylhet	Maulvibazar	Both	Habiganj
Poor parents with too many children should go for abortion/For well-being of the family	12.2	10.0	11.1	25.7
Pregnancy at a very late stage of life should be terminated through MR	10.2	8.0	9.1	25.7
Pregnancy outside wedlock should be terminated through MR	34.7	36.0	35.4	41.9
Unwanted pregnancy should be terminated through MR	11.2	9.0	10.1	32.4
If the health of the woman is at risk because of pregnancy then MR can be performed	12.2	15.0	13.6	32.4
Terminating pregnancy through abortion is a sin/against religion	34.7	31.0	32.9	41.9
Abortion can be used as family planning	10.2	3.0	6.6	2.7

Respondents were also asked about their opinion regarding abortion. Around 10 per cent of the respondents were in support of abortion in the intervention areas compared to one-fourth in the control area. Only in case of pregnancy outside wedlock, a large majority of respondents from both intervention (around one-third) and control areas (41.9 per cent) were in support of abortion. Again, one-third of the male-heads in the intervention areas compared to 41.9 per cent in the control area consider abortion a "sin" or an act against religion.

CHAPTER 6

EXPERIENCE OF MR CLIENTS: BARRIERS TO ACCESSING SERVICES

This chapter presents the findings based on primary data collected from 300 MR clients.

6.1 Background of the Clients

As already mentioned in the methodology section, MR clients were located with the help of key informants. Out of 300 MR clients, 90 cases were identified through women respondents during household survey, while the rest 210 cases were located through field-level health workers working in the study area. Around 55 per cent of the MR clients were aged between 21 and 30 years, while 6 per cent were aged between 15 and 20 years (Table 6.1). Mean age of MR clients was 29 years. Little variation was found in age distribution of MR clients between intervention and control areas. However, their level of education varied by area. The proportion of illiterate clients was higher in intervention area (31 per cent) as compared to control area (17 per cent).

Table 6.1: Percentage Distribution of MR Clients according to Their Background Characteristics: by Area

Characteristics	Intervention Areas						Control Area		All N=300	
	Sylhet n=100		Maulvibazar n=100		Both N=200		Habiganj N=100			
	n	%	n	%	n	%	n	%	n	%
Age (in years)										
15-20 yrs	10	10.0	3	3.0	13	6.5	6	6.0	19	6.3
21-25 yrs	24	24.0	23	23.0	47	23.5	22	22.0	69	23.0
26-30 yrs	31	31.0	34	34.0	65	32.5	31	31.0	96	32.0
31-35 yrs	20	20.0	21	21.0	41	20.5	23	23.0	64	21.3
36-40 yrs	11	11.0	13	13.0	24	12.0	18	18.0	42	14.0
41-45 yrs	4	4.0	6	6.0	10	5.0	0	0.0	10	3.3
45+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mean Age	13		6.5		9.8		29.6		29.5	
Minimum	47		23.5		35.3		17.0		17.0	
Maximum	65		32.5		48.8		40.0		45.0	
Level of Education (Years of Schooling)										
00	39	39.0	23	23.0	62	31.0	17	17.0	79	26.3
Can read and write only	0	0.0	9	9.0	9	4.5	1	1.0	10	3.3
1-5	38	38.0	25	25.0	63	31.5	33	33.0	96	32.0
6-9	22	22.0	27	27.0	49	24.5	40	40.0	89	29.7

The study reveals that the average number of children born alive, children who were dead and children currently living per woman were higher in control area as compared to intervention areas (Table 6.2).

Table 6.2: Percentage Distribution of MR Clients by Number of Children Born Alive and Currently Living: by Area

Indicators	Intervention Areas			Control Area	All
Characteristics	Sylhet	Maulvibazar	Both	Habiganj	
Average no. of children born alive	2.6	2.6	2.6	3.4	2.9
Minimum	0.0	0.0	0.0	0.0	0.0
Maximum	9.0	11.0	10.0	13.0	13.0
Average no. of children who are dead	0.31	0.2	0.3	0.4	0.3
Minimum	0.0	0.0	0.0	0.0	0.0
Maximum	4.0	2.0	3.0	3.0	4.0
Mean no. of children currently living	2.3	2.4	2.4	3.0	2.6
Minimum	0.0	0.0	0.0	0.0	0.0
Maximum	7.0	10.0	8.5	11.0	11.0
Age of the youngest child (Years)	3.90	5.3	4.6	4.0	4.4
Minimum	0.0	0.0	0.0	1.0	0.0
Maximum	18.0	16.0	17.0	15.0	18.0

Table 6.3: Distribution of Respondents by Number of Children Dead: by Area

Indicators	Intervention Areas						Control Area		All	
No. of children dead	Sylhet		Maulvibazar		Both		Habiganj			
	n	%	n	%	n	%	n	%	n	%
0	80	80.0	85	85.0	165	82.5	71	71.0	236	78.7
1	13	13.0	12	12.0	25	12.5	19	19.0	44	14.7
2	4	4.0	3	3.0	7	3.5	7	7.0	14	4.7
3	2	2.0	0	0.0	2	1.0	3	3.0	5	1.7
4	1	1.0	0	0.0	1	0.5	0	0.0	1	0.3
Total	100	100.0	100	100.0	200	100.0	100	100.0	300	100.0

6.2. Knowledge about Family Planning Methods

The findings suggest that MR clients were aware about the advantages of using FP methods. They stated that using FP methods would enhance solvency of the family members, would help them to provide education to their children, and also would keep the mother and children healthy and nutritious (Table 6.4). However, in the control area, the proportion of MR clients who perceived that using FP methods would ensure mother's health and nutrition status was lower than intervention areas.

Table 6.4: Percentage Distribution of MR Clients by Their Perceptions on Advantages of FP Methods (Multiple Responses): by Area

Indicators	Intervention Areas			Control Area	All
Advantages of FP methods	Sylhet	Maulvibazar	Both	Habiganj	
Solvency of the family increases	96.0	92.0	94.0	57.0	81.7
Easier to provide children with education	57.0	82.0	69.5	92.0	77.0
Children have better health and nutrition	84.0	35.0	59.5	81.0	66.7
Mother's health and nutrition is ensured	63.0	64.0	63.5	59.0	62.0
Others	-	4.0	2.0	-	1.3

The perception of MR clients about disadvantages/demerits of FP methods is outlined in Table 6.5. It appears that a large proportion of women in intervention and control areas believed that FP methods had side effects. However, 23 per cent of respondents in Habiganj believed that FP methods had no side effects.

Table 6.5: Percentage Distribution of MR Clients by Their Perceptions regarding Disadvantages of FP Methods (Multiple Responses): by Area

Indicators	Intervention Areas			Control Area	All
Disadvantages of FP methods	Sylhet	Maulvibazar	Both	Habiganj	
Side effects	100.0	96.0	98.0	69.0	88.3
Risk of infertility	78.0	26.0	52.0	41.0	48.3
Husband does not want	45.0	37.0	41.0	35.0	39.0
No demerits	-	1.0	0.5	23.0	8.0
Others	8.0	14.0	11.0	-	7.3

Information on knowledge of family planning methods was assessed by asking respondents whether they have heard of the specific method. The findings suggest that respondents had knowledge about different types of FP methods, including pill, injection, condom, IUD and implant/norplant. However, the proportion of MR clients who had knowledge about emergency pill and a*zol*/withdrawal was considerably lower in control area as compared to intervention areas (emergency pill-intervention area: 29 per cent, control area: 2 per cent).

Table 6.6: Percentage Distribution of MR Clients Who have Knowledge of Different FP Methods: by Area

Knowledge of methods	percent Known				
	Intervention Areas			Control Area	All
	Sylhet	Maulvibazar	Both	Habiganj	
Pill	100.0	99.0	99.5	100.0	99.7
Emergency pill	26.0	32.0	29.0	2.0	20.0
IUD/Copper T	75.0	99.0	87.0	83.0	85.7
Injection/Depo	100.0	100.0	100.0	96.0	98.7
Condom	99.0	100.0	99.5	97.0	98.7
Implant/ Norplant	91.0	98.0	94.5	83.0	90.7
Safe period	67.0	82.0	74.5	44.0	64.3
Azol/Withdrawal	54.0	55.0	54.5	27.0	45.3
Ligation/Tubectomy	99.0	100.0	99.5	88.0	95.7
Vasectomy/NSV	67.0	97.0	82.0	82.0	82.0
Other	0.0	0.0	0.0	25.0	1.7

The MR clients were asked whether they or their husbands were currently using any contraceptive methods (at the time of the survey). It was evident that 85 per cent (165/200) MR clients or their husbands were current users of Family Planning (FP) methods in the intervention areas, while the proportion was 77 per cent (77/100) in control area. Among those who used any FP method, vast majority used pill in both the intervention and control areas.[1]

6.3. Knowledge about MR

MR clients were asked about the reasons and advantages of doing MR. More than four-fifths (86.5 per cent) respondents in the intervention areas and 63 per cent in the control area stated that unwanted pregnancy should be terminated through MR. Though 11.5 per cent respondents in intervention areas considered MR a sin or against religion, the proportion was considerably lower in control area (1 per cent) (Table 6.7).

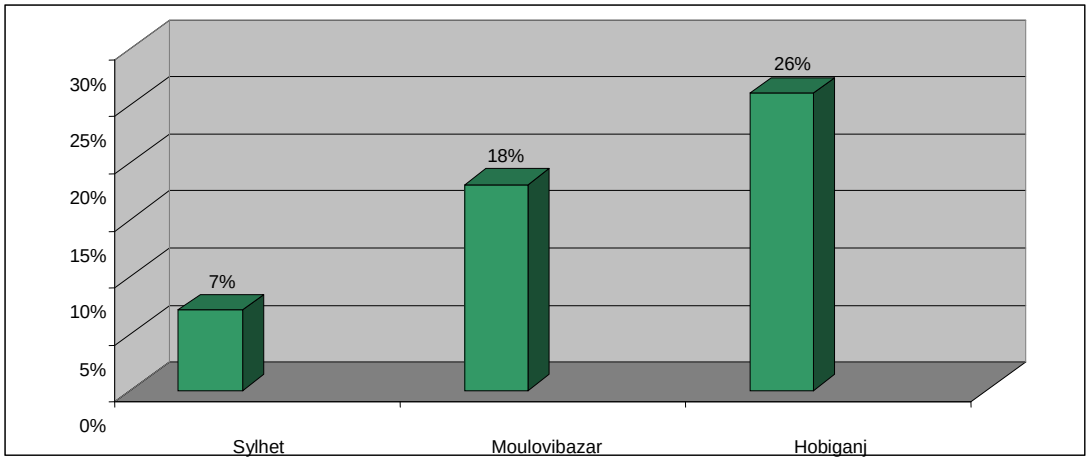
[1] As in the household survey, however, the intervention did not raise the number of FP method users, all else equal (See Annex 1). The intervention did, however, raise the knowledge of the MR clients of the emergency pill, *azol*/withdrawal, the safe period, ligation and the implant, from the largest to the smallest effect respectively.

Table 6.7: Percentage Distribution of MR Clients according to Their Perceptions on Reasons/Advantages/Disadvantages of MR: by Area

Indicators	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
Opinion regarding MR	n	%	n	%	n	%	n	%
Poor parents with too many children should go for MR/For well-being of the family	94	94.0	79	79.0	173	86.5	63	63.0
Pregnancy at a very late stage of life should be terminated through MR	29	29.0	28	28.0	57	28.5	51	51.0
Pregnancy outside wedlock should be terminated through MR	57	57.0	44	44.0	101	50.5	58	58.0
Unwanted pregnancy should be terminated through MR	89	89.0	81	81.0	170	85.0	87	87.0
If the health of the woman is at risk because of pregnancy then MR can be performed	26	26.0	36	36.0	62	31.0	36	36.0
Terminating pregnancy through MR is a sin/against religion	2	2.0	21	21.0	23	11.5	1	1.0
MR can be used as family planning	0	0.0	2	2.0	2	1.0	0	0.0
Others	1	1.0	2	2.0	3	1.5	0	0.0

According to government policy in Bangladesh, the procedure of safe MR needs to be performed within eight weeks from the first day of last menstrual period (LMP) if performed by a paramedic (that is, a trained family welfare visitor) or within ten weeks from the first day of the LMP if performed by a trained medical doctor. The knowledge of the respondents about MR was assessed based on their awareness on this timeline of MR. It was found that 26 per cent of the respondents in control area had incorrect knowledge on the timeline of safe MR, while the proportion was 12.5 per cent in intervention areas (7 per cent in Sylhet and 18 per cent in Maulvibazar) (Figure 6.1).

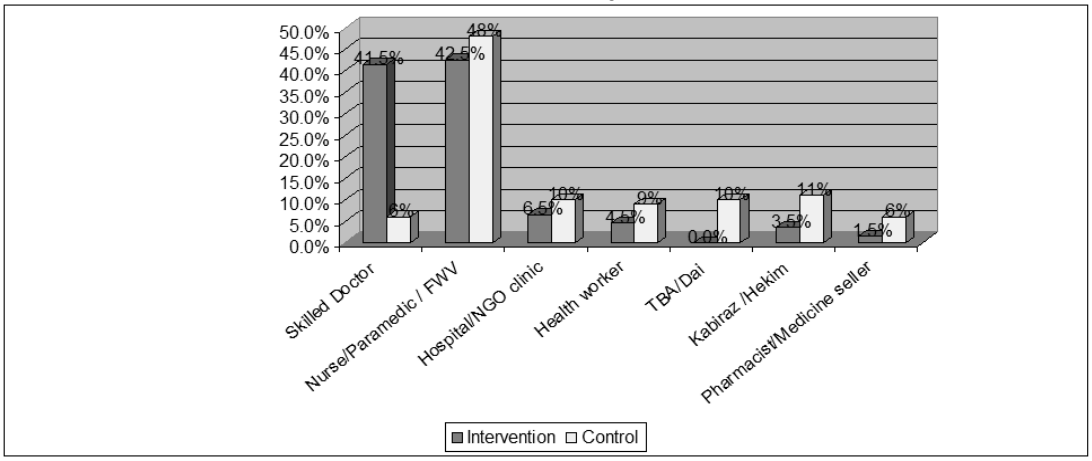
Figure 6.1 : Percentage Distribution of MR Clients Having Incorrect Knowledge about the Timeline of Safe MR



6.4 Assistance for MR

In the baseline survey carried out by Marie Stopes, 40.8 per cent of MR cases were assisted by doctor, 21.9 per cent by nurse/paramedic, 6.4 per cent by health worker, 5.6 per cent by kabiraj and 14.6 per cent by TBA. The present study found that in the intervention area, 41.5 per cent of the MR cases were performed by skilled doctors as opposed to 6 per cent in control area. However, MR assisted by nurse/paramedic/FWV and hospital/NGO clinic was slightly higher in control area (42.5 per cent in the intervention areas and 48 per cent in control area). The MR assisted by TBA/dai and kabiraj/hekim was also considerably high in control area (10 per cent and 11 per cent respectively) (Figure 6.2). On the whole, 90 per cent of the MR cases in the intervention areas were performed by trained/skilled providers, the corresponding figure was 64 per cent in the control area. About a quarter of the MR cases (27 per cent) in control area were performed by traditional unskilled providers like hekim/kabiraj (11 per cent), TBA/dai (10 per cent), medicine seller (6 per cent).

Figure 6.2: Percentage Distribution of MR Clients by Type of Provider Who Performed the Procedure: by Area



In the intervention area, a significantly larger proportion of clients had the procedure performed by a skilled doctor than in the control area. Income also significantly contributed to going to a skilled doctor, both in the intervention areas and in the control area (See Annex 1).

Duration of Pregnancy When MR Was performed

Safe MR requires maintaining safe timeline. Among the MR clients in intervention areas, 59 per cent reported that MR was done within 8 weeks from the LMP, which was 9.9 per cent in the baseline survey. This is a good indication that the interventions of the project have been highly successful. However, 5.5 per cent respondents in intervention areas told that their MR was performed more than 10 weeks after LMP. In control area, 29 per cent of MR clients had the procedure performed after 10 weeks of LMP, which is a risky procedure, involving life threatening consequences, and needs attention of the policy makers (Table 6.8).

Table 6.8: Percentage Distribution of MR Clients by Duration of Pregnancy (Timeline) When the MR Was Performed: by Area

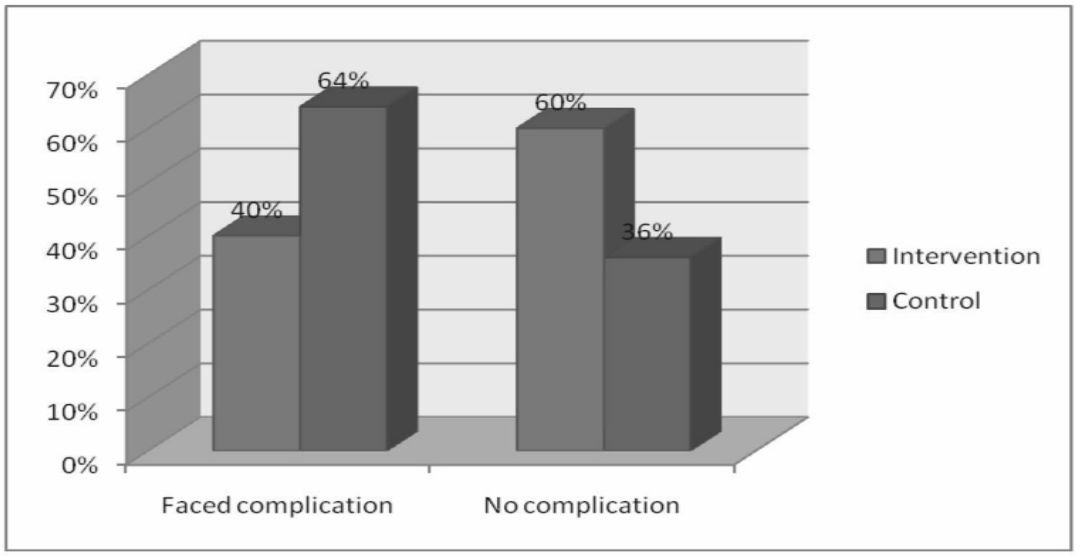
Indicators	Intervention Areas						Control Area	
	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	N	%	N	%
1-8 Weeks	61	61.0	57	57.0	118	59.0	58	58.0
9-10 Weeks	32	32.0	39	39.0	71	35.5	13	13.0
11-12 Weeks	6	6.0	2	2.0	8	4.0	21	21.0
12+ Weeks	1	1.0	2	2.0	3	1.5	8	8.0
N	100	100.0	100	100.0	200	100.0	100	100.0
Minimum	2.0		3.0		2.5		6.0	
Maximum	16.0		14.0		15.0		20.0	
Mean	8.27		8.25		8.26		9.41	

Good quality of care reduces the risk of complications. Quality of care includes that clients will be informed on the procedure, that the provider is technically competent and operates in clean premises, that the provider is friendly towards the client and that follow-up mechanisms are in place. Good quality of care also includes an appropriate constellation of services in case of complications.

The findings suggest that in intervention areas, 40 per cent MR clients faced complications after MR (35 per cent in Sylhet and 45 per cent in Maulvibazar), and the remaining 60 per cent did not face any post–MR complication. However, the proportion of respondents who faced complications after MR was markedly higher in control area (64 per cent) than intervention areas (Figure 6.3).

Figure 6.3: Percentage Distribution of MR Clients Who Faced Complications after MR: by Area

(*The bars in the left of whether the MR clients faced complication or not (i.e., faced complication and no complication) represent the scenario in the intervention areas and the bars in the right, represent that of the control area)*



The MR clients who mentioned that they experienced complications were asked about the type of complications they faced after MR. It was evident that excessive bleeding and abdominal pain were the major problems the MR clients faced in both intervention and control areas. However, a considerable proportion of MR clients (36 per cent) in control area also faced uterus infection after MR. This is not unexpected because more than one-third of the MR cases in the control area were performed by unskilled providers.

Table 6.9: Percentage Distribution of MR Clients by Type of Complications Faced after Having the MR: by Area

Indicators	Intervention Areas						Control Area	
Type of Post-MR Complications	Sylhet		Maulvibazar		Total		Habiganj	
	n	percent	n	percent	N	percent	N	percent
Excessive bleeding	10	28.6	18	40.0	28	34.3	48	75.0
Unconscious	0	0.0	2	4.4	2	2.2	4	6.3
Fever	3	8.6	0	0.0	3	4.3	10	15.6
Vomiting/headache	1	2.9	7	15.6	8	9.3	6	9.4
Abdominal pain	21	60.0	10	22.2	31	41.1	28	43.8
Uterus infection	1	2.9	3	6.7	4	4.8	23	35.9
Others	4	11.4	5	11.1	9	11.3	4	6.3

It was found that 100 per cent of the respondents in Sylhet started using FP methods after MR, while in Habiganj, 91 per cent respondents started using FP methods after MR. The proportion was 86 per cent in Maulvibazar. It was also evident that some of the respondents did MR more than once. The average number of MR done was lower in intervention areas than control area (Table 6.9).

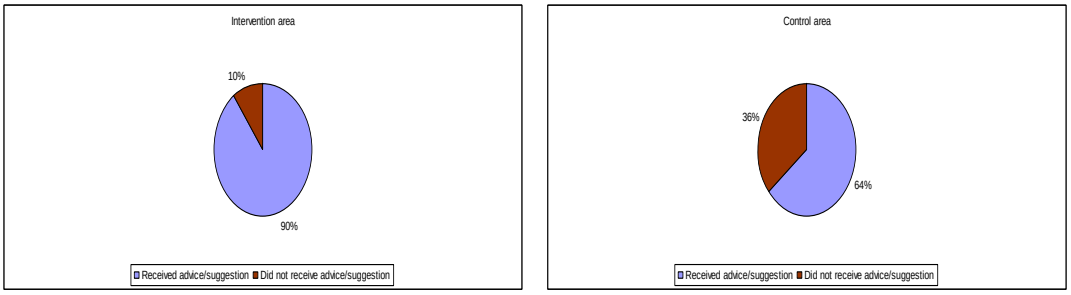
Table 6.10: Average Number of MR Done

Area	District	Average number of MR
Intervention	Sylhet	1.2
	Maulvibazar	1.4
Intervention (Mean)		1.3
Control	Habiganj	1.3
All		1.3

Information Sought by Providers before Performing MR

Providing adequate and proper information to women about issues associated with MR is an essential component of safe MR programme. The MR clients were asked whether they received any suggestions from provider before the MR. The findings suggest that, in intervention areas, very large proportion of clients (90 per cent) received advice before having the MR. In Habiganj, 36 per cent clients reported that they did not receive any suggestion before MR (Figure 6.4)

Figure 6.4: Percentage Distribution of the Respondents Who Received Advice/Suggestions from Provider before MR



The findings of the study suggest that health care provider sought information from the clients before performing MR. However, the scenario is not the same across the areas. In intervention areas, majority of the respondents informed that the providers asked about last date of menstrual cycle, whether it was first pregnancy, age of the last child, and whether any C-section was done. The proportion of women who were asked such questions were lower in control area. Relatively small number of respondents, in both intervention and control areas, stated that providers asked about their knowledge on MR or whether they used any family planning method before (Table 6.10).

Table 6.11: Percentage Distribution of MR Clients by Type of Information Healthcare Provider Sought from Them before MR

Indicators	Intervention Areas						Control Area	
Type of information sought	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	N	%	N	%
Last date of menstrual cycle	74	74.0	80	80.0	154	77.0	63	63.0
Whether first pregnancy	87	87.0	47	47.0	134	67.0	48	48.0
Age of last child	96	96.0	81	81.0	177	88.5	78	78.0
Whether any C-section done	66	66.0	48	48.0	114	57.0	31	31.0
Whether permission taken from guardians	19	19.0	25	25.0	44	22.0	56	56.0
Knowledge related to MR	21	21.0	20	20.0	41	20.5	8	8.0
Whether used any family planning method	30	30.0	22	22.0	52	26.0	7	7.0
Others	1	1.0	-	-	1	0.5	1	1.0

When clients come to the provider for MR, the provider is supposed to inform the MR clients about the various steps involved in the MR procedure. The study finds that a considerably higher proportion of MR clients in intervention areas were told about the steps of MR by the provider as compared to control areas (85 per cent vs 61 per cent). The percentage of respondents who received advice on FP from the MR provider was also noticeably higher in intervention areas than in control area (95 per cent vs 64 per cent) (Table 6.12).

Table 6.12: Percentage Distribution of MR Clients Who were Told of the Steps of MR and Who Received Advice on FP from the Provider: by Area

	District/Area	Percentage of respondents who were told of the steps of MR	Percentage of respondents who received advice on FP
Treatment	Sylhet	86.0	98.0
	Maulvibazar	84.0	92.0
Intervention (Mean)		85.0	95.0
Control	Habiganj	61.0	64.0
	All	77.0	84.7

The study also explored the type of advice the MR clients received from the provider after the MR procedure was completed. The findings are presented in Table 6.12. It shows that the proportion of MR clients who received different pieces of advice from the provider were markedly higher in intervention areas than in control area. Relatively small proportion of MR clients in control area was told to come for follow-up visit after 15 days, use clean sanitary napkin and consult health care provider in case of any complications.

Table 6.13: Percentage Distribution of MR Clients by Type of Advice Received from the Provider: by Area

Indicators	Intervention Areas						Control Area		All	
Type of Advice received	Sylhet (n= 99)		Maulvibazar (n= 99)		Total (N=198)		Habiganj (N=69)			
	n	%	n	%	n	%	n	%	n	%
Take 7 days rest	82	82.8	75	75.8	157	79.3	54	78.3	211	79.0
No heavy work	93	93.9	72	72.7	165	83.3	55	79.7	220	82.4
Refrain from sexual intercourse for 15 days	99	100.0	79	79.8	178	89.9	56	81.2	234	87.6
Come for follow-up visit after 15 days	70	70.7	64	64.6	134	67.7	22	31.9	156	58.4
Use clean/sanitary napkins	30	30.3	36	36.4	66	33.4	2	2.9	68	25.5
Come immediately in case of any complication	62	62.6	59	59.6	121	61.1	29	42.0	150	56.2
Mentioned family planning	95	96.0	87	87.9	182	91.9	43	62.3	225	84.3

It was found that 33 per cent of the respondents in control area faced barriers from their family or community for doing MR. The proportion was considerably lower (about half) in intervention areas (Table 6.14).

Table 6.14: Percentage Distribution of MR Clients Who Faced Problems/Barriers from Family/Society for Doing MR: by Area

Indicators	Intervention Areas						Control Area	
Whether faced any barriers from family/society for doing MR	Sylhet		Maulvibazar		Total		Habiganj	
	n	%	n	%	n	%	n	%
Yes	20	20.0	15	15.0	35	27.5	33	33.0
No	80	80.0	85	85.0	165	122.5	67	67.0

MR clients were asked to mention the problems they faced after coming to the facility/provider for doing MR. Long waiting time, no place to rest, no counseling and spending of money were identified as the major problems they faced in the facility (Table 6.15).

Table 6.15: First Major Problems Faced after Coming to the Facility

Indicators	Intervention Areas						Control Area		All	
Problems faced	Sylhet		Maulvibazar		Total		Habiganj			
	n	%	n	%	n	%	n	%	n	%
Unclean Campus	23	23.5	20	25.0	43	24.3	26	29.5	69	25.9
Long waiting	56	57.1	30	37.5	86	47.3	17	19.3	103	38.7
Unfriendly	9	9.2	8	10.0	17	9.6	17	19.3	34	12.8
Inserted	1	1.0	0	0.0	1	0.5	1	1.1	2	0.8
No resting place	8	8.2	31	38.8	39	23.5	28	31.8	67	25.2
Had to spend money	18	18.4	11	13.8	29	16.1	27	30.7	56	21.1
No counseling	44	44.9	9	11.3	53	28.1	12	13.6	65	24.4
Lack of provider	14	14.3	6	7.5	20	10.9	2	2.3	22	8.3
No privacy	0	0.0	21	26.3	21	13.2	1	1.1	22	8.3
Lack of equipment	2	2.0	0	0.0	2	1.0	2	2.3	4	1.5
Lack of medicine	9	9.2	1	1.3	10	5.3	1	1.1	11	4.1
Poor quality of	25	25.5	3	3.8	28	14.7	0	0.0	28	10.5
Total	N=98	100.0	N=80	100.0	N=178	100.0	N=88	100.0	266	100.0

In reply to the question what should be done to improve service provision regarding MR, most of the MR clients suggested that the facility should be clean, there should be separate waiting room, service should be provided timely and privacy should be ensured. The suggestions are listed in Table 6.16.

Table 6.16: Suggestions to Overcome the Barriers

Indicators	Intervention Areas						Control Area		All	
Suggestions	Sylhet		Maulvibazar		Both		Habiganj			
	n	%	n	%	n	%	n	%	n	%
Ensure cleanliness	19	19.4	20	24.4	39	21.9	22	25.3	61	22.8
Proper counseling	27	27.6	8	9.8	35	18.7	12	13.8	47	17.6
Separate waiting room	11	11.2	31	37.8	42	24.5	28	32.2	70	26.2
Better quality of service	34	34.7	6	7.3	40	21.0	7	8.0	47	17.6
Friendly behaviour	5	5.1	11	13.4	16	9.3	15	17.2	31	11.6
Timely service	39	39.8	17	20.7	56	30.3	11	12.6	67	25.1
Maintain privacy	13	13.3	10	12.2	23	12.8	26	29.9	49	18.4
Reduce cost	42	42.9	18	22.0	60	32.5	2	2.3	62	23.2
Modern equipment	0	0.0	19	23.2	19	11.6	0	0.0	19	7.1
Free medicine	4	4.1	0	0.0	4	2.1	1	1.1	5	1.9
Others	14	14.3	4	4.9	18	9.6	2	2.3	20	7.5
Total	98	100.0	82	100.0	180	100	87	100.0	267	100.0

Respondents were asked about their cost of MR. The findings from the baseline suggested that on an average, they spent about Tk. 1,266 for the MR. The present study suggests that the average cost incurred by an MR client was higher in control area than in intervention areas. It required Tk. 877 for MR in Maulvibazar, Tk. 961 in Sylhet, and Tk.1,345 in Habiganj (Table 6.17). However, the figures of cost may be an underestimate, since costs incurred in connection with transport/travel and food are not included.

Table 6.17: Percentage Distribution of MR Clients by Amount of Cost Incurred for MR: by Area

Indicators	Intervention Areas						Control Area		Total	
	Sylhet		Maulvibazar		Both		Habiganj			
	n	%	n	%	N	%	N	%	N	%
Up to 300	40	40.0	31	31.0	71	35.5	17	17.0	88	29.3
301-400	7	7.0	13	13.0	20	10.0	4	4.0	24	8.0
401-500	19	19.0	12	12.0	31	15.5	12	12.0	43	14.3
501-750	4	4.0	12	12.0	16	8.0	22	22.0	38	12.7
751-1000	10	10.0	10	10.0	20	10.0	12	12.0	32	10.7
1001-1250	0	0.0	1	1.0	1	0.5	7	7.0	8	2.7
1251-1500	3	3.0	5	5.0	8	4.0	4	4.0	12	4.0
1500+	17	17.0	16	16.0	33	16.5	22	22.0	55	18.3
Total	100	100.0	100	100.0	200	100.0	100.0	100.0	300	100.0
Mean	961		877		919		1,345		1,061	
Minimum	0		0		0		50		0	
Maximum	5,000		5,000		5,000		12,000		12,000	

The cost incurred by MR clients by type of provider is presented in Table 6.18. It appears that cost incurred for the MR procedure varies depending on the type of provider. As expected, the highest cost was incurred by those who had the MR procedure performed by skilled doctor, while the lowest average cost was incurred when MR was performed by village doctor. There was also major difference in average cost by type of provider between the intervention and control areas. In general, the mean cost incurred by control area clients was much higher compared to intervention area for each category of provider. For all types of providers together, the costs in the intervention areas are significantly lower (99 per cent confidence interval) than in the control area (Annex 1 provides details on the statistical analysis.). This may be partly explained by the fact that due to capacity building and awareness raising activities of FPAB and MSCS in their respective areas, the MR community people in general have better knowledge about the service providers of MR. Similarly, providers in the intervention areas have been exposed to the training and advocacy programmes of FPAB and MSCS, and as a result, they are more likely to be aware of women's right and sympathetic to MR clients. By contrast, women in the control area are caught in a vicious circle. When they go for MR, they have to pay more for MR and also receive poor quality of services.

Table 6.18: Percentage Distribution of MR Clients by Type of Provider and Average Amount of Cost Incurred: by Area

Indicators		Intervention Areas			Control Area	Overall
Type of Provider		Sylhet	Maulvibazar	Both	Habiganj	
Qualified Doctor	Mean	1,436	1,526	1,481	3,523	1,606
	Minimum	0	300	150	480	0
	Maximum	5,000	4,000	4,500	10,000	10,000
	N	54	29	83	6	89
Nurse/ Paramedic	Mean	415	766	590.5	1,470	914
	Minimum	0	0	0	200	0
	Maximum	1,500	5,000	3,250	12,000	12,000
	N	40	45	85	48	133
FWC	Mean	367	335	351	1,035	643
	Minimum	300	200	250	200	200
	Maximum	500	500	500	5,500	5,500
	N	3	10	13	10	23
Trained Health Worker	Mean	260	550	405	589	553
	Minimum	260	0	130	150	0
	Maximum	260	1,300	780	2,000	2,000
	N	1	8	9	9	18
TBA	Mean	.	.	.	678	678
	Minimum	.	.	.	200	200
	Maximum	.	.	.	2,200	2,200
	N	0	0	0	10	10

(Contd. Table 6.18)

Indicators		Intervention Areas			Control Area	Overall
Type of Provider		Sylhet	Maulvibazar	Both	Habiganj	
Kabiraj/Herbalist	Mean	325	140	232.5	1,695	1,111
	Minimum	150	0	75	150	0
	Maximum	500	200	350	6,000	6,000
	N	2	5	7	11	18
Pharmacist/ Village Doctor	Mean	.	183	91.5	292	256
	Minimum	.	100	50	50	50
	Maximum	.	350	175	700	700
	N	0	3	3	6	9
Total	Mean	961	877	919	1,345	1,061
	Minimum	0	0	0	50	0
	Maximum	5,000	5,000	5,000	12,000	12,000
	N	100	100	200	100	300

CHAPTER 7

ASSESSING THE IMPACT OF THE MR INTERVENTIONS

7.1 Introduction

With financial support from the Embassy of the Kingdom of the Netherlands, a project was launched in 2008 titled "Strengthening of National Menstrual Regulation Programme for Reduction of Maternal Mortality and Morbidity in Bangladesh." The overall aim of the initiative was to improve equitable access to services for unwanted pregnancy and the prevention of unsafe abortion, especially for poor and underserved women in rural, urban and hard-to-reach areas of Bangladesh. The initiative was intended to increase awareness on prevention of unwanted pregnancy and MR services and to improve quality of safe MR services.

The present evaluation has been carried out to assess the impact of the EKN supported interventions on MR performance in terms of:

- Knowledge on timeline and appropriate service providers for MR
- Quality of services, including pre- and post-counseling
- Utilisation of services.

The study was carried out in two intervention areas (Sylhet and Maulvibazar) and one control (Habiganj) area. The study sample included 1,200 respondents–600 women respondents aged 15-49, 300 male household heads and another 300 MR clients. The sample was equally divided among the three areas i.e 400 from each area (consisting of 200 women, 100 male-heads and 100 MR clients). This section presents a comparative analysis of the major impacts of the interventions across areas. Impacts of the interventions are assessed in terms of their knowledge on family planning (FP) methods, current use of FP methods, the timeline for safe MR and service providers for MR.

7.2. Knowledge

Family Planning Methods

The women and the MR clients were asked whether they have heard about different methods of family planning. Little variation was found among women and MR clients about their knowledge on pill, IUD/Copper T, injection, condom and some other FP methods by intervention and control areas. However, the women and the MR clients in intervention areas were more aware of emergency pill, *azol* withdrawal and safe period as compared to control area (Figures 7.1 and 7.2).

Figure 7.1: Percentage Distribution of the Women Respondents Who Have Knowledge about Different FP Methods by Area

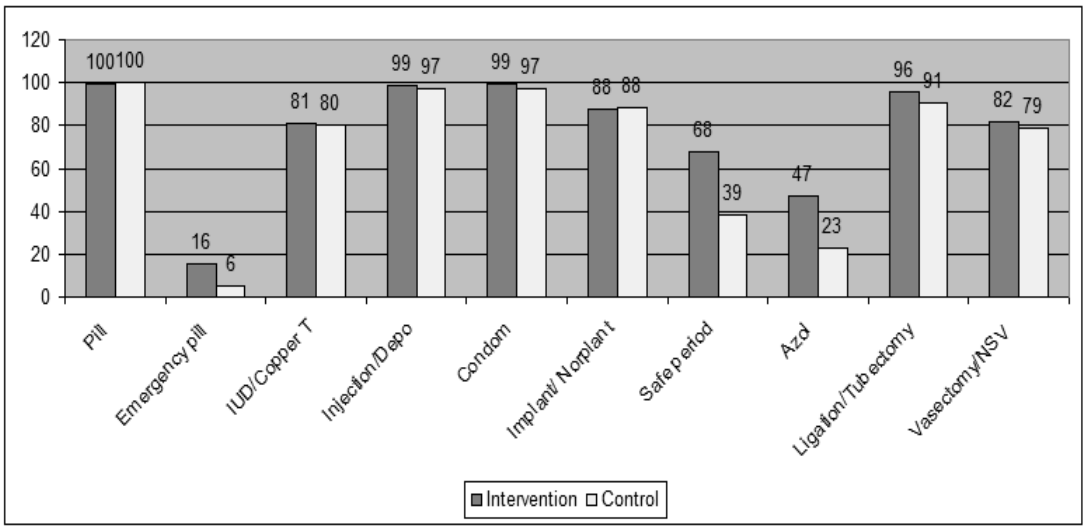
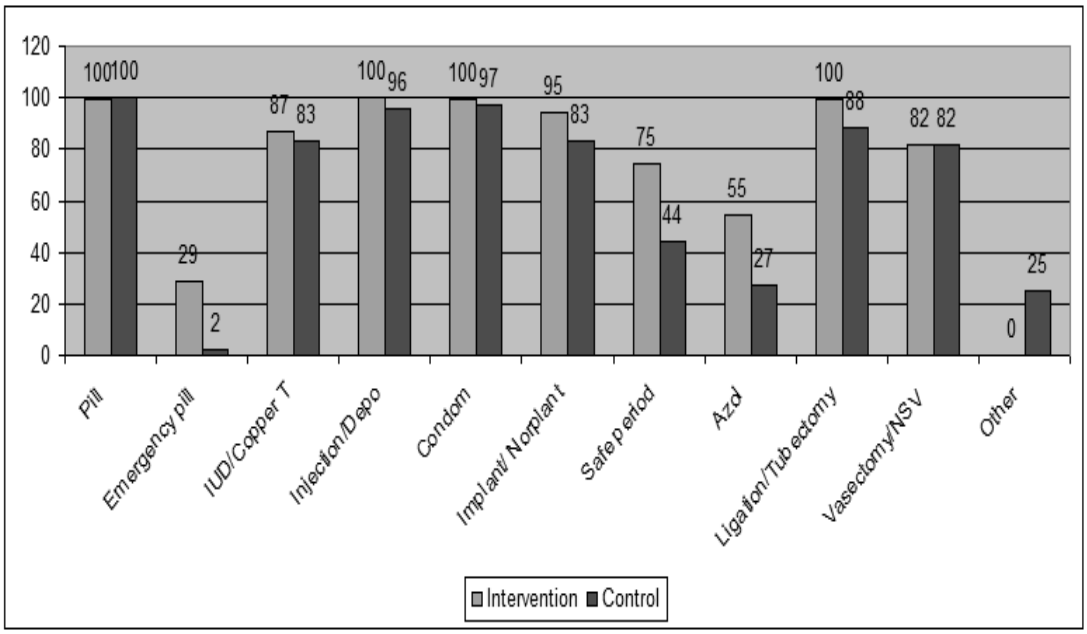


Figure 7.2: Percentage Distribution of MR Clients Who Know about Different Types of FP Methods

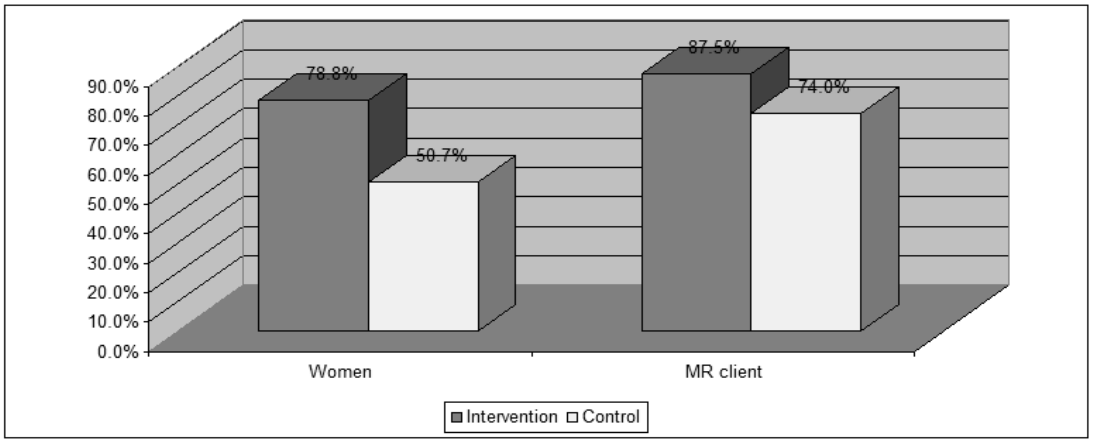


Timeline for MR

Knowledge about timeline of MR is crucial for safe MR. The present study assessed the knowledge of women and MR clients based on their awareness on this timeline of MR. It was found that 51 per cent of women and 74 per cent of the MR clients had correct knowledge about the timeline of safe MR in control area, while the proportion was considerably higher in intervention areas (79 per cent and 88 per cent respectively, Figure 6.4).

Figure 7.3: Percentage Distribution of the Respondents (women and MR clients) Having Correct Knowledge on the Timeline of Safe MR in Intervention and Control Areas

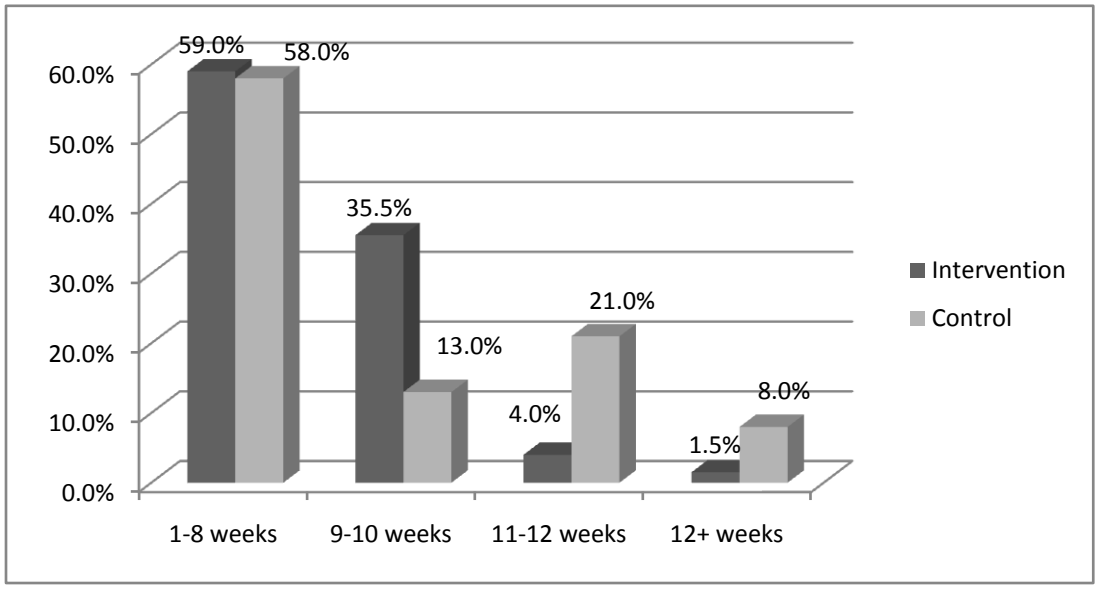
(The bars in the left (i.e., women and MR client) represent intervention area and the bars right represent that of the control area)



The intervention has been successful in improving both the MR clients' and female respondents' knowledge about the timeliness of MR, ceteris paribus. However, it appears that the intervention had a significantly stronger positive effect on the MR clients than on the female respondents. Education and age also seem to influence the knowledge of the female, while the male knowledge is associated with health seeking behaviour.

Figure 7.4: Percentage Distribution of the MR Clients according to the Timeline When They Had the MR Performed

(The bars in the left (i.e., 1-8 weeks, 9-10 weeks, 11-12 weeks and 12+ weeks) represent intervention areas and the bars right represent that of the control area)



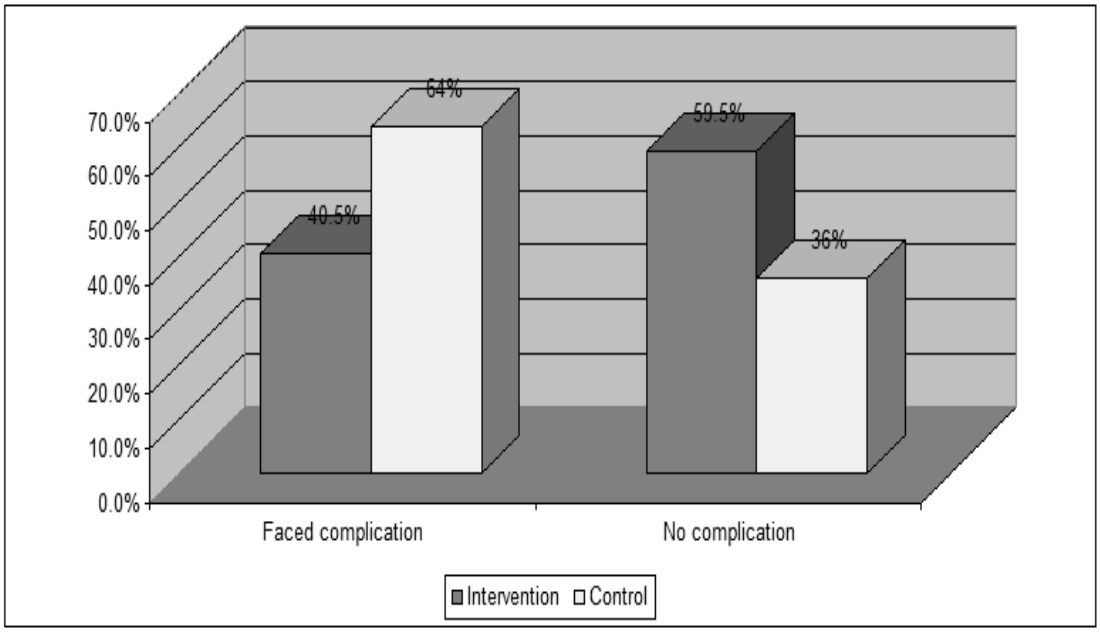
7.3 Quality of Care

Complications after MR

MR related complications are an important indicator of quality of MR. The proportion of respondents who faced complications after MR was markedly higher in control area than intervention areas (Figure 7.5).

Figure 7.5: Percentage Distribution of MR Clients Who Faced Complications after MR: by Area

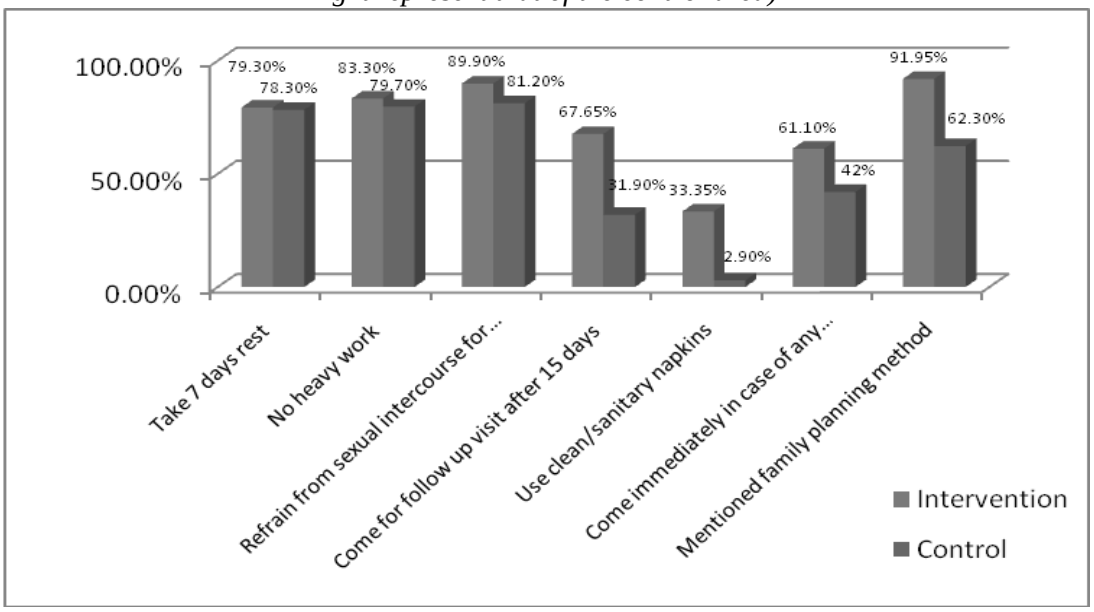
(The bars in the left (i.e., faced complication and no complication) represent intervention areas and the bars right represent that of the control area)



Complications occurred more frequently in the control area and the difference is statistically significant. Clients in the intervention areas also received suggestions more frequently after the MR procedure than clients in the control area, including the advice to take rest and to start using family planning methods (Figure 7.6). However, the procedure itself was not sufficiently clearly explained to the clients, neither in the intervention areas nor in the control area (see Annex 1).

Figure 7.6: Percentage Distribution of MR Clients Who Received Suggestion from Provider after MR Performed

(The bars in the left (i.e., in the horizontal Axis) represent intervention areas and the bars right represent that of the control area)



Post-MR Counseling

The findings indicate that both male and female respondents were more aware on MR in intervention areas as compared to control area. This is reflected in the fact that larger proportion of MR clients in the control area faced barriers from their family/society as compared to intervention areas (Table 7.1).

Table 7.1: Percentage Distribution of the Respondents Who Faced Problems/Barriers from Family/Society for Doing MR: by Area

Indicators	Intervention Areas						Control Area	
Whether faced any barriers from family/society for doing MR	Sylhet		Maulvibazar		Both		Habiganj	
	n	%	n	%	N	%	N	%
Yes	20	20.0	15	15.0	35	17.5	33	33.0
No	80	80.0	85	85.0	165	82.5	67	67.0

7.4 Concluding Remarks

Overall, in Bangladesh, access to safe MR is limited, and unskilled and untrained providers mostly conduct termination of pregnancy. MR facilities are not available at village level, service providers are not adequately trained and post abortion care facilities are insufficient. Huge BCC gap also exists, and procuring funds for promotion of safe abortion service is difficult. The present study has been

undertaken to examine the impact of the MR intervention and considered the project's contribution to changes in knowledge, quality of care and services utilisation.

Awareness and Knowledge

Knowledge on timeliness of the MR procedure and on appropriate service providers (research question 1) was significantly better in the intervention areas than in the control area, pointing to a positive contribution of the project.

Regarding social awareness increasing (RQ2), it can be concluded that misconceptions on MR and abortion were less frequently observed in the intervention area than in the control area. The differences are significant, pointing to a positive contribution of the project. Regarding the opinions and perceptions of male-heads (RQ3), the key decision makers in the household, with regard to MR (RQ 2), also a significant difference could be found between the intervention and the control areas.

Services Utilisation

MR services utilisation was not higher in the intervention areas than in the control area (RQ4), but regarding post-MR counseling there was a difference: it was carried out more frequently in the intervention areas and more often it includes family planning services. In the intervention area, women not only had better knowledge on timeliness and the appropriate place for MR, they also put this knowledge into practice (RQ5). The proportion of MR clients that had their procedure carried out on time and by a skilled provider was significantly higher in the intervention areas than in the control area.

Quality of Care

Clients in the intervention areas faced less complication than clients in the control area, although there is still room for improvement in the intervention areas. The quality of pre and post-counseling was also better in intervention areas (RQ6).

Factors that Contributed to the Achievements

Both MSCS and FPAB undertook serious steps to creating awareness among the policy makers and community level people for considering MR as a women's rights, thus applying a right based approach. They also ensured access to safe MR by providing quality MR services. FPAB, for example, provided educational session on reproductive health and MR.

Another factor was that both MSCS and FPAB invested in capacity development of their staff. Health staff that carried out the MR-procedure was informed on infection prevention and on applying standard guidelines for the procedure in order to improve the quality of the services.

Furthermore, an effective referral system was established with GO-NGO-Private service delivery outlets to ensure management of service complications, including post-MR complications.

The quality of MR services provided by FPAB and MSCS was much better because: the client's history was adequately taken to check for contraindications; good follow-up care was provided, and post-MR complications were managed efficiently and effectively.

The findings suggest that the project has contributed to improving overall knowledge and changing attitude towards safe MR. However, there still remains scope to enhance the knowledge on timeline of MR and to improve quality of care.

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Annex 1: Summary of Statistical Analysis

Annex Table 1a: Household Survey: Male Descriptives

Variable	Description	N	μ	σ	Min	Max
Intervention	Indicates whether the respondent lives in the intervention area (1:intervention)	300	0.67	0.47	0	1
District Hospital	Indicates the respondent's health seeking behaviour: visiting District hospital	300	0.74	0.44	0	1
FWC	Indicates the respondent's health seeking behaviour: visiting FWC	300	0.42	0.49	0	1
UHC	Indicates the respondent's health seeking behaviour: visiting Upazila Health Complex	300	0.42	0.49	0	1
Unqualified	Indicates the respondent's health seeking behaviour: unqualified village doctors	300	0.29	0.45	0	1
Education	Indicates the number of completed classes	278	4.72	4.34	0	16
Education2	Factor variable indicating that the respondent has attended the following:	-	-	-	-	-
	None (base category)	278	0.37	0.03	0	1
	Primary	278	0.23	0.03	0	1
	Secondary	278	0.21	0.02	0	1
	Higher education	278	0.19	0.02	0	1
Occupation	Factor variable indicating the occupation of the head of the household	-	-	-	-	-
	Informal	290	0.75	0.03	0	1
	Agriculture	290	0.07	0.01	0	1
	Formal (base category)	290	0.19	0.02	0	1
Hindu	Indicates that the respondent is of the Hindu religion rather than Muslim	300	0.16	0.36	0	1
Income	Indicates the total amount of the household's monthly income from all sources	300	12995.33	813.65	0	52000
Electricity	Indicates that the respondent's house is electrified	300	0.86	0.34	0	1
House owner	Indicates that the respondent's household owns the house	300	0.71	0.46	0	1
Urban	Indicates whether the respondent lives in an urban area 1: yes	300	0.50	0.50	0	1
Age	Indicates the age of the respondent	300	34.88	7.60	17	60
Knowledge MR 1	*"Do you know within how many weeks of pregnancy MR should be performed?"* 1: correct	272	0.78	0.42	0	1
Knowledge MR 2	*"Do you know the service providers/performers of MR at your locality?"* 1: yes	272	0.89	0.32	0	1

(Contd. Annex Table 1a)

Variable	Description	N	μ	σ	Min	Max
UTP	Universality of terminating pregnancies: "*Do you think that every one, whether unmarried/married/widowed/divorced women have the right to terminate their unwanted pregnancies?"* 1: yes	300	0.71	0.45	0	1
PTUP	Perception on terminating unwanted pregnancies: "*What is your perception on ways of termination/management of unwanted pregnancies?"* 1: MR 0: else	300	0.66	0.47	0	1
FPU	Family Planning User: "*Are you currently using any family planning method?"* 1: yes	300	0.63	0.48	0	1
Emergency pill	Indicates that the respondent is familiar with an emergency pill 1: yes	300	0.14	0.34	0	1
Iud	Indicates that the respondent is familiar with an Iud 1: yes	300	0.46	0.50	0	1
Injection	Indicates that the respondent is familiar with an injection 1: yes	300	0.90	0.30	0	1
Implant	Indicates that the respondent is familiar with an implant 1: yes	300	0.47	0.50	0	1
Safe period	Indicates that the respondent is familiar with a safe period 1: yes	300	0.45	0.50	0	1
Azol	Indicates that the respondent is familiar with azol 1: yes	300	0.39	0.49	0	1
Ligation	Indicates that the respondent is familiar with a ligation 1: yes	300	0.75	0.43	0	1
Vasectomy	Indicates that the respondent is familiar with a vasectomy 1: yes	300	0.64	0.48	0	1

Note: The solid line divides the explanatory variables from the variables of interest.

Annex Table 1b: Household Survey: Female Descriptives

Variable	Description	N	μ	σ	Min	Max
Intervention	Indicates whether the respondent lives in the intervention area (1:intervention)	600	0.67	0.47	0	1
District Hospital	Indicates the respondent's health seeking behaviour: visiting District hospital	600	0.59	0.49	0	1
FWC	Indicates the respondent's health seeking behaviour: visiting FWC	600	0.52	0.50	0	1
UHC	Indicates the respondent's health seeking behaviour: visiting Upazila Health Complex	600	0.58	0.49	0	1
Unqualified	Indicates the respondent's health seeking behaviour: unqualified village doctors	600	0.37	0.50	0	1
Education	Indicates the number of completed classes	585	5.04	3.52	0	16
Education2	Factor variable indicating that the respondent has attended the following:	-	-	-	-	-
	None (base category)	585	0.22	0.02	0	1
	Primary	585	0.38	0.02	0	1
	Secondary	585	0.30	0.02	0	1
	Higher education	585	0.10	0.01	0	1
Occupation	Factor variable indicating the occupation of the head of the household	-	-	-	-	-
	Informal	558	0.67	0.02	0	1
	Agriculture	558	0.10	0.01	0	1
	Formal (base category)	558	0.22	0.02	0	1

(Contd. Annex Table 1b)

Variable	Description	N	μ	σ	Min	Max
Hindu	Indicates that the respondent is of the Hindu religion rather than Muslim	600	0.17	0.38	0	1
Income	Indicates the total amount of the household's monthly income from all sources	600	13001.92	9616.50	3000	100000
Electricity	Indicates that the respondent's house is electrified	600	0.87	0.34	0	1
House owner	Indicates that the respondent's household owns the house	600	0.63	0.48	0	1
Urban	Indicates whether the respondent lives in an urban area 1: yes	600	0.50	0.50	0	1
Age	Indicates the age of the respondent	600	28.83	6.67	16	49
Total children	Indicates the total number of children of the respondent	600	2.66	1.77		
Knowledge MR 1	*"Do you know within how many weeks of pregnancy MR should be performed?"* 1: correct	535	0.72	0.45	0	1
Knowledge MR 2	*"Do you know the service providers/performers of MR at your locality?"* 1: yes	535	0.90	0.29	0	1
UTP	Universality of terminating pregnancies: "*Do you think that every one, whether unmarried/married/widowed/divorced women have the right to terminate their unwanted pregnancies?"* 1: yes	600	0.85	0.36	0	1
PTUP	Perception on terminating unwanted pregnancies: "*What is your perception on ways of termination/management of unwanted pregnancies?"* 1: MR 0: else	600	0.71	0.45	0	1
FPU	Family Planning User: "*Are you currently using any family planning method?"* 1: yes	600	0.67	0.47	0	1
Emergency pill	Indicates that the respondent is familiar with an emergency pill 1: yes	600	0.12	0.33	0	1
Iud	Indicates that the respondent is familiar with an Iud 1: yes	600	0.81	0.40	0	1
Injection	Indicates that the respondent is familiar with an injection 1: yes	600	0.98	0.13	0	1
Implant	Indicates that the respondent is familiar with an implant 1: yes	600	0.88	0.33	0	1
Safe period	Indicates that the respondent is familiar with a safe period 1: yes	600	0.58	0.49	0	1
Azol	Indicates that the respondent is familiar with azol 1: yes	600	0.39	0.49	0	1
Ligation	Indicates that the respondent is familiar with a ligation 1: yes	600	0.94	0.23	0	1
Vasectomy	Indicates that the respondent is familiar with a vasectomy 1: yes	600	0.81	0.39	0	1

Note: The solid line divides the explanatory variables from the variables of interest.

Annex Table 1C: MR Client Data Survey Descriptives

Variable	Description	N	μ	σ	Min	Max
Intervention	Indicates whether the respondent lives in the intervention area (1:intervention)	300	0.67	0.47	0	1
Education	Indicates the number of completed classes	290	4.85	3.72	0	16
Education2	Factor variable indicating that the respondent has attended the following:	-	-	-	-	-
	None (base category)	290	0.27	0.03	0	1
	Primary	290	0.33	0.03	0	1
	Secondary	290	0.31	0.03	0	1
	Higher education	290	0.09	0.02	0	1
Occupation	Factor variable indicating the occupation of the head of the household	-	-	-	-	-
	Informal	286	0.68	.01	0	1
	Agriculture	286	0.09	.02	0	1
	Formal (base category)	286	0.21	.02	0	1
Income	Indicates the total amount of the household's monthly income from all sources	300	11480.67	7646.44	1500	60000
Age	Indicates the age of the respondent	300	29.50	6.14	17	45
Total children	Indicates the total number of children of the respondent	300	2.89	1.93	0	13
FPU	*"Are you currently using any family planning method?"* 1: yes	300	0.81	0.40	0	1
Emergency pill	Indicates that the respondent is familiar with an emergency pill 1: yes	300	0.20	0.40	0	1
Implant	Indicates that the respondent is familiar with an implant 1: yes	300	0.91	0.29	0	1
Safe period	Indicates that the respondent is familiar with a safe period 1: yes	300	0.64	0.48	0	1
Azol	Indicates that the respondent is familiar with azol 1: yes	300	0.45	0.50	0	1
Ligation	Indicates that the respondent is familiar with a ligation 1: yes	300	0.96	0.20	0	1
Complication	"Did you face any problem after MR?" 1: yes	300	0.48	0.50	0	1
Post MR FP	"Did the service provider tell you about post MR family planning? 1: yes	300	0.85	0.36	0	1
Explain step	"Did the service provider explain each step of the MR procedure and assured you about them?" 1: yes	300	0.77	0.42	0	1
Explain clearly	"Did the service provider explain to you clearly about the MR procedure?" 1: yes	300	0.87	0.34	0	1
Pre-counselling	"Did the service provider give you any counselling before MR?" 1: yes	300	0.81	0.39	0	1
Pre-counselling2	"Did you get proper counselling before MR? 1: yes	300	0.86	0.35	0	1
Post-counselling	"After the MR did the service provider give any counselling?" 1: yes	300	0.89	0.31	0	1
Follow up	"Did the provider ask you to come for a follow up visit? 1: yes	300	0.80	0.40	0	1
Barrier	"Did you face any barrier in your family or within community for doing MR?" 1: yes	300	0.23	0.42	0	1
Buy medicine	"Did you spend any money for getting the medicines?" 1: yes	296	0.94	0.24	0	1
Cost	"If yes, then how much did you spend on medicines?" in currency	296	1073.16	1413.74	0	12000
MR Qualified	"Who actually performed MR?" 1: qualified doctor; 0: else	300	0.30	0.46	0	1
Timely	"How many weeks after your last menstruation did you have the procedure?" 1: less than 11 0: more than 11	300	0.87	0.34	0	1
Satisfaction pre	Level of satisfaction derived from pre-counselling	298	3.38	0.74	1	5
Satisfaction post	Level of satisfaction derived from post-counselling	295	3.45	0.70	1	5
Satisfaction MR	Level of satisfaction derived from MR procedure	297	3.34	0.66	1	5
Quality MR	Quality of MR services	300	3.63	0.70	1	5
Knowledge	Rating of provider's knowledge and skill	300	3.63	0.72	1	5

Annex Table 1d: Results

Knowledge MR 1									
	Male			Female			Female		
Intervention	.34	(.05)	**	.20	(.05)	**	.19	(.05)	**
Education	.00	(.01)		.02	(.01)	*			
None (base)									
Primary							.05	(.06)	
Secondary							.11	(.06)	
10 years +							.23	(.07)	**
Income	.00	(.00)		.00	(.00)		.00	(.00)	
Age	.00	(.00)		.01	(.00)	*	.01	(.00)	*
Hindu	.09	(.07)		-.02	(.06)		-.02	(.06)	
Electricity	.10	(.07)		.04	(.06)		.03	(.06)	
Urban	.04	(.05)		-.01	(.04)		-.01	(.04)	
House owner	-.01	(.06)		-.06	(.05)		-.06	(.05)	
Unqualified doctor	.13	(.06)	*	-.03	(.04)		-.04	(.04)	
UHC	.00	(.06)		-.01	(.05)		-.01	(.05)	
FWC	.08	(.06)		-.04	(.05)		-.04	(.05)	
District Hospital	.02	(.06)		.02	(.05)		.02	(.05)	
Occupation head household									
Formal (base)									
Informal	-.16	(.05)	**	.00	(.05)		.00	(.05)	
Agriculture	-.21	(.12)		-.19	(.09)	*	-.19	(.09)	*
N	244			482			284		
Pseudo R^2	.24			.09			.10		
Log likelihood	-.98.82			-257.00			-255.42		

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

Knowledge MR 2						
Gender	Male			Female		
Intervention	.18	(.05)	**	.16	(.04)	**
Education	.00	(.01)		.00	(.00)	
Income	.00	(.00)		.00	(.00)	
Age	.00	(.00)		.00	(.00)	
Hindu	.13	(.06)	*	-.01	(.04)	
Electricity	.02	(.06)		.02	(.04)	
Urban	.05	(.04)		.02	(.03)	
House owner	-.04	(.05)		.08	(.03)	*
Unqualified doctor	-.03	(.04)		-.01	(.03)	
UHC	.10	(.05)	*	-.03	(.03)	
FWC	.02	(.05)		.05	(.03)	
District Hospital	.08	(.05)		-.02	(.04)	
Occupation head household						
Formal (base)						
Informal	-.02	(.05)		.07	(.04)	
Agriculture	-.07	(.11)		-.01	(.06)	
N	244			482		
Pseudo R^2	.23			.26		
Log likelihood	-68.45			-127.57		

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

What is your perception on ways of termination/management of unwanted pregnancies?" : MR						
Gender	Male			Female		
Intervention	.14	(.07)	*	.22	(.04)	**
Education	.00	(.01)		.01	(.01)	
Income	.00	(.00)		.00	(.00)	
Age	.00	(.00)		.00	(.00)	*
Hindu	.12	(.07)		-.03	(.04)	
Electricity	-.02	(.08)		-.05	(.04)	
Urban	-.09	(.05)		.04	(.03)	
House owner	-.08	(.07)		.01	(.04)	
Unqualified doctor	-.14	(.06)		-.04	(.03)	
UHC	-.06	(.06)		.02	(.04)	
FWC	.10	(.07)		.03	(.04)	
District Hospital	.02	(.07)		.04	(.04)	
Occupation head household						
Formal (base)						
Informal	-.07	(.07)		-.01	(.04)	
Agriculture	-.13	(.13)		-.08	(.05)	
N	269			545		
Pseudo R^2	.14			.22		
Log likelihood	-138.48			-185.11		

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

Do you think everyone, whether unmarried/married/widowed/divorced women have the right to terminate their unwanted pregnancies (1:yes)												
Gender	Male			Female								
Religion	All			All			Muslim			Hindu		
Intervention	.45	(.06)	**	.19	(.05)	**	.14	(.05)	**	.53	(.13)	**
Education	-.01	(.01)		.00	(.01)		.00	(.01)		.00	(.02)	
Income	.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)	
Age	.00	(.00)		.00	(.00)		.00	(.00)		.00	(.01)	
Hindu	.12	(.08)		-.16	(.05)	**						
Electricity	-.02	(.08)		.04	(.06)		.03	(.06)		.69	(.37)	
Urban	-.04	(.05)		.08	(.04)		.13	(.04)	**	-.17	(.11)	
House owner	-.02	(.07)		.09	(.05)		.06	(.05)		.15	(.12)	
Unqualified doctor	.21	(.07)	**	-.07	(.04)		-.06	(.04)		-.20	(.10)	
UHC	.08	(.07)		-.04	(.05)		-.05	(.05)		-.38	(.19)	*
FWC	-.04	(.07)		.05	(.05)		.05	(.05)		.07	(.17)	
District Hospital	.11	(.07)		.01	(.05)		.05	(.05)		-.13	(.14)	
Occupation head household												
Formal (base)												
Informal	.01	(.07)		-.04	(.05)		-.14	(.05)	**	.28	(.10)	**
Agriculture	-.07	(.13)		.01	(.07)		-.06	(.06)		.10	(.20)	
N	269			545			448			97		
Pseudo R^2	.20			.10			.07			.26		
Log likelihood	-138.90			-296.08			-231.41			-49.83		

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

We will now ask you about some of the family planning methods and if you know about them																
Method	Emergency pill					IUD					Implant					
Gender	Male			Female		Male			Female			Male			Female	
Intervention	.08	(.06)		.10	(.04)	*	-.16	(.08)	*	.01	(.05)		.37	(.07)	**	.02	(.04)
Education	.00	(.01)					.03	(.01)	**	.02	(.01)	**	.04	(.01)	**	.01	(.00)
None (base)																
Primary				.02	(.03)											
Secondary				.05	(.04)											
10 years +				.16	(.06)	*										
Income	.00	(.00)		.00	(.00)	**	.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)
Age	.00	(.00)		.00	(.00)		.00	(.00)		.01	(.00)	*	.00	(.00)		.01	(.00)
Hindu	.01	(.06)		.00	(.04)		-.02	(.08)		.06	(.06)		.03	(.09)		.00	(.04)
Electricity	.00	(.06)		.11	(.09)		.24	(.09)	**	-.01	(.05)		-.01	(.09)		-.10	(.06)
Urban	.06	(.04)		.07	(.03)	*	-.12	(.06)		-.02	(.04)		.01	(.06)		.01	(.03)
House owner	.11	(.05)	*	.01	(.03)		-.05	(.07)		-.05	(.04)		.08	(.07)		-.02	(.03)
Unqualified doctor	.02	(.05)		.04	(.03)		-.08	(.07)		-.01	(.04)		-.07	(.07)		-.01	(.03)
UHC	-.06	(.05)		.00	(.03)		.02	(.07)		.00	(.04)		.04	(.07)		-.03	(.03)
FWC	.03	(.05)		.02	(.03)		.00	(.07)		-.01	(.04)		.01	(.07)		.02	(.03)
District Hospital	-.07	(.05)		.00	(.03)		.14	(.08)		-.02	(.04)		.01	(.08)		.00	(.03)
Occupation head household																
Formal (base)																
Informal	-.05	(.07)		-.01	(.03)		.11	(.09)		.02	(.05)		.05	(.08)		-.05	(.03)
Agriculture	-.02	(.11)		.00	(.07)		.09	(.15)		.06	(.06)		.11	(.14)		-.01	(.04)
N	269			545			269			545			269			545	
Pseudo R^2	.12			.16			.15			.03			.13			.07	
Log likelihood	-86.17			-161.46			-157.01			-257.48			-161.32			-191.24	

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

Will now ask you about some of the family planning methods and if you know about them												
Method	Safe period						Azol					
Gender	Male			Female			Male			Female		
Intervention	.49	(.07)	**	.21	(.05)	**	.14	(.08)		.22	(.05)	**
Education	.01	(.01)					.00	(.01)		.01	(.01)	
None (base)												
Primary				.05	(.05)							
Secondary				.19	(.06)	**						
10 years +				.33	(.08)	**						
Income	.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)	
Age	.00	(.00)		.02	(.00)	**	.00	(.00)		.01	(.00)	**
Hindu	.16	(.09)		-.04	(.06)		.28	(.08)	**	.02	(.06)	
Electricity	.01	(.09)		.13	(.06)	*	-.06	(.06)		.13	(.04)	**
Urban	.08	(.06)		.10	(.04)	*	-.06	(.06)		.13	(.04)	**
House owner	.13	(.06)	*	-.06	(.05)		-.04	(.08)		.05	(.05)	
Unqualified doctor	.05	(.07)		-.04	(.04)		-.04	(.08)		.04	(.05)	
UHC	-.06	(.07)		-.04	(.05)		.04	(.07)		.02	(.05)	
FWC	.07	(.07)		.10	(.05)	*	.10	(.07)		.14	(.05)	**
District Hospital	.14	(.08)		-.02	(.05)		.04	(.08)		.02	(.05)	
Occupation head household												
Formal (base)												
Informal	-.02	(.08)		-.03	(.05)		-.02	(.09)		-.06	(.05)	
Agriculture	.09	(.14)		-.10	(.08)		-.06	(.15)		-.12	(.08)	
N	269			545			269			545		
Pseudo R^2	.20			.16			.16			.09		
Log likelihood	-148.58			-313.16			-171.20			-334.48		

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

We will now ask you about some of the family planning methods and if you know about them

Method	Vasectomy						Ligation					
Gender	Male			Female			Male			Female		
Intervention	-.34	(.07)	**	-.01	(.05)		.29	(.04)	**	.05	(.03)	
Education	.02	(.01)	*	-.01	(.01)		.01	(.01)		.01	(.00)	*
Income	.00	(.00)		.00	(.00)	*	.00	(.00)		.00	(.00)	
Age	.01	(.00)		.00	(.00)		.00	(.00)		.00	(.00)	
Hindu	-.12	(.08)		.03	(.05)		.04	(.06)		-.01	(.03)	
Electricity	.08	(.08)		.05	(.05)		.01	(.06)		.05	(.03)	
Urban	-.04	(.05)		.02	(.04)		-.05	(.04)		-.02	(.02)	
House owner	.06	(.06)		-.02	(.04)		-.05	(.06)		-.04	(.03)	
Unqualified doctor	.11	(.07)		-.13	(.04)	**	-.09	(.05)		-.03	(.02)	
UHC	.26	(.06)	**	-.06	(.04)		-.04	(.05)		-.03	(.03)	
FWC	.07	(.06)		-.02	(.04)		.05	(.06)		.02	(.03)	
District Hospital	-.11	(.07)		-.07	(.04)		-.10	(.06)		-.06	(.03)	
Occupation head household; Formal (base)												
Informal	-.13	(.08)		.03	(.05)		.06	(.07)		.01	(.03)	
Agriculture	-.37	(.12)	**	.02	(.07)		.15	(.09)		.02	(.04)	
N	269			545			269			545		
Pseudo R^2	.28			.06			.34			.09		
Log likelihood	-123.64			-255.51			-101.31			-117.75		

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

Quality of the MR procedure																	
	Qualified doctor			Complications			Explain step			Explain clearly			pre-counselling			Proper pre-counselling	
Intervention	.44	(.07)	**	-.21	(.06)	**	.23	(.05)	**	.01	(.05)		.25	(.04)	**	.05	(.05)
Education	-.01	(.01)		-.02	(.01)	*	.00	(.01)		.01	(.01)		.01	(.01)		.01	(.01)
Age	-.01	(.01)	*	.00	(.01)		.01	(.01)		.00	(.00)		.00	(.01)		.00	(.00)
Income	.00	(.00)	**	.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)
Total Children	.02	(.02)		.02	(.02)		.01	(.02)		.01	(.02)		.02	(.02)		.02	(.02)
Occupation head																	
Formal (base)																	
Informal	-.05	(.07)		-.06	(.08)		-.11	(.06)		.01	(.06)		-.06	(.06)		.01	(.06)
Agriculture	-.23	(.10)	**	.03	(.12)		-.09	(.09)		-.03	(.10)		-.06	(.09)		.00	(.09)
N	276			276			276			276			276			276	
Pseudo R^2	.19			.05			.10			.02			.13			.04	
Log likelihood	-136.48			-182.02			137.12			-109.78			-119.07			-112.87	

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

	Quality of the MR procedure																		Other	
	Post MR PF			Post-counselling			Barrier			Buy Medicine			Follow up			Timely			FP method user	
Intervention	.24	(.04)	**	.27	(.05)	**	-.13	(.05)	**	-.02	(.03)		.32	(.03)	**	.25	(.04)	**	.07	(.05)
Education	.00	(.01)		-.01	(.01)		-.01	(.01)		-.01	(.00)		-.01	(.01)		.01	(.01)		.01	(.01)
Age	.00	(.00)		.00	(.00)		-.01	(.01)		.00	(.00)		.00	(.00)		.00	(.00)		.01	(.01)
Income	.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)
Total Children	.00	(.01)		-.01	(.01)		.02	(.02)	*	.01	(.01)		.01	(.01)		.02	(.01)		.00	(.02)
Occupation head																				
Formal (base)																				
Informal	.00	(.05)		.07	(.05)		-.05	(.07)		-.03	(.03)		-.01	(.06)		-.06	(.05)		-.03	(.06)
Agriculture	-.10	(.09)		.01	(.07)		-.01	(.10)		-.14	(.08)		-.12	(.09)		.06	(.05)		-.05	(.09)
N	276			276			276			276			276			276			276	
Pseudo R^2	.19			.33			.06			.11			.27			.23			.02	
Log likelihood	-98.29			-65.00			-140.86			-56.68			-104.12			-84.45			-122.68	

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

We will now ask you about some of the family planning methods and if you know about them															
Method	Emergency pill			Implant			Safe period			Azol			Ligation		
Intervention	.46	(.12)	**	.08	(.04)	*	.24	(.05)	**	.25	(.06)	**	0,11	(0,04)	**
Education	.03	(.01)	**	.01	(.01)		.01	(.01)		.02	(.01)		0,00	(0,00)	
Age	.00	(.00)		.00	(.00)		.03	(.01)	**	.02	(.01)	**	0,00	(0,00)	
Income	.00	(.00)		.00	(.00)		.00	(.00)		.00	(.00)		0,00	(0,00)	
Total children	.00	(.02)		.00	(.01)		-.04	(.02)		-.04	(.02)		0,02	(0,01)	
Occupation head															
Formal (base)															
Informal	.00	(.06)		-.02	(.04)		-.25	(.06)	**	-.06	(.08)		-0,01	(0,03)	
Agriculture	.02	(.10)		-.07	(.08)		-.35	(.11)	**	-.21	(.12)		-0,05	(0,05)	
N	276			276			276			276			276		
Pseudo R^2	.23			.17			.18			.10			.26		
Log likelihood	-101.69			-76.34			-149.68			-171.50			-34.03		

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

Regarding safe period, it can be stated that the base category of the occupation of the head of the household, being formally employed, has a significant and positive effect on the knowledge of the safe period, compared to the informal and agricultural sector.

The cost of performing the procedure			
(Constant)	1870.19	(587.84)	**
Intervention	-503.85	(186.11)	**
Education	27.45	(26.57)	
Age	-21.98	(18.02)	
Income	.02	(.01)	
Total children	16.60	(58.62)	
Occupation head			
Formal (base)			
Informal	-217.95	(231.69)	
Agriculture	-915.99	(353.26)	**
N	272.09		
R^2(unadjusted)			

Note: OLS Estimation; Standard errors are presented in parentheses. *p<.05; **p<.01

Quality of pre-counselling				
	Level of satisfaction			
Intervention				
	2	.06	(.02)	**
	3	.21	(.05)	**
	4	-.23	(.05)	**
	5	-.05	(.02)	**
Education				
	2	-.01	(.00)	**
	3	-.02	(.01)	**
	4	.02	(.01)	**
	5	.00	(.00)	*
Age				
	2	-.00	(.00)	
	3	-.00	(.00)	
	4	.01	(.01)	
	5	.00	(.00)	
Income				
	2	-.00	(.00)	
	3	-.00	(.00)	
	4	.00	(.00)	
	5	.00	(.00)	
Total children				
	2	-.01	(.01)	
	3	-.02	(.02)	
	4	.02	(.02)	
	5	.00	(.00)	
N	286			
Pseudo R^2	.08			
Log likelihood	-284.86			

Note: rdered logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

Are you currently using any Family Planning methods? (1: yes)					
Gender	Male		Female		
Intervention	.06	(.08)	.04	(.06)	
Age	.00	(.00)	.01	(.00)	*
Income	.00	(.00)	.00	(.00)	
Education	.01	(.01)	.01	(.01)	
Hindu	.06	(.09)	.07	(.06)	
Electricity	.14	(.09)	.05	(.06)	
Urban	.08	(.06)	.03	(.05)	
House owner	.10	(.07)	.06	(.05)	
Unqualified doctor	.00	(.07)	.00	(.05)	
UHC	.03	(.07)	-.04	(.05)	
FWC	.07	(.07)	.06	(.05)	
District Hospital	.03	(.08)	.03	(.05)	
Occupation head household					
Formal (base)					
Informal	.01	(.09)	-.01	(.05)	
Agriculture	.21	(.12)	-.03	(.08)	
N	269		545		
Pseudo R^2	.05		.03		
Log likelihood	-168.55		-331.41		

Note: Logit estimation; average marginal effects. Standard errors are presented in parentheses. *p<.05; **p<.01

Annex 2: Information on the Two Implementing Agencies

Marie Stopes Clinic Society (MSCS)

Marie Stopes (MS) is the foremost organisation in the Sexual and Reproductive Health (SRH) sector in Bangladesh, providing high quality services as well as developing and implementing effective programmes, especially for the poor and vulnerable. The long term vision of MSCS is to provide improved SRH and well-being of women, men and adolescents in Bangladesh.

MS, affiliated to Marie Stopes International, UK, was established in 1988 in Chittagong following a survey by Marie Stopes International (MSI), which highlighted the need for a high quality family planning service in the region. It started its journey with a modest clinic financed by the UK's then Overseas Development Administration Joint Funding Scheme. This clinic soon became very successful due to its client focus, high quality services and innovative marketing. MS assists the advancement of SRH in Bangladesh through integrated programmes comprising service delivery, advocacy, public awareness and SRH rights. It pledges deep commitment to high grade SRH services in this country through adherence to international systems. In Bangladesh, MS is providing SRH services in 62 districts, while maintaining 143 service delivery centres and an extensive outreach – catering to more than 1.6 million clients annually. Over the past 20 years, more than 20 million clients have entered the premises of MS to exercise their preference of SRH methods. About 80,000 safe MR services rendered every year. Marie Stopes' programmes embrace communities from every sector, including the hard-core poor and the hard-to-reach. Special approaches have been undertaken to make its services accessible, particularly to the left-outs and the vulnerable groups (such as the homeless, those living in haors, isles and coastal locations and the high-risk group). Almost 50 percent of the total client-mix comes from the poor communities while only 11 percent of Marie Stopes' clients are full fee-payers.

Services Provided at MS Clinics:

The clinics are open to all clients. The core services provided are:

- Family planning (cafeteria of choice), including temporary, long acting and permanent methods
- Ante and post natal care
- General health care
- RTI/STI management
- Menstrual regulation
- Immunisation
- Child health care
- Supportive pathological tests
- Essential Obstetric Care (delivery) in selected clinics
- Other services –TB (DOTS), eye care in selected clinics
- Ultra sonogram services in selected clinics

SERVICES AND NETWORK OF MSCS AT A GLANCE

Network of Clinics	Number
Referral Clinics	43
Mini Clinics	9
Upgraded Mini Clinics	74
Maternities Clinics	4
Premium Clinics	2
Total	132
Outreach Services	
Adolescents programme	2
Satellite services for homeless	10
NGO partnership for STI services	53
Health Card Scheme in factories	102
Roving Teams for VSC	10
Roving Teams for IUD	8
Monthly Delivery of Services	500 locations
Spread of Services	
Service Delivery	62 Districts
Roving Teams:	10
VSC services	29 Districts
Collaborating Teams with GoB	
Organising VSC Days	43 Districts

Projects of Marie Stopes

Urban Primary Health Care Project (UPHCP)

The Urban Primary Health Care Project is implemented via the City Corporations/Municipality and is funded by the ADB, UNFPA, DIFD, ORBIS and SIDA. The project's purpose is to improve the health of the urban poor by improving access and changing the way in which health services are provided in urban areas.

Creating a Network of Sustainable Mini Clinics

Funded by Marie Stopes International (MSI), this project is expanding on Marie Stopes's successful mini-clinic model in 8 rural and 8 urban sites. Eight are already in operation. The project has been running from January 2006 until 2009. This is the first time Marie Stopes (MS) has extended its service network to rural areas.

EC Block Grant

This project, supported by the European Commission (EC), consists of 7 different components which support Marie Stopes (MS) outreach programmes, advocacy and focus on quality of care. Specifically the project will strengthen and expand the homeless,

adolescents, male, mini-clinics and factory worker's programmes; Marie Stopes' (MS) focus on quality of care will be strengthened and a Rights Based Approach (RBA) will be implemented across all project areas. The project runs from 2006 to 2008.

EC Co-Financing

This EC funded project supports the establishment of 3 SRH centres in 3 hard-to-reach areas of Shariatpur, Bhola and Barisal. These centres will provide general health and SRH servicecs to low-income women, men and adolescents. Mini clinics and satellite services will also be established to ensure a wider section of the population has access to affordable quality health services. The project runs from 2006 to 2010.

Marie Stopes Vasectomy

In collaboration with international partners such as Marie Stopes International (MSI), Government of Bangladesh has led to a dramatic increase in modern contraceptive use and a decline in total fertility. The modern contraceptive prevalence rate increased dramatically from five per cent in 1975 to 47.5 per cent in 2007.

FAMILY PLANNING ASSOCIATION OF BANGLADESH (FPAB)

FPAB is the oldest NGO in Bangladesh and provides a range of reproductive health and family planning services, including MR services. International Planned Parenthood Federation (IPPF) is a global service provider and a leading advocate of sexual and reproductive health and rights for all. They are a worldwide movement of national organizations, working with and for communities and individuals. The services their facilities provide for these users include counseling, gynecological care, HIV related services, diagnosis and treatment of sexually transmitted infections, infertility services, mother and child health, emergency contraception and abortion related services.

The prime objective, which inspired the establishment of the Association, was to improve quality of life of the underprivileged section of the people, by advocating family planning as a basic human right and motivating people towards the concept of small family.

FPAB played an important role in formulating national family planning programme introduced by the then government of Pakistan in 1965. With the span of more than 50 years of its emergence, FPAB has made a significant achievement in creating awareness among the eligible couples about family planning and annually contributes 7 per cent to the total national family planning performance. In conformity with the global and national needs, FPAB shifted its thrust from lone family planning interventions to the holistic approach of reproductive health in the mid-1990s of the last century. Instead of targeting fertile couples, interventions of FPAB now involve men and women of all ages, with a special focus on the disadvantaged segment of the population. Beneficiaries of FPAB have now exceeded ten million people.

The organisation has carried out several projects and studies, a selection of which is presented below :

Project Resource Mobilisation and Awareness (PRMA)

FPAB has implemented Project Resource Mobilisation and Awareness (PRMA) in Bangladesh as an important catalyst to increase the financial and political commitment to sustainable RH supplies. The study has been conducted to understand various human impact of shortage/stock-out/irregular supply of contraceptives at the level of household as well as on national economy, and to examine the sufficiency of allocation of funds vis-a-vis need of government's financial mechanism for it. The project has been implemented at six FPAB clinics in six districts: Barisal, Chittagong, Sylhet, Jhalakati, Magura and Netrokona. In order to promote community awareness, reproductive health promoters (RHPs) have been used to disseminate the key messages to the community.

Results of a Study into MR Practices

It was felt that a base line survey is essential to know the level of knowledge, attitude and practices (KAP) of the community people on MR at the beginning of the project, using a structured questionnaire. It is also necessary to do an end line survey using the same questionnaire. This process can help in evaluation of the project to measure the extent the project has achieved and what need to be done in the next days to overcome the detected shortfalls.

The objectives of the KAP study were:

- Getting the information of knowledge, attitude and practices (KAP) of the community people on MR and abortion issue at the end of project implementation at the selected project locations.
- using the survey data to evaluate the project at the end of the project period.
- measuring the extent the project has achieved and what need to be done in the next days to overcome shortfall.

The RHPs randomly selected the population to fill-up the KAP survey questionnaires. The women were asked that the information they will provide will be kept totally confidential. There were 15 questions; some on knowledge, some on attitude and others on practices of them on abortion issues and menstrual regulation (MR). There were three options as answer; i.e. (1) Yes (2) No and (3) Not willing to give any answer (non-response). No woman was forced to provide answer to each of the 15 questions. Some of the questions were marked as non-response if the participants were not willing to say anything on the question.

At each of the project location, 15 RHPs took interview of the local women of reproductive age. At each location, 150 women were interviewed and their responses to the questionnaires were recorded. The 90 RHPs of the 6 project locations filled up 900 end line KAP survey forms i.e. at each of the project location 150 KAP survey forms have been filled up. These findings have been compiled location wise as the projects are located at 6 geographical locations which are located at different corners of the country. The MTR team observed an information dissemination session by RHPs in a slum area of Sylhet and

noted that RHPs need to improve their skill in facilitating health education group sessions. Senior staffs of FPAB were requested to accompany the MTR team to observe the programme activities of MSCS the following day. The field staff from FPAB could also visit field staff at MSCS project sites to observe communication sessions.

Study: Good and Effective Rights-based Practices to Eliminate Maternal Mortality and Morbidity

Institutionalisation Increased Access of Marginalised to Safe Motherhood:

FPAB developed Community Institutions (CIs) at the community level involving women, men, girls and senior community members. Developed capacity of the office bearers on ANC, natal and PNC, identification of high risk mother, use of Birth Preparedness Card for preparing pregnant women, her family and community for supporting ANC, institutional delivery and PNC services. FPAB also developed referral link between CIs and FPAB clinics and government hospitals for safe motherhood services. CIs are organising monthly satellite clinic sessions with the assistance of FPAB clinics and providing ANC, PNC and other RH services at the community. In order to reduce morbidity of women, CIs also identified and referred 400 uterine prolapsed cases to FPAB who need surgical operation. FPAB developed formal partnership with district government hospital and private clinics and ensured surgical procedures and required treatment.

The following four ways of communication contributed significantly to reduce the maternal death in the project area.

- Interpersonal communication mainly through RHPs
- Communication by mobile phone
- Client transportation by rickshaw van from inside the rural area.
- Client transportation by ambulance to the clinic and to referral centres for better management.

Study: IEC Opened the Widow of Opportunity Removing the Social Barriers Towards Safe Motherhood

FPAB developed need based target specific BCC materials on safe motherhood issues. Provided training to the office bearers of CIs and community volunteers under CIs on use of these IEC materials to create awareness and sensitise the community stakeholders towards safe motherhood, some materials have been developed for individual and community counseling.

In addition, campaign on safe motherhood is organised at the eve of safe motherhood day. CIs organise rally followed by discussion meetings, media conferences, video show on safe motherhood, etc. This has created good impact at the community level. More numbers of pregnant women are visiting clinics for ANC, safe delivery and PNC.

Study: Involvement of Experts, Professionals, and Community Formal and Informal Leaders in Project Planning, Implementation and Monitoring Process

Safe motherhood project had two layers of advisory group. Central level advisory groups are technically sound and provide assistance to the project. Secondly, the local level advisory groups are involved in planning, implementing and monitoring the project activities.

The project utilised the credibility and expertise of the eminent maternal health professionals and programme experts from GoB and NGO sectors, who have contributed to providing technical assistances to the project from time to time, both by reviewing the progress and by visiting project sites. Again, Local Level Project Advisory Groups helped in planning, implementing and monitoring the project activities regularly. All these support helped in effective implementation and quality improvement of the project activities, which ultimately contributed to reduce the maternal death in the project area.

Project: Working towards Safe Motherhood in South Asia: Increasing Access to Maternal Health Services for Poor Women in Rural Bangladesh

In response to the current deplorable maternal mortality and morbidity scenarios in Bangladesh, especially in Chittagong and Sylhet divisions, the Family Planning Association of Bangladesh (FPAB) has initiated a project titled "Working towards Safe Motherhood in South Asia: Increasing Access to Maternal Health Services for Poor Women in Rural Bangladesh," commonly known as SMP project, with the funding support from the European Commission. The project areas are Dharmapasha (Shunamganj), Kaptai (Rangamati), Naniarchar (Rangamati), Rangamati Sadar (Rangamati), Noakhali Sadar (Noakhali) and Sylhet Sadar (Sylhet). In order to effectively implement the project activities, FPAB has initiated the current study for collecting baseline information from the agencies providing sexual and reproductive health (SRH) services, community and other stakeholders. The purpose of this study is to prepare the benchmark data to evaluate the impact of the project at the end of the project period in the implementation locations.