

# Impact Evaluation of Strengthening the National MR Programme in Bangladesh

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## Preface

The study titled “Impact Evaluation of Strengthening the National MR Programme in Bangladesh” was undertaken by BIDS and sponsored by the Policy and operations Evaluation Department, Ministry of Foreign Affairs, the Netherlands.

The main purpose of the study has been to assess the effectiveness of the activities implemented under the MR project and provide a comprehensive analysis on different aspects of the rights-based approach implemented by MSCS and FPAB. While not all aspects related to program design and implementation mechanism of the two agencies could be covered within the limited scope, the evaluation has attempted to assess the impact of MR intervention and to identify major issues involved in management and implementation of rights-based approach with regard to MR.

A variety of research tools were employed including structured interviews, FGDs, and key informant interviews. In addition to analysis of secondary sources of information, data has been collected from a range of organizations and different stakeholders including program managers, service providers, communities leaders, and of course, the MR clients. Attempts have been made to identify bottlenecks in improving the MR service delivery, measures needed to ensure access to safe MR and improving quality of services.

We are grateful to those who cooperated at different stages during the conduct of this study. We acknowledge our deep appreciation and gratitude to the **Policy and Operations Evaluation Department, Ministry of Foreign Affairs, the Netherlands**, for sponsoring the study and for providing the necessary funding to undertake the evaluation. We would also like to express our sincere gratitude to Ella de Voogd and Mushfiqa Satiar of the Embassy of the Kingdom of the Netherlands (EKN) at Dhaka for their help and cooperation. Caspar Lobbrecht (IOB) assisted us with the statistical analysis of the data and we would like to express our appreciation for his work.

We remain grateful to the respondents belonging to the implementing agencies, community leaders and male and female respondents, for their cooperation in responding to our multifarious questions. Those interviewed were very accommodative with their time and resource materials. The respondents, though anonymous here, deserve our special

appreciation, because without their cooperation the study would not have been possible. We are thankful to all of them.

We would like to extend our thanks also to the members of our field staff (investigators, supervisors, and coordinators) for their hard work and sincere efforts in collecting the relevant information.

We remain ever grateful to Marijke Stegeman and Saskia Hesta of IOB for their invaluable guidance and support throughout the period of the study. We acknowledge the valuable comments provided by Marijke Stegeman and Saskia Hesta while finalizing the field instruments. We are particularly grateful to both of them for their detailed and meticulous comments on the draft report which helped us enormously in revising the draft. They helped us in all conceivable ways, and their input into this research is invaluable.

However, the research team alone is responsible for any remaining errors or omissions.

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## 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 Immunizations 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 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, but 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) combating diseases (MDG-6) are on track,<sup>12</sup> the achievement of the MDG-5, i.e. reduction of Maternal Mortality Ratio (MMR), is not achievable within the time limit.<sup>3</sup>

One of the important goals of Health, Nutrition and Population Sector Programme (HNPS) 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 immunization program is most impressive, including reductions in infant and child mortality. The contraceptive prevalence rate has already reached more than 50% 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.<sup>4</sup> More than 50 per cent of married couples of reproductive age have been

<sup>1</sup> see <http://www.undp.org.bd/mdgs/goals/MDG%204.pdf>

<sup>2</sup> see <http://www.undp.org.bd/mdgs/goals/MDG%205.pdf>

<sup>3</sup> see <http://www.undp.org.bd/mdgs/goals/MDG%206.pdf>

<sup>4</sup> See <http://www.measuredhs.com/pubs/pdf/PR15/PR15.pdf>

protected by modern contraception now as compared to only 8 per cent in the early seventies. 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 (World Bank, 2009) and 43 in 2011 (BDHS 2011), while the under five-mortality rate declined from around 260 deaths per 1000 live births to only 53 over the same period (BDHS 2011). Immunization coverage at the age of 12 months increased from as low as 54% in 1990 to 82.5% in 2011 (BDHS) and the country is expecting to attain polio-free status very soon (UNDP/GOB 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 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% from 1990 to 2010–2011 (IHME 2011; WHO 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 2010). 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% in 1990 to 50% 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) program, 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 toward meeting the Millennium Development Goal 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 authorized procedure—known as menstrual regulation, or MR—to “establish non-pregnancy” after a missed period (Akhter H, 1988).

Available evidence suggests that the share of maternal mortality due to complications from induced abortion has declined since initiation of the MR program. 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% 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% (Fauveau V. et al, 1988). However, there has been 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 (BMMS, 2001) found a substantially lower proportion of maternal deaths attributable to abortion—only 5% of maternal deaths were related to induced abortion (NIPORT et al, 2003). The 2011 BMMS found an even smaller percentage, merely 1% 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 emphasized 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 (WHO et al, 2012).

It is to note 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 is 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 as a tool to hide the ‘sin’ of secret sexual relations, and therefore is socially unacceptable in Bangladesh. MR is also considered as a sin from 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 Program**

The recent Directorate General Health Services (DGHS) 2007 report estimates approximately four million unwanted pregnancies annually in Bangladesh, of which 25% are estimated to be attributed for terminations. The Maternal Mortality Survey 2001 indicates that illegal

terminations due to unsafe practices account for 15% 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% of MMR in 2001 to 1% 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 regarded illegal abortions and legal MR procedures. While termination of pregnancy is legal only to save the life of the pregnant woman, there is an increasing demand for pregnancy termination despite a steady increase in contraceptive use rate.

A special project, “**Strengthening the National Menstrual Regulation Program 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 2,73 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 emphasized that given the sensitivity of the issue arising from social, cultural and religious norms (vig. 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; and
- 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 that 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.<sup>5</sup>

The initiative has been reviewed in 2011 and overall the seven projects were considered successful.<sup>6</sup> 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 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 able to cope with the demand created by the projects and infection prevention practices were not carried out properly.

The present impact study is complementary to this review and will assess more precisely the net-effect of the MR programme. The study will be limited to project areas of Sylhet division that 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.

### **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: Narayangonj 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

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<sup>5</sup> Partner NGOs distributed, among others awareness messages on 1. the right time, 2. place and 3. service provider for MR contraception, 4. age of marriage, 5. age of first pregnancies and 6. Violence against women.

<sup>6</sup> Islam & Venghaus 2011.

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, 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 (RHP) have been used to disseminate the key messages to the community. The organization has carried out a base- and end-line KAP surveys in all project locations, including the Sylhet division.

## **1.4 Outline of the report**

The report is organized 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 methods. Chapter three provides a brief literature review and state of affairs regarding MR program 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 utilization of services is analysed in Chapter six. In Chapter seven the overall impact of the MR intervention related to the objectives is presented.

## 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 utilization of services. The study also aims to identify barriers that women face in assessing and utilizing reproductive health services. Therefore, information was also collected among 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 Sylhet and from Maulvibazar each were covered, which are considered as 'intervention' area. For comparison purposes, two upazilas from Habigonj district were selected as 'control area'. The present evaluation has been designed to permit an assessment of the impact of the MR program in the intervention area.

To this and it was necessary to collect information among sufficient households for allowing statistically significant comparisons between the two areas. To this end, household surveys were conducted in both areas. Interviews with key persons and focus group discussions 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 survey of MSCS); ICCDRB 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
  - Discussion with different stakeholders (relevant agencies/organizations);

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 was utilized for the evaluation.

### **2.2.2 Selection of Areas - Project and Control Area**

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

In order to be able to assess the impact of the program in the project area, we need to compare the beneficiaries/project participants with a control group. Both the program (Sylhet and Maulvibazar) and control (Habigonj) areas are homogeneous having similar

socio-economic characteristics where literacy is still low, access to information limited, and early age at marriage and conception 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 information from three categories of study population at different levels. The **first** group, at the macro level, included policy makers at the apex and program managers/project directors of FPAB and MSCS, and Civil Surgeon of District hospital.

The **second** group, the micro level population, comprised the households/population living in catchment areas of FPAB and MSCS intervention areas and control area of Habigonj district including the women who have undergone MR procedures during the last 12 months preceding the survey. Face to Face interview using 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 Habigonj district (Control group) were selected as shown in Table 2.1. A structured questionnaire was applied 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 1200 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>i.e</i> 100 households from two unions
		Two Urban Wards	One <i>Mohalla</i> from each Ward	50 Households from each <i>Mohalla</i> were selected randomly <i>i.e</i> 100 households from two <i>Mohallas</i> in the <i>peri-urban</i>
Maulvibazar	Two Upazilas including sadar upazila	Two Rural Unions	One village from each Union	50 Households from each village <i>i.e</i> 100 households from two unions
		Two Urban Wards	One <i>Mohalla</i> from each Ward	50 Households from each <i>Mohalla</i> were selected at random <i>i.e</i> 100 households from two <i>Mohallas</i> in the <i>peri-urban</i> area of <i>Maulvibazar Sadar upazilas</i>
Habigonj	Two Upazilas including sadar upazila	Two Rural Unions	One village from each Union	50 Households were selected at random from each village <i>i.e</i> 100 households from two unions
		Two Urban Wards	One <i>Mohalla</i> from each Ward	50 Households were selected randomly from each <i>Mohalla</i> <i>i.e</i> 100 households from two <i>Mohallas</i> in the <i>peri-urban</i> area of <i>Habigonj Sadar upazilas</i>
3 districts	6 upazilas	6 Unions and 6 Wards	600 households from 12 Villages/ <i>Mohallas</i>	

## Sample Selection - Project and Control Area

A multi-stage, simple random sampling approach was adopted. Six villages (two each from Sylhet, Maulavibazar and Habigonj district) and six mohallas/wards ( two from each district) were randomly selected as the Primary Sampling Units (PSU). After selecting the sample villages/*mohallas* as the Primary Sampling Units (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 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 applied 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 male of household heads are assumed to have an important role in the decision making, information was 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 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 utilizing 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 area. 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). Secondly, 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 deep 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/wards. Out of this, 100 MR cases were selected for interview.
- v. During fieldwork for the household survey, out of 600 respondent women who were interviewed, 179 of them (30%) 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 (i.e 50%) could be successfully interviewed during the field survey. They included 30 from Sylhet, 24 from Maulvibazar and 36 from Habigonj. This means that majority of the MR clients (i.e 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.

Data Collection through structured Questionnaire	Number		
	Intervention area	Control group	Total
Household/client survey			
Women aged 15-49 years	400	200	600
Male Household heads	200	100	300
MR Client Survey	200	100	300
All	800	400	1200

### 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 program managers included: Civil Surgeons at the district hospital (DH) and program 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 district, the sample comprised one district hospital (DH), two Upazila Health Complexes (UHCs), and four Union Health and Family Welfare Centres (HFWCs). Total facilities covered included 3 District Hospitals (DHs), 6 Upazila Health Complexes (UHCs), and 12 Union Health and Family Welfare Centres (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 (i) socio-economic and demographic characteristics (age, education, occupation, income, etc.); (ii) knowledge and attitude regarding FP and MR; (iii) 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 program 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 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 1200 respondents consisting of 600 currently married women aged 15-49 years, 300 male household heads and another 300 MR

clients. In addition, facility survey was conducted in three districts covering three district hospitals, 6 Upazila Health Complexes (UHCs), 12 Union Health and Family Welfare Centers (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 minimized 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 is concerned must be acknowledged at the outset. The sample location has been selected in such a manner so 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 who are 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 000 women aged 15-44, just one-third that of clandestine abortion complications (6.5 cases per 1000 women aged 15-44..<sup>7</sup> 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.

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 us enormously in meeting the needs of the assignment.

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<sup>7</sup> <http://www.guttmacher.org/pubs/IB-Bangladesh-MR.html>.

## CHAPTER 3

### MENSTRUAL REGULATION (MR) PROGRAM IN BANGLADESH: AN OVERVIEW

#### 3.1 The Menstrual Regulation (MR) Program 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" (Ali et al., 1978, Akhter, 1988, Dixon-Mueller, 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. Menstrual regulation (MR)—officially recognized as an interim method for establishing non-pregnancy—has been available free of charge in the government's family planning program as a public health measure since 1979 (GoB, 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 (Begum et al., 1985; Germain, 1985). In 1978, the Pathfinder Fund initiated and funded the Menstrual Regulation Training and Service Programs (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 Program

(MRTSP). In 1979 MR was legalized and incorporated into the National Family Planning Program. 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 program the government issued a circular including MR in the national family planning program and encouraging service providers to offer service in all government hospitals and health and family planning complexes (the present day UHCs) (Akhter, 1983). The program 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.

Menstrual regulation (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, in 1998 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 and Mitra and Associates, 2009). Family welfare visitors (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 H 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 be the backbone of the program 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 recruiting has left the program 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 (BDHS/NIPORT, 1999-2000), 5% 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 H, 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 S 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 obtaining 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 from 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 program was initiated in seven medical college hospitals and two district hospitals (Akhter H, 2001). In the years since, service provision has expanded and is now national in scale. MR is included with in the family planning program 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 E 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 recognized as an interim method for establishing non-

pregnancy—has been available free of charge in the government’s family planning program as a public health measure since 1979 (GoB, 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 stake-holders such as service providers and women’s rights organizations (Akhter H 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 program has argued that it has been marginalized within overall health policy in Bangladesh over the last decade (Johnston et al, 2011)

A government authorization 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 summarized as follows:

- About 12% 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 sterilize equipment.

- Approximately 231,000 women were treated in facilities for complications of induced abortion in 2010. In addition, health professionals estimated that 60% of all women with complications did not get medical care.
- The public sector accounted for about two-thirds of all MRs performed; non-governmental organizations 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% of public and private facilities that would be expected to provide MR services actually did so, with a wide range across divisions (37–76%). Shortages of trained providers, lack of equipment and religious and cultural reasons are 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% 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, these include: 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 PAI) 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 A, 2011). Additionally, non-governmental organization (NGO) clinics provide MR services throughout Bangladesh, and many private physicians obtain MR training from specialized centers 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 hospitalization 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% 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 program was initiated. The proportion of patients having abortion complications with severe infections, meaning infections that had spread beyond the reproductive tract, fell from 29% in 1977 to 18% in 1994 based on data for Dhaka Medical College Hospital (Akhter H et al, 1998). According to the authors, during the same time, the case fatality rate from abortion complications in this facility

decreased from 5% to 0.2% (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 Dipu 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, because of 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 program as well. No training and service delivery manuals and guidelines were available at any of the sample public health facilities (Chowdhury and Dipu 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 under-reporting of up to 70% 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 counseling 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 S 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, where by 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% 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 S, 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 behaviors 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 Bangladesh**

This paragraph presents a succinct overview of the MR services provided by **Marie Stopes Clinical 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 will be provided in annex 2.

#### **3.4.1 Menstrual Regulation (MR) Programme of MSCS:**

The Marie Stopes Clinical Society provides a wide range of reproductive health services, including menstrual regulation. The in this study evaluated project aimed at intensifying these MR services. The overall objective of the project was to increase demand and utilization 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), 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 provider (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 organizations and donors to achieve our 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 Habigonj-were covered by the present survey. The survey has collected information regarding age, level of education, occupation, family income, reproductive health, and on the knowledge, attitude and practice concerning family planning and MR. Sylhet and Maulvibazar districts are considered as 'intervention' (program) area and Habigonj 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% in Sylhet, 50% in Maulvibazar and 56% in Habigonj. About 11 percent of the respondents belong to the 15-19 year age group in Sylhet and Maulvibazar compared to 7 percent in Habigonj. The age distribution of women in the study area was more or less similar-the mean age was 28.34 years in Sylhet, 29.30 years in Maulvibazar and 28.85 years in Habigonj.

##### 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 area. About a quarter of the respondents in Sylhet (27%) and Maulvibazar (26%) were illiterate compared to only 13% in Habigonj. About one-third of the respondents in Sylhet (37 %), Maulvibazar (37%), and Habigonj (38%) had primary school education (up to class 5). The distribution of the respondents by educational status shows that the proportion of women belonging to class 6-9 group is relatively higher in Habigonj (40.5%) compared to Sylhet (28.6%) and Maulvibazar (22.1%). About half (48.7%) of the women in Habigonj compared to 35.2% in Sylhet and 29.8% 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% in Sylhet, 93.5% in Maulvibazar and 95% in Habigonj. 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		
	Sylhet	Maulvibazar	Habigonj
<b>Age (in years)</b>			
15-19	11.0	10.0	7.0
20-24	29.0	24.5	28.0
25-29	31.0	26.5	28.5
30-34	16.0	17.0	19.0
35-39	7.0	13.5	14.5
40-44	4.5	7.5	2.5
45+	1.5	1.0	0.5
<b>Mean Age</b>	<b>28.34</b>	<b>29.30</b>	<b>28.85</b>
<b>Level of Education</b>			
Illiterate	27.0	26.2	13.3
Can read and write only	0.5	6.7	0.0
Primary (1-5 class pass)	37.2	37.4	37.9
Secondary (6-9 class pass)	28.6	22.1	40.5
Secondary completed or more (10 or more class pass)	6.6	7.7	8.2
<b>Occupation</b>			
Agriculture/farming	0.0	0.5	0.5
Day labourer	1.5	0.5	0.0
Small business/petty trading	0.0	0.5	0.5
Service/salaried job	0.5	2.5	2.5
Self employed	1.5	1.0	0.5
Handicraft	1.0	0.0	0.0
Housewife	91.5	93.5	95.0
Student	1.0	0.0	1.0
servant/made servant	3.0	1.0	0.0
Others	0.0	0.5	0.0
<b>Household Income</b>			
Average monthly income of the household head from main occupation	10718	8835	9183
Average monthly income of the other household members	1390	2495	3269
Average monthly income of households from others sources	133	1964	1021
Average household monthly income	12240	13293	13473
Per capita monthly income	2915	2684	2654

**Table 4.2**      **Distribution of Women by Main Occupation of Household Head (% of households)**

Main Occupation	Sylhet	Maulvibazar	Habigonj
Agriculture/farming	1.0	4.0	14.5
Day laborer (agriculture)	0.0	2.0	3.5
Day laborer (Non-agriculture)	21.5	20.0	10.5
Small business/petty trading	25.5	31.0	25.5
Business	6.5	3.0	8.0
Service/salaried job	15.5	13.5	13.0
Self employed	11.0	2.0	8.5
Rickshaw/Van puller	7.5	4.0	1.0
Transport worker	10.5	6.5	6.5
Sick/disabled	0.0	0.0	2.5
Housewife	0.5	4.5	1.5
Unemployed (more than 14 years and not student)	0.0	1.0	1.5
Others	0.5	8.5	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 labour or non-agricultural wage labour, the corresponding figure for control group women is only 10.5%. Again, about a quarter of the husbands in all the three sample areas are engaged in small business/petty trading. The data shows that only an insignificant proportion of the husbands in the intervention area are farmers (1% in Sylhet and 4% in Maulvibazar), the corresponding figure is 14.5% 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 Habigonj. About 15% 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 previous surveys in Bangladesh. This might be partly explained by the fact that out of the 600 households from the three study areas, 50% 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% of the respondents in both the intervention and control area belonged to the poorest category (with monthly income not exceeding Tk. 5000), while a quarter of the respondents had monthly income between Tk. 5,000 to Tk.7,500. Again, slightly more than a quarter of the respondents had monthly income between Tk. 10,000 to 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% in Sylhet compared to 15.5% and 16.5% in Maulvibazar and Habigonj respectively. The average monthly household income was lowest in Sylhet Tk. 12,240 followed by Tk. 13,293 in Maulvibazar and Tk. 13,473 in Habigonj. On the other hand, per capita monthly income was highest in Sylhet Tk. 2,915 compared to Tk. 2,684 and Tk.2,654 in Maulvibazar and Habigonj respectively.

**Table 4.3 Distribution of Households by Monthly Income: by area**

Monthly Income	Sylhet		Maulvibazar		Habigonj	
	n	%	n	%	n	%
Up to TK 2000	0	0	0	0	0	0
TK 2001 – 3000	1.0	0.5	2.0	1.0	0	0
TK 3001 – 5000	8.0	4.0	14.0	7.0	13.0	6.5
TK 5001 – 7500	48.0	24.0	54.0	27.0	55.0	27.5
TK 7501 – 10000	60.0	30.0	44.0	22.0	44.0	22.0
TK 10001 -15000	48.0	24.0	37.0	18.5	35.0	17.5
TK 15001-20000	13.0	6.5	18.0	9.0	20.0	10.0
TK 20000+	22.0	11.0	31.0	15.5	33.0	16.5
Mean income	12240		13293		13473	
Minimum	3000		3000		4000	
Maximum	62000		100000		55000	

Overall, it can be concluded that the population in the intervention areas -Sylhet and Maulvibazar does not differ significantly from the control area of Habigonj 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 amount of male agricultural workers in intervention areas than in control

area; statistically significant higher amount of male informal workers in intervention areas than in control area; statistically significant lower amount of male formal workers in intervention areas than in control area; statistically lower amount of house owners in the intervention areas than in the control area.

In the statistical analysis the findings will be 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 than in the control group.<sup>8</sup>

#### **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 of the tradition of his/her family and the type of the illness. In 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 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% of the respondents mentioned that they generally go to the district hospital for the treatment of household members during sickness, while 60% and 65% go to the UHC and FWC respectively for treatment purposes. However, 33.5% of the respondents mentioned that they consult MBBS doctor, while another 21.5% goes to the village doctor/medicine seller as their preferred place of treatment in case of sickness. The health seeking behavior 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%) consult unqualified doctors/traditional practitioners/medicine sellers for treatment purposes, about a quarter of them also go for homeopathy treatment. Compared to the intervention area, lesser number of households from control area visits public health facilities (DH, UHC and FWC) for treatment purposes (ranging between 28.5 to 42.5%).

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<sup>8</sup>See annex 1.

**Table 4.4 Distribution of the Respondents According to their Usual Place of Treatment during Sickness: by area**

Type of Facility	Sylhet	Maulvibazar	Habigonj
District Hospital	84.5	53.0	39.5
UHC	60.0	71.0	42.5
FWC	65.0	63.5	28.5
MBBS doctor/private chamber	33.5	20.0	18.5
NGO/private clinic	15.0	11.0	11.5
Unqualified allopath/Village doctor/ medicine seller	24.0	25.5	62.0
Homeopath	10.5	38.0	28.0
Kobiraj/Hekim	4.0	15.5	8.0
Spiritual Healer	1.5	2.5	-
Self Medication	-	1.0	-
Don't go any where	-	-	-

#### 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 behavior 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 covered by the survey, 72% of the households in Sylhet, 88% in Maulvibazar and 95% in Habigonj had at least one episode of illness in their households during 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 the 144 households in Sylhet, compared to 278 and 441 illness episodes in Maulvibazar and Habigonj respectively. This implies that for households having incidence of sickness during the last three months, on the average, there were 1.69 episodes of illness per household in Sylhet, 1.57 in Maulvibazar and 2.32 in Habigonj.

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

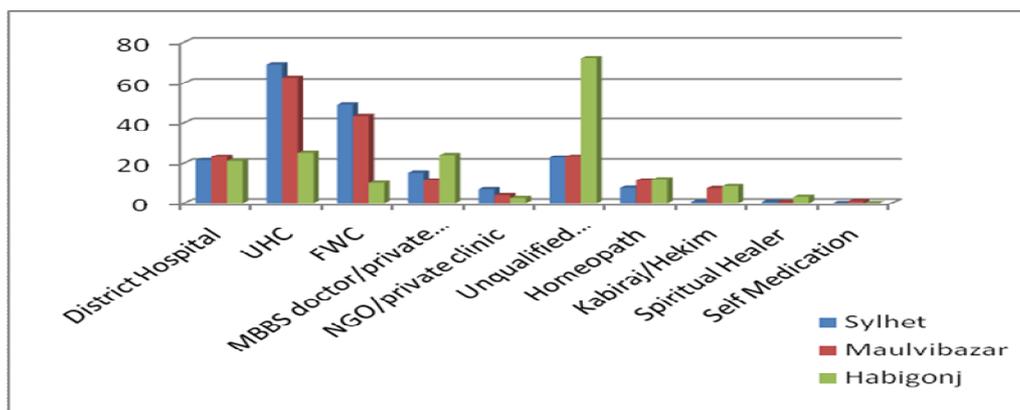
The respondents were asked about the type of treatments received by the households during the last three months. The findings show that among the 510 households having 963 illnesses during the last three months, one-fifth of the respondents from both intervention and control area visited district hospitals. However, with regard to utilization of UHC and FWC, there was major difference between control and intervention area. Two-thirds of the program area households visited the UHC, the corresponding figure was only 25% in control area. Similar differential between program and control area was also observed in case of utilization of FWC (46% vs 10%). Again, the highest proportion of patients in Habigonj (72%), 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 area 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	Sylhet (n=144)		Maulvibazar (n=176)		Habigonj (n=190)	
	No.	%	No.	%	No.	%
District Hospital	31	21.5	41	23.3	40	21.1
UHC	99	68.8	110	62.5	48	25.3
FWC	71	49.3	76	43.2	19	10.0
MBBS doctor/private chamber	22	15.3	20	11.4	46	24.2
NGO/private clinic	10	6.9	7	4.0	5	2.6
Unqualified allopath/Village doctor/medicine seller	33	22.9	41	23.3	137	72.1
Homeopath	11	7.6	20	11.4	34	11.9
Kabiraj/Hekim	1	0.7	13	7.4	16	8.4
Spiritual Healer	1	0.7	1	0.6	6	3.2
Self Medication	-	0	2	1.1	-	0

**Figure 4.1 Percentage Distribution of the Respondents According to the Type of Treatment received for Sickness during Last Three Months: by area**



## 4.5 Marriage and Reproductive Health

### Age at Marriage

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

The findings show that an overwhelming proportion of women in the sample areas (58% in Sylhet, 66% in Maulvibazar and 54% in Habigonj) 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 is forbidden by law. The average age at first marriage is found to be 16.95, 16.76 and 17.13 years in Sylhet, Maulvibazar and Habigonj 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.

Yet, despite these national laws and international conventions and the efforts of various national and international organizations, 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), since 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 number of children currently alive is 2.32, while in Habigonj the corresponding figures are 2.78 and 2.51 respectively. The data shows that mean number of children born alive and currently living is slightly higher in Habigonj compared to the intervention area.

**Table 4.6 Distribution of Women by Age at First Marriage: by area**

Age at first marriage (years)	Sylhet (N=200)	Maulvibazar (N=200)	Habigonj (N=200)
Up to 12	4.5	1.5	0.5
13	7.0	9.0	7.0
14	8.5	8.0	6.5
15	12.0	15.5	13.5
16	14.5	17.5	13.5
17	11.5	14.0	12.5
18	17.0	14.0	20.5
19	7.0	6.0	10.5
20 +	18.0	14.5	15.5
<b>Mean age at Marriage</b>	<b>16.95</b>	<b>16.75</b>	<b>17.13</b>

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

Sylhet	Rural	Urban	Total
Children born alive	2.66	2.50	2.58
Children currently living	2.33	2.25	2.29
<b>Maulvibazar</b>			
Children born alive	2.66	2.57	2.62
Children currently living	2.41	2.23	2.32
<b>Habigonj</b>			
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 to 87%) mentioned that decision was made by mutual understanding of the couple. However, a quarter of the women in Sylhet (26.7%) maintained that pregnancy occurred due to failure/unavailability of FP method (13%) , or .it was unplanned pregnancy (12.5%). The corresponding figures were 21.2% in Maulvibazar and 10.7% in Habigonj. An insignificant proportion of women said that pregnancy occurred due to husband’s own decision.

**Table 4.8 Decision regarding Last Pregnancy: was it mutual or forced by husband**

Indicators	Sylhet	Maulvibazar	Habigonj
Mutual understanding of the couple	70.0	75.3	87.2
Husband's own decision/Compelled by husband	3.5	2.5	0.5
Unplanned	12.5	16.7	2.0
Lack of FP methods	1.0	2.0	3.6
Unwanted/failure of FP method	13.0	2.5	5.1
Other	0	1.0	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 percent 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	Sylhet	Maulvibazar	Habigonj
Yes	100.0	100.0	100.0
No	0.0	0.0	0.0
N	200	200	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%, a decrease compared to the 2007 data (17%).

#### 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 percent of respondents in Sylhet stated about ‘solvency of the family’, followed by ‘better health and nutrition of children’ (mentioned by 78.5%), ‘mother’s health and nutrition is ensured’ (reported by 68.55%), and ‘easier to provide education for children’ (maintained by 61.5%). The pattern was more or less similar in other two areas.

Regarding disadvantages of FP methods, the various responses included “side effects” (ranging between 72 to 94%), “risk of infertility” (ranging between 35 to 70%), “husband does not like” (ranging between 26 to 49%), etc.

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

Advantages of FP methods	Sylhet	Maulvibazar	Habigonj
Solvency of the family increases	91.0	90.0	70.5
Easier to provide children with education	61.5	79.5	89.5
Children have better health and nutrition	78.5	42.0	82.0
Mother’s health and nutrition is ensured	68.5	70.5	53.5
Others	0	1.5	0

**Table 4.11 Percentage Distribution of Respondents by their Perception about Disadvantages of FP Methods: by area (Multiple Responses)**

Disadvantages of FP methods	Sylhet	Maulvibazar	Habigonj
Side effects	90.0	94.0	71.5
Risk of infertility	70.0	44.0	34.5
Husband does not want	48.5	31.0	26.0
No disadvantage	0.5	3.0	20.5
Others	7.5	13.0	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, all the respondents in Sylhet mentioned about poor health of mother and children, followed by economic burden (95%) and inadequate birth spacing (62.5%). In Maulvibazar and Habigonj, similar observations were also made about adverse consequences. However, more than a half of the respondents in Habigonj (58%) and one-third in Sylhet (35.5%) mentioned about positive aspects of frequent pregnancies – i.e. the benefits of a large family. The corresponding figure was 15 percent in Maulvibazar.

**Table 4.12 Percentage Distribution of Respondents According to their Opinion about Consequences of Frequent Pregnancies: by area (Multiple Responses)**

Consequences of frequent pregnancies	Sylhet	Maulvibazar	Habigonj
Benefits of a large family	35.5	15.0	58.0
Leads to poor health of mother and children	100.0	92.5	95.5
Economic burden	95.0	84.5	94.0
Inadequate birth spacing	62.5	63.0	33.5
Others	2.0	6.0	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 sterilization is almost universally known (more than 90% in the study area), while knowledge of other methods like IUD, implant/norplant, vasectomy varies between 70 percent and 90 percent. By contrast, knowledge of traditional methods like safe period, *Azol*/withdrawal ranges between 23 percent and 68 percent. Surprisingly, regarding emergency pill very few women possess this knowledge-only 20 percent women in Maulvibazar compared to 11 and 5 percent in Sylhet and Habigonj respectively 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	Sylhet N=100	Maulvibazar N=100	Habigonj N=100??	Findings from End line survey MSCS (N=700)*
Pill	99.5%	100.0%	100.0%	98.9
Emergency pill	11.5	20.0	5.5	-
IUD/Copper T	70.0	92.0	80.0	17.3
Injection	98.5	99.5	97.0	92.6
Condom	99.5	99.0	97.0	67.6
Implant/ Norplant	79.5	96.0	88.0	43.6
Safe period	67.5	67.5	38.5	1.7
<i>Azol</i> /withdrawal	46.5	48.0	23.0	-
Ligation/Tubectomy	93.5	98.5	90.5	80.7
Vasectomy/NSV	73.0	91.0	78.5	14.7

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

Our results compares favorably with the findings as obtained by end-line survey of MSCS at Maulvibazar. There has been 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, 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 faced to carry an unplanned and unwanted pregnancy. With respect to current use of contraception, it is evident from the findings that between 59 to 75 percent of the unmarried women in the intervention area are currently using any family planning method. However, the figure of current use is 16.5 percent higher in Sylhet than in Maulvibazar (75% vs 58.5%). By contrast, two-thirds (66%) of control group women are current users.

The method-mix of current users ranges between 56 to 72 percent for the pill and 10 to 20 percent for the injection in both the intervention and control area. However, pill users were highest (72%) in the control area and use of injection was lowest (10%). Surprisingly, 12 percent 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% of the respondents as current users. The most used family planning method was pill, followed by injection, condom and ligation.

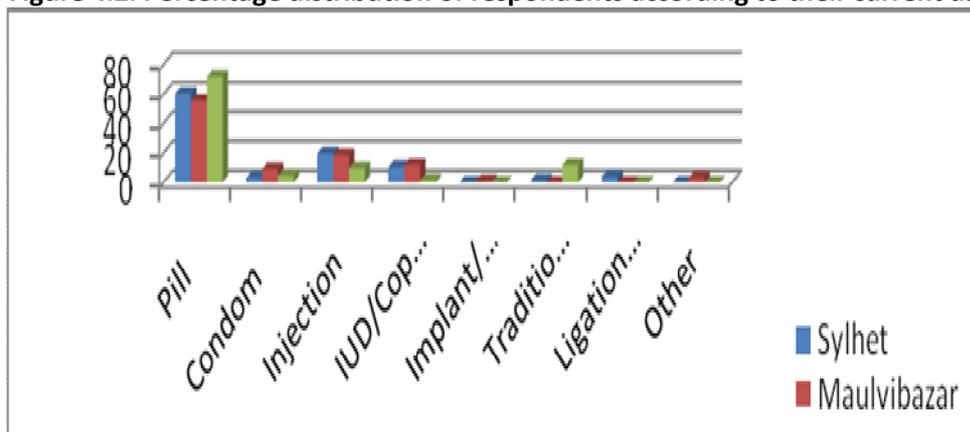
**Table 4.14 Whether the Woman or Her Husband is Currently using Any FP Method: by area**

Using any FP methods	Sylhet	Maulvibazar	Habigonj
Yes	75.0	58.5	66.0
No	25.0	41.5	34.0

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

Current use by methods	Sylhet		Maulvibazar		Habigonj		Findings from End line survey of MSCS N=700
	N=150	%	N=117	%	N=132	%	
Pill	91	60.7	65	55.6	95	72.0	35.7
Condom	5	3.3	11	9.4	6	4.5	3.4
Injection	30	20.0	22	18.8	13	9.8	26.9
IUD/Copper T	16	10.7	14	12.0	2	1.5	0.6
Implant/ Norplant	0	0	1	0.9	0	0	2.6
Traditional method	2	1.3	0	0	16	12.1	-
Ligation/Vasectomy	6	4.0	0	0	0	0	0.3
Other	0	0	4	3.4	0	0	-

**Figure 4.2: Percentage distribution of respondents according to their current use of FP by methods**



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 start using family planning. However, the intervention did increase both male and female knowledge on several family planning methods. It appears that the female respondents benefitted from the intervention regarding their knowledge of the emergency pill, a 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.

#### 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 to 82 percent 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 to 78%), followed by injection (ranging between 11% to 17%), and condom. However, 3.5 percent women in Habigonj ever used traditional method.

**Table 4.16 Percentage Distribution of Women by Ever Use of FP methods**

Whether ever use any Method	Sylhet		Maulvibazar		Habigonj	
	N	%	N	%	N	%
Yes	164	82.0	143	71.5	142	71.0
No	36	18.0	57	28.5	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	Sylhet		Maulvibazar		Habigonj	
	N	%	N	%	N	%
Pill	115	70.1	110	76.9	110	77.5
Condom	15	9.1	9	6.3	8	5.6
Injection	27	16.5	15	10.5	17	12.0
IUD/Copper T	5	3.0	7	4.9	0	0
Implant/ Norplant	0	0	2	1.4	2	1.4
Traditional method	0	0	0	0	5	3.5
Ligation/Tubectomy	1	0.6	0	0	0	0
Others	1	0.6	0	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. The data shows that a vast majority of respondents in both the program and control areas are aware of the adverse effect of not using family planning method. Among the different responses, “economic burden” was mentioned by highest proportion (reported by 76 to 94%), followed by “frequent pregnancies” (mentioned by 77 to 85%) and “burden of large family” (reported by 51 to 77%). There is no major difference in the perception of respondents in the two areas about the consequence of not using family planning. Since family planning program in the country has been in operation for the last five decades or so and continued advocacy program has been going on, most of the people are aware of the socio-economic consequences of not using FP.

The End line survey shows that an overwhelming majority of respondents (98.4%) stated that pregnancy is the ultimate consequence of not using family planning. In our study also more than 70% 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 the two studies.

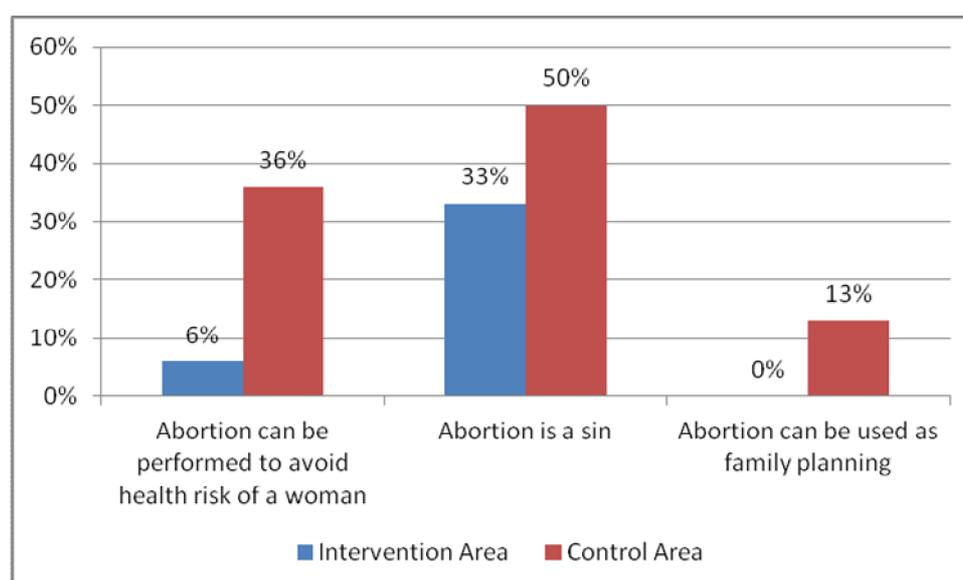
**Table 4.18 Percentage Distribution of Women according to their Perceptions about Consequences of not using Any FP Methods: by area**

Consequences of not using FP	Sylhet	Maulvibazar	Habigonj	Findings from End line survey of MSCS (N=700)
May conceive/frequent pregnancies	84.5	80.0	77.0	98.4
Burden of large family/too many children	59.5	50.5	77.0	0.1
Economic burden	86.5	75.5	93.5	0.3
Short spacing of birth	34.0	25.0	21.5	-
Poor health of mother and children	33.0	54.0	27.5	-
Don't know	0	0	0	1.1
Others	0	1.5	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 area (Figure 4.3).

**Figure 4.3 Percentage distribution of the respondents according to their opinion regarding abortion**



#### 4.6.9 Management of Unwanted Pregnancy

Although use of family planning method has been increasing continually, the cases of unwanted pregnancy is 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.

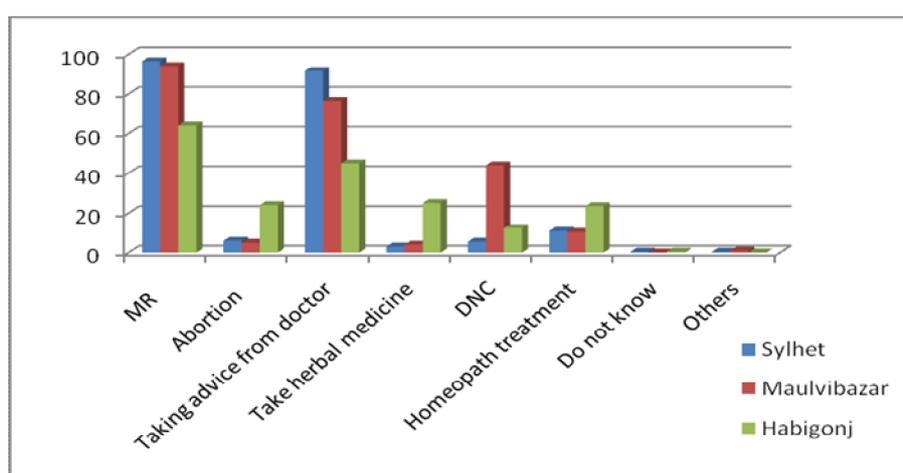
Respondents were asked about their perception on different ways of termination of unwanted pregnancies. In Sylhet, 96.5% respondents mentioned MR as the way of pregnancy termination, the corresponding figure was 94 percent in Maulvibazar. By contrast, only 64 percent women in Habigonj said that they would go for MR in case of an unwanted pregnancy. The evidence suggests that a higher proportion of respondents in the intervention area 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 program area mentioned about MR to terminate an unwanted pregnancy. By contrast, about a quarter (24%) of women in Habigonj compared to only 6% in Sylhet and 5% in Maulvibazar mentioned abortion to get rid of unwanted pregnancy, which has enormous health risk for women. Surprisingly, one-fourth (25%) of the women in Habigonj compared to 3% in Sylhet and 4% in Maulvibazar said that they would seek advice from Hekim/Kabiraj/Herbalist for the purpose. Again, about a tenth of the women in Sylhet (11%) and Maulvibazar and 23.5% in Habigonj 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%) of End Line respondents mentioned MR as the way of pregnancy termination, while 16.7% 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**

Indicators	Sylhet	Maulvibazar	Habigonj	Findings from End line survey of MSCS (N=700)
MR	96.5	94.0	64.0	78.6
Abortion	6.0	5.0	24.0	16.7
Taking advice from doctor	91.5	76.5	45.0	1.1
Take herbal medicine	3.0	4.0	25.0	-
DNC	5.5	44.0	12.5	2.3
Homeopath treatment	11.0	10.5	23.5	-
Do not know	0.5	0	0.5	2.0
Others	0.5	1.0	0	-

**Figure 4.4 Percentage distribution of the respondents according to their perception on management of unwanted pregnancy (multiple response)**



#### 4.6.10 Knowledge about Early Marriage

Respondents were asked whether they know about minimum age of marriage for girls and boys. In Sylhet, 88.0 and 43.5 percent of respondents know about minimum age of marriage for girls and boys respectively, while 65.0 and 28.5 percent of respondents know about minimum age of marriage for girls and boys respectively in Maulvibazar. However, a much lower proportion of women in Habigonj, 69.0 and 31.5 percent know about minimum age of marriage for girls and boys 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	Sylhet		Maulvibazar		Habigonj	
	N	%	N	%	N	%
Know about minimum age at marriage for girls	176	88.0	130	65.0	138	69.0
Know about minimum age at marriage for boys	87	43.5	57	28.5	63	31.5

Respondents were asked about their perception regarding impact of early marriage on the girl. The various consequences mentioned by both program and control group women are shown in Table-4.21 are more or less similar. The main consequences included “early pregnancy” (intervention area: 87 to 91.5%; control area: 79%), “adverse effect on health” (program: 78 to 81%; control: 87.5%), “can’t look after family properly” (program: 46 to 52%; control: 37%), and “can’t take proper care of children” (program: 24.5 to 28.5%; control: 26.5%).

**Table 4.21 Percentage Distribution of Women by their Perception About Impact/Consequences of Early Marriage of Girls: by area**

Consequences of early marriage	Sylhet		Maulvibazar		Habigonj	
	N	%	N	%	N	%
Early pregnancy	183	91.5	174	87.0	158	79.0
Adverse effect on health	156	78.0	162	81.0	175	87.5
Break in education	58	29.0	81	40.5	127	63.5
Can’t look after family properly	104	52.0	93	46.5	74	37.0
Can’t take proper care of children	57	28.5	49	24.5	53	26.5
Can’t adjust with husband properly	21	10.5	14	7.0	4	2.0
More chances of violence by husband	3	1.5	4	2.0	2	1.0
No demerits	-	-	3	1.5	-	-
Others	-	-	1	0.5	-	-

#### 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 govt. approved) method to get rid of an unwanted pregnancy. Respondents were asked whether they have ever heard of MR. The responses are summarized in Table-4.22. It is evident that knowledge about MR is almost universal in the intervention area—all of the responding women in Sylhet (99.5%) and Maulvibazar (100%) have heard of MR. However, only 68% of the women in Habigonj have ever heard of MR. This variation in awareness level between intervention and control area is in the expected direction because over the years, FPAB and MSCS have been trying to promote

awareness regarding MR in their program areas; and they have been highly successful in their endeavours. Our results are consistent with those obtained by End Line survey of MSCS, which shows that 93.9% 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.

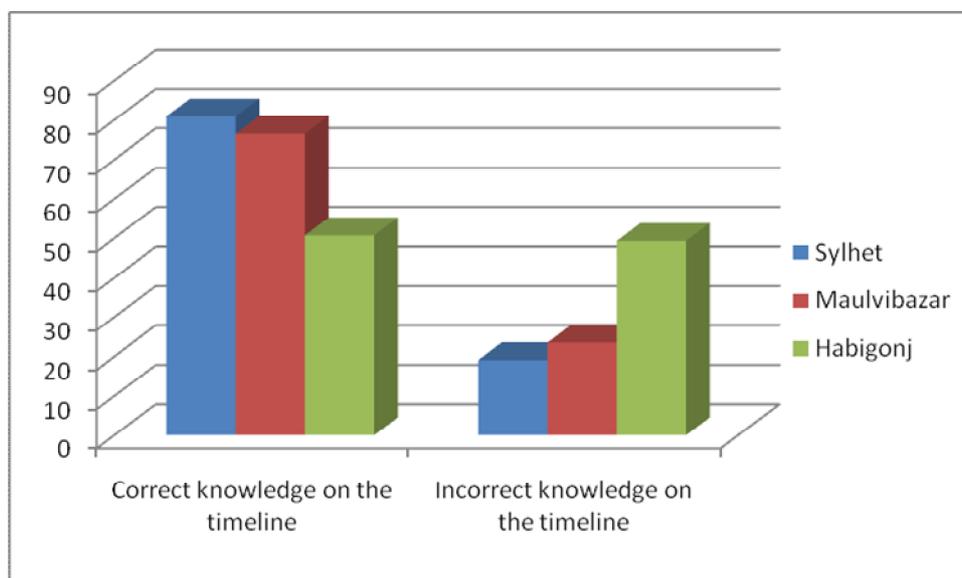
The data shows that even though knowledge about MR is universal in the intervention area, women who have heard of MR not all of them know about the correct timeline for MR. More than three-fourths of the women in the intervention area - 80.9% in Sylhet and 76.5 % in Maulvibazar - possess the knowledge 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% of the respondents have correct knowledge on the time line for safe MR.

**Table 4.22 Percentage distribution of the respondents according to their knowledge about MR**

Ever heard of MR	Sylhet		Maulvibazar		Habigonj	
Yes	99.5		100		68.0	
No	0.5		0.0		32.0	
N	200		200		200	
<b>Percentage distribution of the respondents according to their knowledge regarding the timeline of MR</b>						
Indicators	Sylhet N=199		Maulvibazar N=200		Habigonj N=136	
	N	%	N	%	N	%
Correct knowledge on the timeline	161	80.9	153	76.5	69	50.7
Incorrect knowledge on the timeline	38	19.1	47	23.5	67	49.3

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

**Figure 4.5 Percentage distribution of the respondents according to their knowledge regarding the timeline of MR**



### 4.7.3 Assistance and Service Providers for MR

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

The categories of staff who perform MR services include: qualified doctor, nurse/paramedic, Female Welfare Visitor (FWV), trained health worker, Traditional Birth Attendant (TBA), village doctor, kabiraj/herbalist etc. However, because of 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	Sylhet	Maulvibazar	Habigonj
Yes	97.0	93.5	76.5
No	3.0	6.5	23.5
N	199	200	136

Service provider/center	Sylhet (n=193)		Maulvibazar (187)		Habigonj (n=104)	
	No.	%	No.	%	No.	%
District hospital	125	64.8	110	58.8	49	47.1
MCWC	47	24.4	61	32.6	24	23.1
FWC	120	62.2	142	75.9	50	48.1
UHC	116	60.1	110	58.8	50	48.1
Marie Stopes Clinic	85	44.0	128	68.4	-	-
Other NGO Clinics	47	24.4	24	12.8	2	1.9
Private Clinic	63	32.6	13	7.0	24	23.1
Medicine Seller	1	0.5	2	1.1	2	1.9
Kabiraj/Hekim	26	13.5	24	12.8	36	34.6
Homeopath	3	1.6	10	5.3	14	13.5
Doctor/nurse	26	13.5	7	3.7	28	26.9
Village doctor	-	-	-	-	2	1.9
TBA/dai	2	1.0	-	-	2	1.9
FPAB	149	77.2	-	-	-	-
Pir/Fakir	-	-	-	-	3	2.9

#### 4.7.4 Attitude towards MR

Respondents were asked about their opinion regarding MR. The various responses given by respondents include “poor parents with too many children should go for MR” (85.4 to 87.5 % in intervention and 69.1% in control area); “unwanted pregnancy should be terminated through MR” (72 to 81.9 % in intervention and 84.6% in control area). Respondents also mentioned that “pregnancy at a very late stage of life should be terminated through MR” (28 to 37% in intervention and 49% in control area); “If the health of the woman is at risk because of pregnancy then MR can be performed” (36 to 40 % in intervention and 32% in control area). However, one-third of women in Habigonj (32.4%) said that MR can be used as family planning, while only 2% 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. A significant proportion of respondents also consider MR as a sin-the fear of incurring the “curse of God”- such proportions range from 9.3% in Sylhet to 10.8 % in Maulvibazar, and to 28% in Habigonj.

**Table 4.24 Percentage distribution of the respondents according to their opinion regarding MR issue**

Opinion regarding MR	Sylhet (n=199)		Maulvibazar (n=200)		Habigonj (n=136)	
	No.	%	No.	%	No.	%
Poor parents with too many children should go for MR/For financial well-being	170	85.4	175	87.5	94	69.1
Pregnancy at a very late stage of life should be terminated through MR	74	37.2	55	27.5	67	49.3
Pregnancy outside wedlock should be terminated through MR	86	43.2	80	40.0	60	44.1
Unwanted pregnancy should be terminated through MR	163	81.9	144	72.0	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	43	31.6
Terminating pregnancy through MR is a sin/against religion	19	9.5	22	11.0	38	27.9
MR can be used as family planning	4	2.0	3	1.5	44	32.4

#### 4.7.5 Whether MR is considered as a right of Women?

Respondents were asked whether they consider MR as a right of women to get rid of unwanted pregnancy. The findings show that four-fifths of the women in the intervention area consider MR as a women's right to terminate unwanted pregnancy. By contrast, only half of the control group women (52.5%) 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 for the two groups 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% confidence level.

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

Indicators	Sylhet	Maulvibazar	Habigonj
Considers MR as a right	82.5	79.0	52.5
Do not considers MR as a right	17.5	21.0	47.5

Respondents were also asked about their opinion regarding abortion as a method of termination of pregnancy. Less than 10% of the respondents in the intervention area were in support of abortion, while a vast majority of women gave their opinion against abortion as a way of pregnancy termination. Only in case of pregnancy outside wedlock, a large

majority of respondents from intervention area were in support of abortion. The data shows that a vast majority of the respondents in the intervention area were against abortion irrespective of poverty of households or age at pregnancy.

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%), “unwanted pregnancy” should be terminated through abortion (61.5%). Respondents in control area also mentioned that pregnancy at a very late stage of life should be terminated through abortion (35.6%), or if the health of the woman is at risk because of pregnancy then abortion can be performed (36.3%). 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. Around one-tenth of the control group women 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 the Table 4.26 that about a third of the women in the intervention area and one-half (50.5%) of the women in the control area mentioned 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 abortion	Sylhet (n=193)		Maulvibazar (n=185)		Habigonj (n=135)	
	No.	%	No.	%	No.	%
Poor parents with too many children should go for abortion/For financial well-being	18	9.3	21	11.4	77	57.0
Pregnancy at a very late stage of life should be terminated through abortion	20	10.4	18	9.7	48	35.6
Pregnancy outside wedlock should be terminated through abortion	149	77.2	135	73.0	54	40.0
Unwanted pregnancy should be terminated through abortion	15	7.8	13	7.0	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	49	36.3
Terminating pregnancy through abortion is a sin/against religion	62	32.1	62	33.5	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 her relatives/friends had an MR, and if so at what stage of pregnancy the MR was performed. It is evident from the table that a fourth of the respondents in Sylhet (24.5%) compared to 22% in Maulvibazar said that they personally know women who have undergone MR; while the proportion of such women was 43.9% in Habigonj.

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)–87.5% in Sylhet and 84.1% in Maulvibazar. By contrast, less than two-thirds (63.2%) of the MR cases in the control area was 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 ranged between 12.5% in Sylhet to 15.9% in Maulvibazar, while the proportion of such cases was about three times higher (36.8%) in Habigonj. 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.

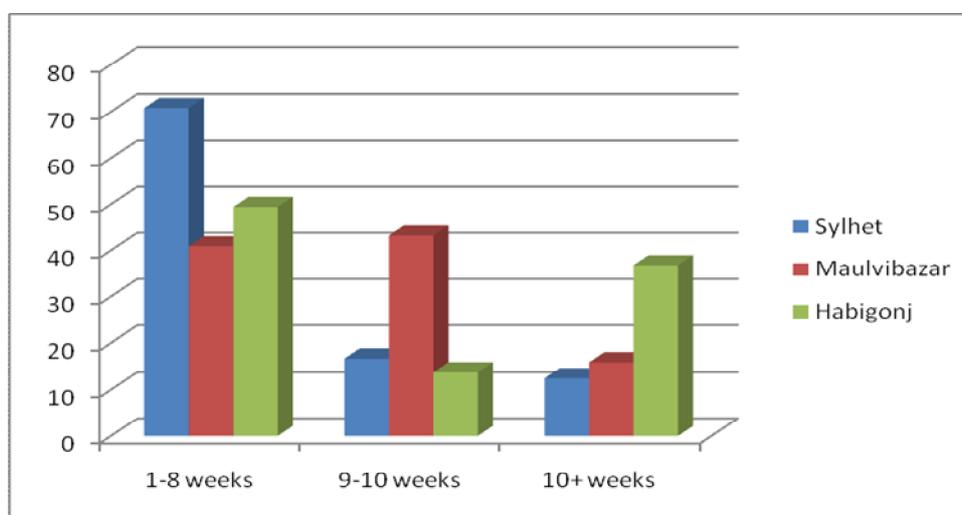
**Table 4.27 Percentage Distribution of Women having Relatives/Friends who had experience of MR**

Indicators	Sylhet		Maulvibazar		Habigonj	
	N	%	N	%	N	%
Yes	48	24.5	44	22.1	87	43.9
No	148	75.5	155	77.9	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	Sylhet		Maulvibazar		Habigonj	
	N	%	N	%	N	%
1-8 weeks	34	70.8	18	40.9	43	49.4
9-10 weeks	8	16.7	19	43.2	12	13.8
11-12 weeks	6	12.5	6	13.6	16	18.4
12+ weeks	0	0.0	1	2.3	16	18.4
Overall	48	100.0	44	100.0	87	100.0
Minimum	2		2		4	
Maximum	12		14		24	

**Figure 4.6: Percentage distribution of the respondents according to the time line/duration of pregnancy when their relatives/friends had the MR performed**



#### 4.7.7 Service Providers for MR

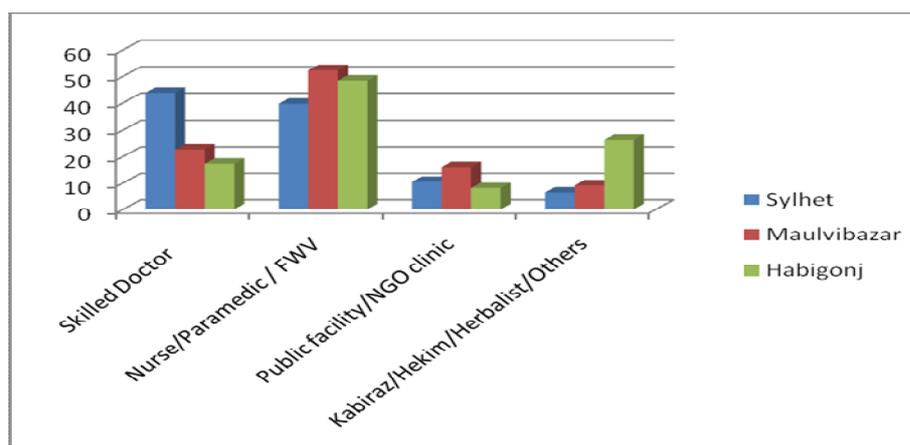
According to the government policy, safe MR needs to be performed either by a trained medical doctor (within 10 weeks from LMP) or by a trained paramedic/FWV (within 8 weeks). Judged on this criterion, a vast majority of MR cases in both the program areas were performed by skilled personnel—83.4% in Sylhet and 75% in Maulvibazar. However, the picture was not that much encouraging for the control area only half of the MR cases (54%) in Habigonj were attended by skilled personnel. Again, one-fourth (26.3%) of MR cases in the control area was performed by unskilled professional (Kabiraj/herbalist/ homeopath etc.) compared to only 6% in Sylhet and 9% in Maulvibazar- i.e. in the intervention area.

This is really unfortunate that after 3 decades of MR program in Bangladesh, a sizeable proportion of MR clients in the control area sought help from traditional practitioners/herbalists or untrained provider to terminate their pregnancies. This issue deserves due attention by the program managers and policy makers, so that women stop going to unskilled provider 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	Sylhet		Maulvibazar		Habigonj		Findings from End line survey MSCS N=700
	N	%	N	%	N	%	
Skilled Doctor	21	43.8	10	22.7	15	17.2	80.3
Nurse/Paramedic / FWV	19	39.6	23	52.3	42	48.3	81.1
Public facility/NGO clinic	5	10.4	7	15.9	7	8.0	0.3
Kabiraz /Hekim/Herbalist	2	4.2	2	4.5	21	24.1	0.7
Homeopath	0	0.0	0	0.0	1	1.1	-
Pharmacist /Village doctor	1	2.1	2	4.5	0	0.0	1.6
Other	0	0.0	0	0.0	1	1.1	-
Total	48	100.0	44	100.0	87	100.0	-

**Figure 4.7 Percentage distribution of the respondents according to the service providers of MR done for relatives/friends**



#### 4.7.8 Complications Faced after MR

Respondents were asked whether they know of any complications their friends/relatives have suffered because of MR. Out of 179 MR cases, 80 MR clients (44.7%) 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% in Sylhet to 48% in Maulvibazar, and to 36% in Habigonj. 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 might have under-reported the incidence of post

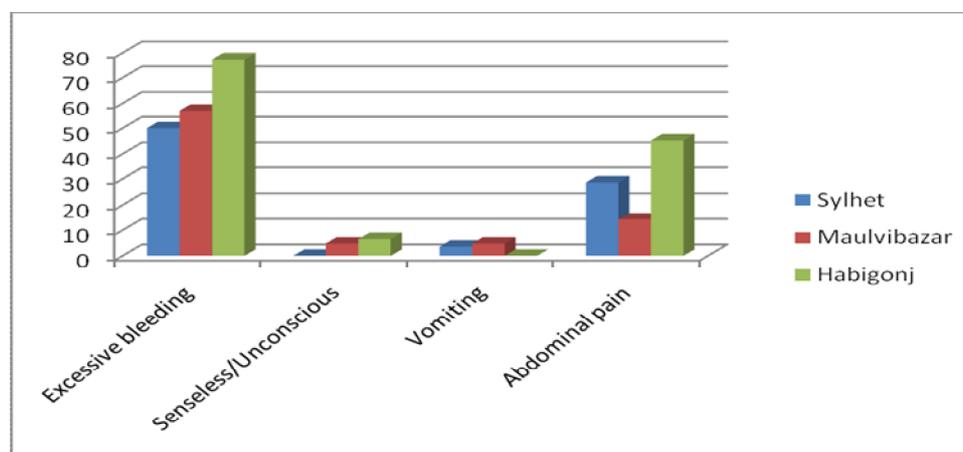
MR complications suffered by their friends/relatives; or the probability of recall lapse was higher in case of control area respondents compared to their counterparts in the intervention area.

The various complications mentioned by women from both intervention and control area include: ‘excessive bleeding’ (mentioned by around 50% of program and 78% of control group of respondents), ‘abdominal pain’ reported by less than one-fifth of women in the program area compared to 45% in 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	Sylhet		Maulvibazar		Habigonj	
	N=28	%	N=21	%	N=31	%
Excessive bleeding	14	50.0	12	57.1	24	77.4
Senseless/Unconscious	0	0.0	1	4.8	2	6.5
Vomiting	1	3.6	1	4.8	0	0.0
Abdominal pain/uterus infection	8	28.6	3	14.3	14	45.2

**Figure 4.8 Percentage distribution of the respondents according to their perception regarding complications faced due to unsafe MR**



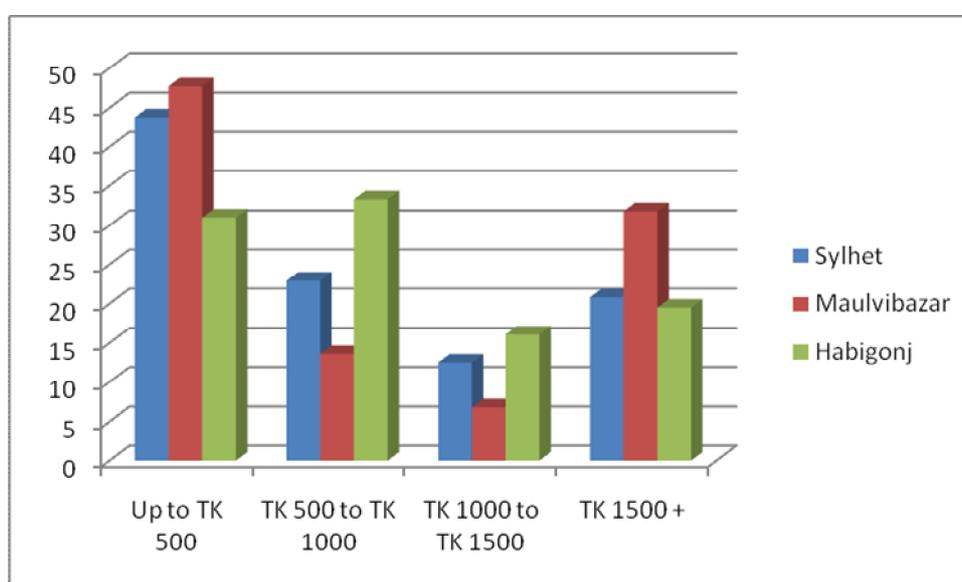
#### 4.7.9 Cost of MR

Respondents were asked about cost of having an MR procedure. In Sylhet, 43.8 percent mentioned that the cost of MR was within 500 taka, 22.9% stated that the cost was between Tk. 500 to Tk. 1000, while 20.8% said that the cost was more than Tk. 1500. There was only minor variation in the average cost of MR in the study areas. On an average, Tk. 1119 is required to conduct an MR in Sylhet, while the corresponding figure was Tk.1573 in Maulvibazar and Tk.1221 in Habigonj. The average cost of MR was lowest in Sylhet and highest in Maulvibazar, the cost in Habigonj was in between Sylhet and Maulvibazar.

**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	Sylhet		Maulvibazar		Habigonj	
	N	%	N	%	N	%
Up to TK 500	21	43.8	21	47.7	27	31.0
TK 500 to TK 1000	11	22.9	6	13.6	29	33.3
TK 1000 to TK 1500	6	12.5	3	6.8	14	16.1
TK 1500 +	10	20.8	14	31.8	17	19.5
Total	48	100.0	44	100.0	87	100.0
Average cost (taka)	1119		1573		1221	

**Figure 4.9 Percentage distribution of the respondents according to their perception about cost of MR**



#### 4.8 Results of focus group discussions

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

- i. Awareness generation and mobilization program among the community on safe timeline for MR, service providers for safe MR, VAW, and early marriage through focus group discussion, courtyard discussion/meetings, film shows, etc. were contributing to the results obtained.
- ii. The advocacy seminar organized with government agencies, religious leaders, health professionals and community leaders, to recognize, protect and fulfill women’s rights has 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. Interesting findings include: s.

- 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 focus group discussion 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 marginalized 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 in-egalitarian 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.

Because of prevailing socio-cultural reasons, rural Bangladesh is also characterized 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 use 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 kin. (Abdullah and Zeidenstein, 1980; Cain, 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, 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 Ellickson, 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" (Ellickson, 1975). 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. Menstrual regulation (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 experience 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 Habigonj—taking 100 from each

district. A brief description of socio-economic characteristics of the respondents is provided below.

### **Age**

In the survey area most (54% on average) of the male household heads are in the age group of 25 to 34 years (55% in Sylhet, 50% in Maulvibazar and 58% in Habigonj). There is some variation in the age group of 40-44 years, with 6% of the male heads in Sylhet, 8% in Maulvibazar and 14% in Habigonj. In addition, we observed major variations in the age group 50 years and over. Only 4 per cent of the household heads in Sylhet compared to 10 per cent in Maulvibazar belong to age group 50 years and above. In Habigonj, there was not even a single household belonging to the 50+ age group. The mean age of household heads was 34 years in Sylhet and Habigonj as against 36 years in Maulvibazar.

### **Education**

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 illiterates. The rate of illiteracy was the highest in Maulvibazar (69.7 per cent) and the lowest in Habigonj (18 per cent). One-fourth of the male household heads in Sylhet had primary level education with 1-5 years of schooling, compared to one-third of the household heads in Habigonj and only 10% in Maulvibazar.

In terms of literacy and education, the situation was worse in Maulvibazar. This trend of education was observed to be similar in case of secondary (6-9 class pass) and higher level of education as well. One-third (33.0%) of the household heads in Sylhet have completed at least six years of education compared to two-fifths (42.7%) in Habigonj. However, less than one-fifth (18.1%) of the household heads in of Maulvibazar had similar level of education.

### **Occupation**

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

The other occupational category shows a heterogeneous mix of work activities- from self-employment (9.3%), rickshaw/van pulling, transport work (5%) and agriculture/farming (47%). 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	Sylhet N=100	Maulvibazar N=100	Habigonj N=100	All N=300
<b>Age (in years)</b>				
15-19	0.0	1.0	0.0	0.3
20-24	12.0	6.0	3.0	7.0
25-29	23.0	24.0	32.0	26.3
30-34	32.0	26.0	26.0	28.0
35-39	17.0	14.0	23.0	18.0
40-44	6.0	8.0	14.0	9.3
45-49	6.0	11.0	2.0	6.3
50-54	3.0	5.0	0.0	2.7
55-59	1.0	4.0	0.0	1.7
60 and above	0.0	1.0	0.0	0.3
Mean Age of Household Heads	33.85	36.34	34.45	34.88
<b>Level of Education</b>				
Illiterate	25.3	69.7	18.0	38.7
Can read and write only	15.4	2.0	6.7	7.9
Primary (1-5 class pass)	26.4	10.1	32.6	22.6
Secondary (6-9 class pass)	23.1	10.1	28.1	20.1
Secondary completed or more (10 or more class pass)	9.9	8.1	14.6	10.8
<b>Occupation</b>				
Agriculture/Farming	1.0	3.0	10.0	4.7
Day labourer ( Agriculture)	-	5.0	2.0	2.3
Day labourer ( Non-Agriculture)	9.0	39.0	9.0	19.0
Small Business/Petty Trading	25.0	24.0	37.0	28.7
Business	7.0	5.0	4.0	5.3
Service/Salaried Job	10.0	5.0	23.0	12.7
Self employed	16.0	5.0	7.0	9.3
Rickshaw/ Van puller	21.0	1.0	2.0	8.0
Transport Worker	5.0	5.0	5.0	5.0
Handicraft	-	2.0	-	0.7
Sick/disabled	-	3.0	-	1.0
Unemployed (more than 14 years and not student)	-	1.0	-	0.3
Others	6.0	2.0	1.0	3.0
<b>Household Income</b>				
Average monthly income of the household head from main occupation	11091	8260	8258	9203
Average monthly income of other household members	1461	5315	1711	2829
Average monthly income of households from others sources	615	665	1610	963
Average monthly income from all sources	13167	14240	11579	12995
Per capita monthly income	3261	2832	2581	2891

## 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 belongs to the broad income group of Tk.7501-15000 per month. About a fifth of the household heads in Sylhet (22%) and Habigonj (20%) belong to the monthly income group of Tk. 7501-10000. The corresponding figure for Maulvibazar is only 14%. Similarly, a fourth of the households in Sylhet (26%) and Habigonj (27%) belong to the income group of Tk. 10001-15000, compared to 30% in Maulvibazar. Just over a tenth of the households in Sylhet (14%), Maulvibazar (15%) and Habigonj (11%) belong to the highest income group of above Tk. 20000 per month.

The data in Table 4.2 shows 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 5000 compared to 4% in Sylhet and 1% in Maulvibazar.

Overall, average monthly income of the household heads from all sources was Tk.12995 per month. However, mean monthly income of households in the intervention area was somewhat higher in the intervention area (Tk. 13167 in Sylhet and Tk.14240 in Maulvibazar) than that of the control area (Tk.11579).

Among the three districts, average per capita monthly income is highest in Sylhet, i.e. Tk. 3261, followed by Tk.2832 in Maulvibazar and the lowest of Tk.2531 in the control area in Habigonj.

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

Income of HH	Sylhet		Maulvibazar		Habigonj		All	
	n	%	n	%	n	%	n	%
Up to TK 2000	1	1.0	-	-	1	1.0	2	0.7
TK 2001-3000	-	-	-	-	1	1.0	1	0.3
TK 3001-5000	3	3.0	1	1.0	10	10.0	14	4.7
TK 5001-7500	22	22.0	14	14.0	20	20.0	56	18.7
TK 7501-10000	26	26.0	30	30.0	27	27.0	83	27.7
TK 10001-15000	23	23.0	25	25.0	25	25.0	73	24.3
TK 15001-20000	11	11.0	15	15.0	5	5.0	31	10.3
TK 20000+	14.0	14.0	15	15.0	11	11.0	40	13.3
Average monthly income	13167		14240		11579		12995	

### 5.3 Knowledge and use of Family Planning

The family planning program 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 shows that the extent of knowledge regarding family planning in the study area is universal (almost 100% 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% of the male-heads or their wives in the intervention area have ever used any FP method,; the corresponding figure for the control group respondents was a bit lower- around 65%. Again, a large majority of the make-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 area. The following section provides with 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 of the household heads in program area mentioned about MR as the way of pregnancy termination, the corresponding figure was 54 percent in Habigonj (Table 5.3). Again, about a quarter (16%) of male head?? in Habigonj compared to only 8% in Sylhet and 10% in Maulvibazar mentioned abortion to get rid of unwanted pregnancy, which has enormous health risk for women. Surprisingly, more than two-fifths (45%) of the male heads in Habigonj compared to 12 percent in Sylhet and 14 percent in Maulvibazar said that they would seek advice from Hekim/Kabiraj/Herbalist for the purpose. Again, about a tenth of the males in Sylhet (13%) and Maulvibazar (13%) and a quarter (27%) in Habigonj said that they would opt for homeopathy medicine to get rid of unwanted pregnancy.

**Table 5.3 Percentage Distribution of Household Heads According to their Perceptions on Management of Unwanted Pregnancy**

Indicators	Sylhet	Maulvibazar	Habigonj
MR	81.0	78.0	54.0
Abortion	8.0	10.0	6.0
Taking advice from doctor	95.0	89.0	84.0
Take herbal medicine	12.0	14.0	45.0
DNC	4.0	10.0	7.0
Homeopathy treatment	5.0	7.0	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 summarized 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 Sylhet (98%) and Maulvibazar (100%) have heard of MR., compared to 74% in Habigonj. This variation in awareness level between intervention and control area may be attributed to the advocacy and awareness raising activities of FPAB and MSCS.

## 5.6 Timeline for MR

The data shows that more than four-fifths of the male heads in the intervention area (86.7% in Sylhet and 89 % in Maulvibazar) 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%) 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**

Ever heard of MR	Sylhet	Maulvibazar	Habigonj
Yes	98.0	100.0	74.0
No	2.0	0.0	26.0
N	100.0	100.0	100.0

Percentage Distribution of Male Heads According to their Knowledge Regarding the Timeline of MR						
Indicators	Sylhet		Maulvibazar		Habigonj	
	N=98	%	N=100	%	N=74	%
Correct knowledge on the timeline	85	86.7	89	89.0	38	51.4
Incorrect knowledge on the timeline	13	13.3	11	11.0	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 shows that 95% of the respondents in the intervention area compared to 70% in the control area know about service providers of MR in their locality. In Sylhet, 69 percent of respondents mentioned FPAB, other responses included district hospital (75.5%), FWC (55.3%), UHC (51.1%), private clinic (5.3%), MCWC (73.4%) and other NGO clinics (20.2%). In Maulvibazar, the pattern was more or less similar where 78 percent of respondents stated about Marie Stopes Clinic. In Habigonj, fewer proportion of respondents mentioned about public facility/skilled personnel (46% to 59%), while much higher proportion mentioned about traditional practitioners like kabiraj/hekim (25.0%) or homeopathy medicine (21.2%)

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

Knowledge of availability of service provider	Sylhet		Maulvibazar		Habigonj	
	N=98	%	N=100	%	N=74	%
Yes	94	95.9	95	95.0	52	70.3
No	4	4.1	5	5.0	22	29.7

Service Provider for MR	Sylhet (N=94)	Maulvibazar (N=95)	Habigonj (N=52)
District hospital	75.5	66.3	55.8
MCWC	73.4	64.2	46.2
FWC	55.3	51.6	59.6
UHC	51.1	69.5	48.1
Marie Stopes Clinic	38.3	77.9	-
Other NGO Clinics	20.2	9.5	1.9
Private Clinic	5.3	4.2	38.5
Medicine Seller	-	1.1	15.4
Kabiraj/Hekim	6.4	10.5	25.0
Homeopath	2.1	2.1	21.2
Doctor/nurse	22.3	4.2	3.8
Village doctor	-	6.3	11.5
TBA	2.1	-	15.4
FPAB	69.1	-	-

The intervention raised the knowledge of the respondents about the availability of the MR service provider in their locality, all else equal”.<sup>9</sup>

## 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 of male-heads in Habigonj (27%) said that MR can be used as family planning, which is a wrong perception regarding MR. Less than one-tenth of the respondents in intervention area mentioned MR as a method of family planning. A significant proportion of respondents also consider MR as a sin, “an act against the will of God”, such proportions range from 15.3% in Sylhet to 10 % in Maulvibazar, and as high as 32.4% in Habigonj.

<sup>9</sup>See annex 1

**Table 5.6 Percentage Distribution of Male Heads According to their Opinion Regarding MR Issue : by Area**

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

### 5.9 Whether Male-heads consider MR as a right of Women?

Respondents were asked whether they consider MR as a right of women to get rid of unwanted pregnancy. The findings as depicted in Table 5.7 show that more than three-fifths of the male-heads in Maulvibazar (88%) and three-fourths (73%) in Sylhet consider MR as a women's right to terminate unwanted pregnancy. By contrast, only one-third (38%) 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 attitudes towards termination of unwanted pregnancy through MR. The male-heads in the control area are found to be much more conservative in this regard.

Respondents were also asked about their opinion regarding abortion. Around 10% of the respondents were in support of abortion in the intervention area 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 area (42%) were in support of abortion. Again, one-third of the male-heads in the intervention area compared to 42% in the control area consider abortion as a 'sin' or an act against religion.

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

Indicators	Sylhet	Maulvibazar	Habigonj
Consider MR as a right	73.0	88.0	38.0
Do not consider MR as a right	27.0	12.0	62.0

**Table 5.8 Percentage Distribution of Male Heads According to their Opinion Regarding Abortion: by Area**

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

## CHAPTER 6

### EXPERIENCE OF MR CLIENTS: BARRIERS IN 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% of the MR clients were aged between 21 to 30 years, while 6% were aged between 15 to 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 Sylhet (39%) as compared to Maulvibazar (23%) and Habigonj (17%).

**Table 6.1 Percentage Distribution of MR Clients According to their Background Characteristics: by Area**

Characteristics	Name of District						All N=300	
	Sylhet N=100		Maulvibazar N=100		Habigonj N=100		n	%
	n	%	n	%	N	%		
<b>Age (in years)</b>								
15-20 yrs	10	10.0	3	3.0	6	6.0	19	6.3
21-25 yrs	24	24.0	23	23.0	22	22.0	69	23.0
26-30 yrs	31	31.0	34	34.0	31	31.0	96	32.0
31-35 yrs	20	20.0	21	21.0	23	23.0	64	21.3
36-40 yrs	11	11.0	13	13.0	18	18.0	42	14.0
41-45 yrs	4	4.0	6	6.0	0	0.0	10	3.3
45+	0	0.0	0	0.0	0	0.0	0	0.0
Mean Age	28.83		30.10		29.56		29.50	
Minimum	17		18		17		17	
Maximum	45		45		40		45	
<b>Level of Education ( Years of Schooling)</b>								
00	39	39.0	23	23.0	17	17.0	79	26.3
Can read and write only	0	0.0	9	9.0	1	1.0	10	3.3
1-5	38	38.0	25	25.0	33	33.0	96	32.0
6-9	22	22.0	27	27.0	40	40.0	89	29.7

Characteristics	Name of District						All N=300	
	Sylhet N=100		Maulvibazar N=100		Habigonj N=100			
	n	%	n	%	N	%	n	%
<b>Age (in years)</b>								
10 or more	1	1.0	16	16.0	9	9.0	26	8.7
Minimum	0		0		0		0	
Maximum	12		16		12		16	

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**

Characteristics	Sylhet	Maulvibazar	Habigonj	All
Average no. of Children born alive	2.68	2.60	3.40	2.89
Minimum	0	0	0	0
Maximum	9	11	13	13
Average no. of Children who are dead	0.31	0.18	0.42	0.30
Minimum	0	0	0	0
Maximum	4	2	3	4
Mean no. of Children currently living	2.37	2.42	2.98	2.59
Minimum	0	0	0	0
Maximum	7	10	11	11
Age of the youngest child (Years)	3.90	5.28	4.02	4.38
Minimum	0	0	1	0
Maximum	18	16	15	18

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

No. of children dead	Sylhet		Maulvibazar		Habigonj		Total	
	N	%	N	%	N	%	N	%
0	80	80.0	85	85.0	71	71.0	236	78.7
1	13	13.0	12	12.0	19	19.0	44	14.7
2	4	4.0	3	3.0	7	7.0	14	4.7
3	2	2.0	0	0.0	3	3.0	5	1.7
4	1	1.0	0	0.0	0	0.0	1	0.3
Total	100	100.0	100	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 area.

**Table 6.4 Percentage Distribution of MR clients by their Perceptions on Advantages of FP Methods (multiple responses): by Area**

Advantages of FP methods	Sylhet	Maulvibazar	Habigonj	All
Solvency of the family increases	96.0	92.0	57.0	81.7
Easier to provide children with education	57.0	82.0	92.0	77.0
Children have better health and nutrition	84.0	35.0	81.0	66.7
Mother's health and nutrition is ensured	63.0	64.0	59.0	62.0
Others	-	4.0	-	1.3

The perception of MR clients about disadvantages/ demerits of FP methods are outlined in Table 6.5. It appears that a large proportion of women in intervention and control area believed that FP methods had side effects. However, 23% of respondents in Habigonj 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**

Disadvantages of FP methods	Sylhet	Maulvibazar	Habigonj	All
Side effects	100.0	96.0	69.0	88.3
Risk of infertility	78.0	26.0	41.0	48.3
Husband does not want	45.0	37.0	35.0	39.0
No demerits	-	1.0	23.0	8.0
Others	8.0	14.0	-	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 Azol/withdrawal was considerably lower in control area as compared to intervention areas (emergency pill- intervention area: 26-32%, control area: 2%).

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

Knowledge of Methods	% known			
	Sylhet	Maulvibazar	Habigonj	All
Pill	100.0	99.0	100.0	99.7

Emergency pill	26.0	32.0	2.0	20.0
IUD/Copper T	75.0	99.0	83.0	85.7
Injection/Depo	100.0	100.0	96.0	98.7
Condom	99.0	100.0	97.0	98.7
Implant/ Norplant	91.0	98.0	83.0	90.7
Safe period	67.0	82.0	44.0	64.3
<i>Azol</i>	54.0	55.0	27.0	45.3
Ligation/Tubectomy	99.0	100.0	88.0	95.7
Vasectomy/NSV	67.0	97.0	82.0	82.0
Other	0.0	0.0	25.0	1.7

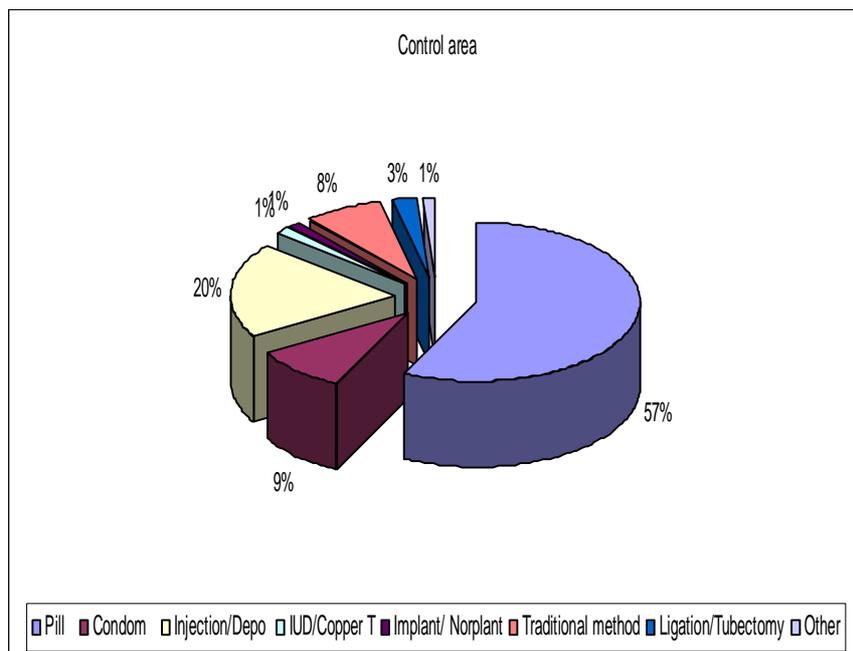
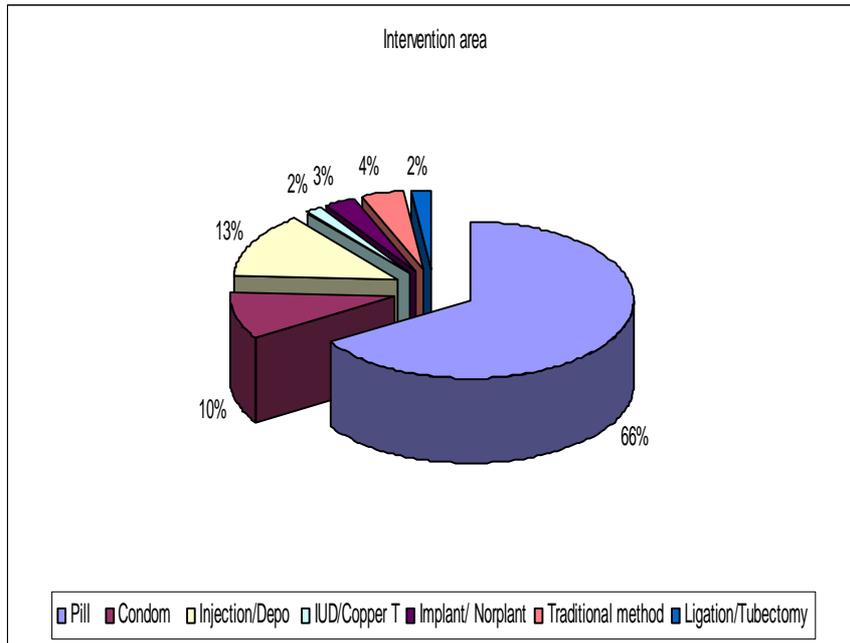
The MR client was asked whether she or her husband is currently using any contraceptive method (at the time of the survey). It was evident that 85% (165/200) MR clients or their husbands were current users of Family Planning (FP) method in the intervention area, while the proportion was 77% (77/100) in control area.. Among those who used any FP method, vast majority used pill in both the intervention and control areas (Figure 6.1).

As in the household survey, however, the intervention did not raise the number of FP method users, all else equal.<sup>10</sup>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 largest to smallest effect respectively.

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<sup>10</sup>See annex 1.

**Figure 6.1 Percentage distribution of the respondents according to the type of FP methods they are currently using by area**



### 6.3. Knowledge about MR

MR clients were asked about the reasons and advantages of doing MR. More than 80% respondents in both the intervention area and 63% in the control area stated that unwanted pregnancy should be terminated through MR. Though 21% respondents in

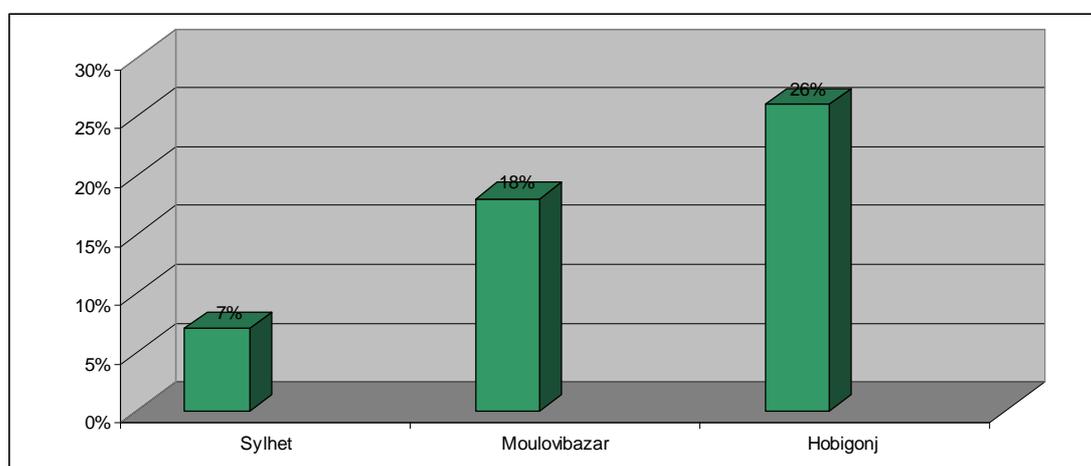
Maulvibazar considered MR as a sin or against religion, the proportion was considerably lower in Sylhet and Habigonj (Table 6.6).

**Table 6.6 Percentage Distribution of MR Clients According to their Perceptions on Reasons/Advantages/Disadvantages of MR: by Area**

Opinion regarding MR	Sylhet		Maulvibazar		Habigonj	
	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	63	63.0
Pregnancy at a very late stage of life should be terminated through MR	29	29.0	28	28.0	51	51.0
Pregnancy outside wedlock should be terminated through MR	57	57.0	44	44.0	58	58.0
Unwanted pregnancy should be terminated through MR	89	89.0	81	81.0	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	36	36.0
Terminating pregnancy through MR is a sin/against religion	2	2.0	21	21.0	1	1.0
MR can be used as family planning	0	0.0	2	2.0	0	0.0
Others	1	1.0	2	2.0	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% of the respondents in Habigonj had incorrect knowledge on the timeline of safe MR, while the proportion was 7% in Sylhet and 18% in Maulvibazar (Figure 6.2).

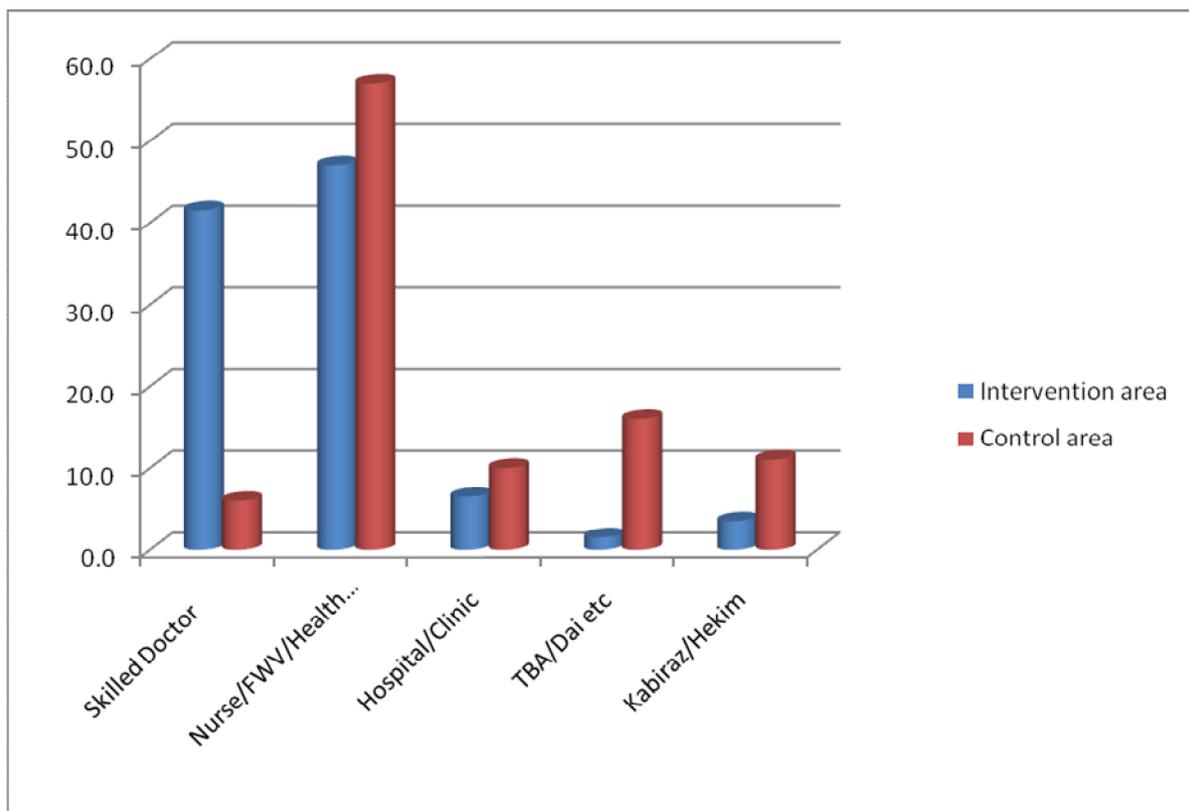
**Figure 6.2 Percentage Distribution of MR Clients having incorrect knowledge about the timeline of safe MR**



#### 6.4. Assistance for MR

In the baseline survey carried out by Marie Stopes, 40.8% respondents stated that their MR was assisted by doctor, 21.9% by nurse/paramedic, 6.4% by health worker, 5.6% by kabiraj and 14.6% by TBA. The present study found that in the intervention areas, 41.5% of the MR was performed by skilled doctors as opposed to 6% in control area. However, MR assisted by nurse/paramedic/FWV and hospital/NGO clinic was slightly higher in control area (42.5% in the intervention area, 48% in control area). The MR assisted by TBA/dai and kabiraj/hekim were also considerably high in control area (10% and 11% respectively) (Figure 6.3). On the whole, 90% of the MR cases in the areas were performed by trained/skilled provider, the corresponding figure was 64% in the control area. About a quarter of the MR cases (27%) in control area was performed by traditional unskilled providers like *hekim/kabiraj* (11%), *TBA/dai* (10%), medicine seller (6%).

**Figure 6.3 Percentage Distribution of MR Clients by type of Provider Who Performed the Procedure: by Area**



In the intervention area, a significantly larger part 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 and in the control area.<sup>11</sup>

**Duration of pregnancy when MR was performed:** Safe MR requires maintaining safe timeline. Among the MR clients in intervention areas, 59% reported that MR was done within 8 weeks from the LMP which was 9.9% in the baseline survey. This is a good indication that the interventions of the project have been highly successful. However, 5.5% respondents in intervention areas told that their MR was performed more than 10 weeks after LMP. In control area, 29% 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 6.7).

**Table 6.7 Percentage Distribution of MR Clients by Duration of Pregnancy (time line) when the MR was Performed: by Area**

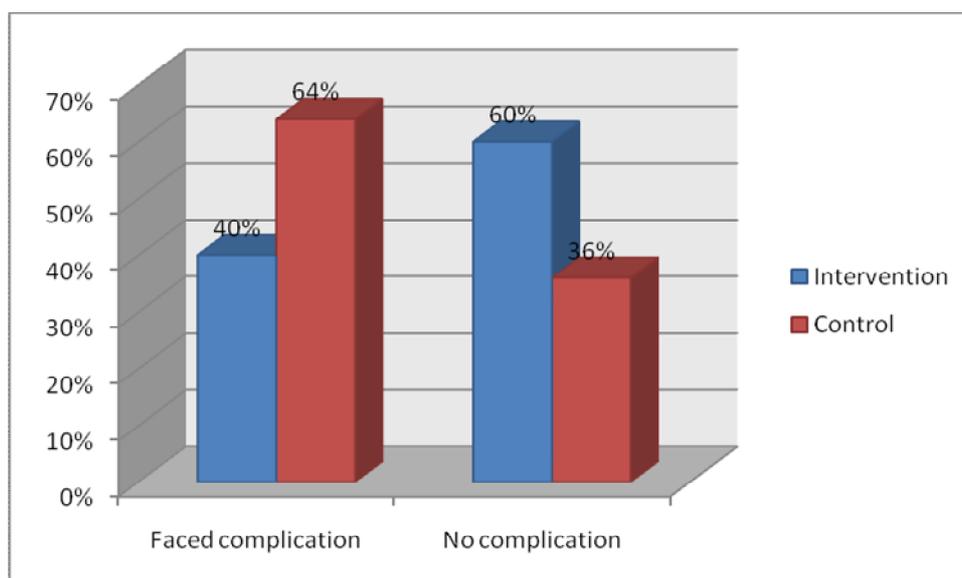
Indicators	Sylhet		Maulvibazar		Habigonj	
	n	%	N	%	N	%
1-8 Weeks	61	61.0	57	57.0	58	58.0
9-10 Weeks	32	32.0	39	39.0	13	13.0
11-12 Weeks	6	6.0	2	2.0	21	21.0
12+ Weeks	1	1.0	2	2.0	8	8.0
N	100	100.0	100	100.0	100	100.0
Minimum	2		3		6	
Maximum	16		14		20	
Mean	8.27		8.25		9.41	

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% MR clients faced complications after MR (35% in Sylhet and 45% in Maulvibazar), and the remaining 60% did not face any post MR complication. However, the proportion of respondents who faced complications after MR was markedly higher in control area (64%) than intervention areas (Figure 6.4).

<sup>11</sup>See Annex 1.

**Figure 6.4 Percentage Distribution of MR Clients Who Faced Complications after MR: by 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%) 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 6.8 Percentage Distribution of MR Clients by type of Complications faced after Having the MR: by Area**

Type of Post-MR Complications	Sylhet		Maulvibazar		Habigonj	
	N	%	n	%	n	%
Excessive bleeding	10	28.6	18	40.0	48	75.0
Unconscious	0	0.0	2	4.4	4	6.3
Fever	3	8.6	0	0.0	10	15.6
Vomiting/headache	1	2.9	7	15.6	6	9.4
Abdominal pain	21	60.0	10	22.2	28	43.8
Uterus infection	1	2.9	3	6.7	23	35.9
Others	4	11.4	5	11.1	4	6.3
Total	35		45		64	

It was found that 100% of the respondents in Sylhet started using FP methods after MR, while in Habigonj, 91% respondents started using FP methods after MR. The proportion was 86% 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 Sylhet than two other districts (Table 6.9).

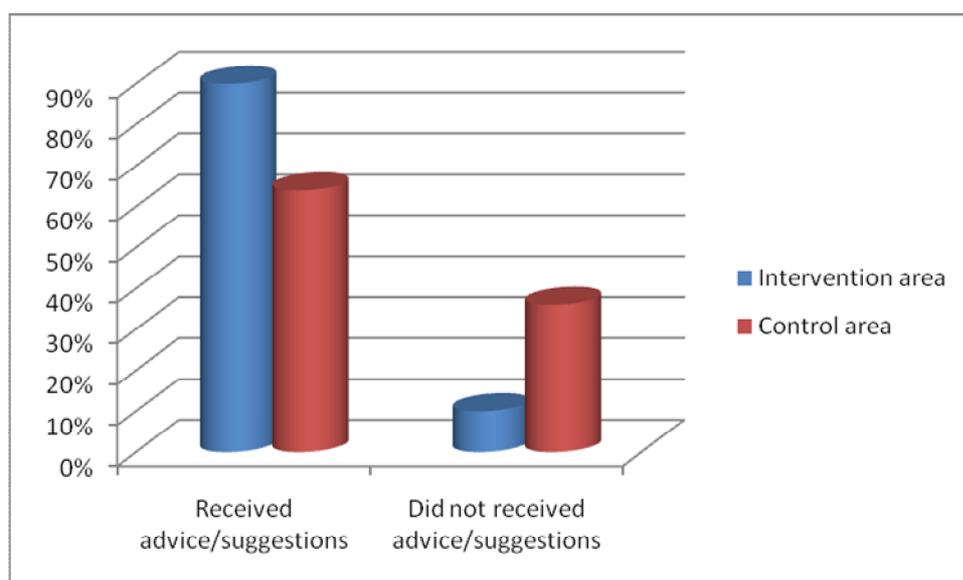
**Table 6.9 Average number of MR done**

District	Average number of MR
Sylhet	1.17
Maulvibazar	1.38
Habigonj	1.33
All	1.28

**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 program. 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%) received advice before having the MR. In Habigonj, 36% clients reported that they did not receive any suggestion before MR (Figure 6.5).

**Figure 6.5 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 client 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 6.10 Percentage Distribution of MR Clients by type of Information Healthcare Provider Sought from her before MR**

Type of information sought	Sylhet N=		Maulvibazar N=		Habigonj N=			
	n	%	n	%	n	%		
Last date of menstrual cycle	74	74.0	80	80.0	63	63.0		
Whether first pregnancy	87	87.0	47	47.0	48	48.0		
Age of last child	96	96.0	81	81.0	78	78.0		
Whether any C-section done	66	66.0	48	48.0	31	31.0		
Whether permission taken from guardians	19	19.0	25	25.0	56	56.0		
Knowledge related to MR	21	21.0	20	20.0	8	8.0		
Whether used any family planning method before	30	30.0	22	22.0	7	7.0		
Others	-	-	1	1.0	-	-	1	0.3

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% vs 61%). 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% vs 64%) (Table 6.11).

**Table 6.11 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
Sylhet	86%	98%
Maulvibazar	84%	92%
Habigonj	61%	64%
All	77%	84.7%

The study also explored the type of advice the MR clients received from the provider after the MR procedure was complete. The findings are presented in Table 6.12. It shows that the proportion of MR clients who received different advises from the provider were markedly higher in intervention areas than 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 6.12 Percentage Distribution of MR Clients by Type of Advice Received from the Provider: by Area**

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

It was found that 33% 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 6.13).

**Table 6.13 Percentage Distribution of MR Clients who faced Problems/Barriers from Family/Society for doing MR: by Area**

Whether faced any barriers from family/society for doing MR	Sylhet		Maulvibazar		Habigonj	
	N	%	n	%	n	%
Yes	20	20.0	15	15.0	33	33.0
No	80	80.0	85	85.0	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 6.14).

**Table 6.14 First Major Problems faced after Coming to the Facility**

Problems faced	Sylhet		Maulvibazar		Habigonj		All	
	n	%	n	%	N	%	N	%
Unclean Campus	23	23.5	20	25.0	26	29.5	69	25.9
Long waiting	56	57.1	30	37.5	17	19.3	103	38.7
Unfriendly behaviour	9	9.2	8	10.0	17	19.3	34	12.8
Inserted IUD/Copper	1	1.0	0	0.0	1	1.1	2	0.8
No resting place	8	8.2	31	38.8	28	31.8	67	25.2
Had to spend money	18	18.4	11	13.8	27	30.7	56	21.1
No counseling	44	44.9	9	11.3	12	13.6	65	24.4
Lack of provider	14	14.3	6	7.5	2	2.3	22	8.3
No privacy	0	0.0	21	26.3	1	1.1	22	8.3
Lack of equipment	2	2.0	0	0.0	2	2.3	4	1.5
Lack of medicine	9	9.2	1	1.3	1	1.1	11	4.1
Poor quality of services	25	25.5	3	3.8	0	0.0	28	10.5
Total	N=98	100.0	N=80	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 6.15.

**Table 6.15 Suggestions to Overcome the Barriers**

Suggestions	Sylhet		Maulvibazar		Habigonj		All	
	n	%	n	%	n	%	N	%
Ensure cleanliness	19	19.4	20	24.4	22	25.3	61	22.8
Proper counseling	27	27.6	8	9.8	12	13.8	47	17.6
Separate waiting room	11	11.2	31	37.8	28	32.2	70	26.2
Better quality of service	34	34.7	6	7.3	7	8.0	47	17.6
Friendly behaviour	5	5.1	11	13.4	15	17.2	31	11.6
Timely service	39	39.8	17	20.7	11	12.6	67	25.1
Maintain privacy	13	13.3	10	12.2	26	29.9	49	18.4
Reduce cost	42	42.9	18	22.0	2	2.3	62	23.2
Modern equipment	0	0.0	19	23.2	0	0.0	19	7.1
Free medicine	4	4.1	0	0.0	1	1.1	5	1.9
Others	14	14.3	4	4.9	2	2.3	20	7.5
Total	98	100.0	82	100.0	87	100.0	267	100.0

Respondents were asked about their cost of MR. The findings from baseline suggested that on an average they spent 1265.75 taka 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 877 Taka for MR in Maulvibazar, 961 Taka in Sylhet, and 1345 Taka in Habigonj

(Table 6.16). However, the cost figures may be an underestimate, since costs incurred in connection with transport/travel and food are not included.

**Table 6.16 Percentage Distribution of MR Clients by Amount of Cost Incurred for MR: by Area**

	Sylhet		Maulvibazar		Hobigonj		Total	
	N	%	N	%	N	%	N	%
Up to 300	40	40.0	31	31.0	17	17.0	88	29.3
301-400	7	7.0	13	13.0	4	4.0	24	8.0
401-500	19	19.0	12	12.0	12	12.0	43	14.3
501-750	4	4.0	12	12.0	22	22.0	38	12.7
751-1000	10	10.0	10	10.0	12	12.0	32	10.7
1001-1250	0	0.0	1	1.0	7	7.0	8	2.7
1251-1500	3	3.0	5	5.0	4	4.0	12	4.0
1500+	17	17.0	16	16.0	22	22.0	55	18.3
Total	100	100.0	100	100.0	100	100.0	300	100.0
Mean	961		877		1345		1061	
Minimum	0		0		50		0	
Maximum	5000		5000		12000		12000	

The cost incurred by MR clients by type of provider is presented in Table 6.17. 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 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 area. 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 area are significantly lower (99% confidence interval) than in the control area.<sup>12</sup> This may be partly explained by the fact that due to capacity building and awareness raising activities 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 area have been exposed to the training and advocacy programs 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.

<sup>12</sup>Annex 1 provide details on the statistical analysis.

**Table 6.17 Percentage Distribution of MR Clients by type of Provider and Average Amount of Cost Incurred: by Area**

Type of Provider		Sylhet	Maulvibazar	Hobigonj	Overall
Qualified Doctor	Mean	1436	1526	3523	1606
	Minimum	0	300	480	0
	Maximum	5000	4000	10000	10000
	N	54	29	6	89
Nurse/Paramedic	Mean	415	766	1470	914
	Minimum	0	0	200	0
	Maximum	1500	5000	12000	12000
	N	40	45	48	133
FWV	Mean	367	335	1035	643
	Minimum	300	200	200	200
	Maximum	500	500	5500	5500
	N	3	10	10	23
Trained Health Worker	Mean	260	550	589	553
	Minimum	260	0	150	0
	Maximum	260	1300	2000	2000
	N	1	8	9	18
TBA	Mean	.	.	678	678
	Minimum	.	.	200	200
	Maximum	.	.	2200	2200
	N	0	0	10	10
Kabiraj/Herbalist	Mean	325	140	1695	1111
	Minimum	150	0	150	0
	Maximum	500	200	6000	6000
	N	2	5	11	18
Pharmacist/ Village Doctor	Mean	.	183	292	256
	Minimum	.	100	50	50
	Maximum	.	350	700	700
	N	0	3	6	9
Total	Mean	961	877	1345	1061
	Minimum	0	0	50	0
	Maximum	5000	5000	12000	12000
	N	100	100	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 was carried out to assess the impact of the EKN supported interventions on MR performance in terms of:

- Knowledge on timelines and appropriate service provider for MR
- Quality of services, including pre- and post-counseling
- Utilisation of services,

The study was carried out in two intervention (Sylhet and Maulvibazar) and one control (Habiganj) areas. The study sample included 1200 respondents- 600 women respondents aged 15-49 years, 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 1.their knowledge on family planning (FP) methods, 2. current use of FP methods, 3. the timeline for safe MR and 4. service providers for MR.

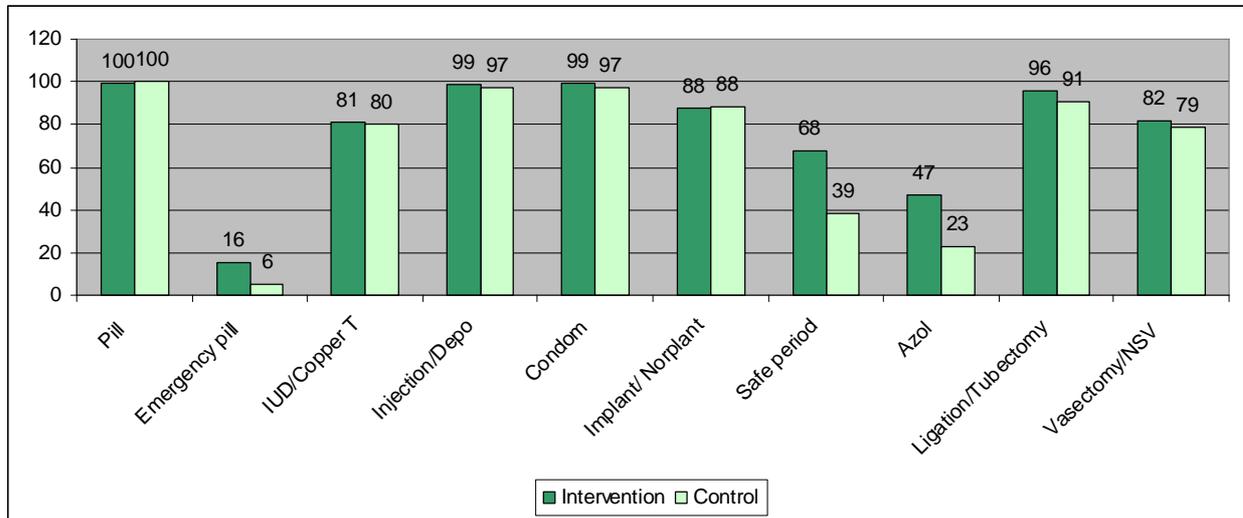
#### 7.2 Knowledge

##### Family Planning Methods

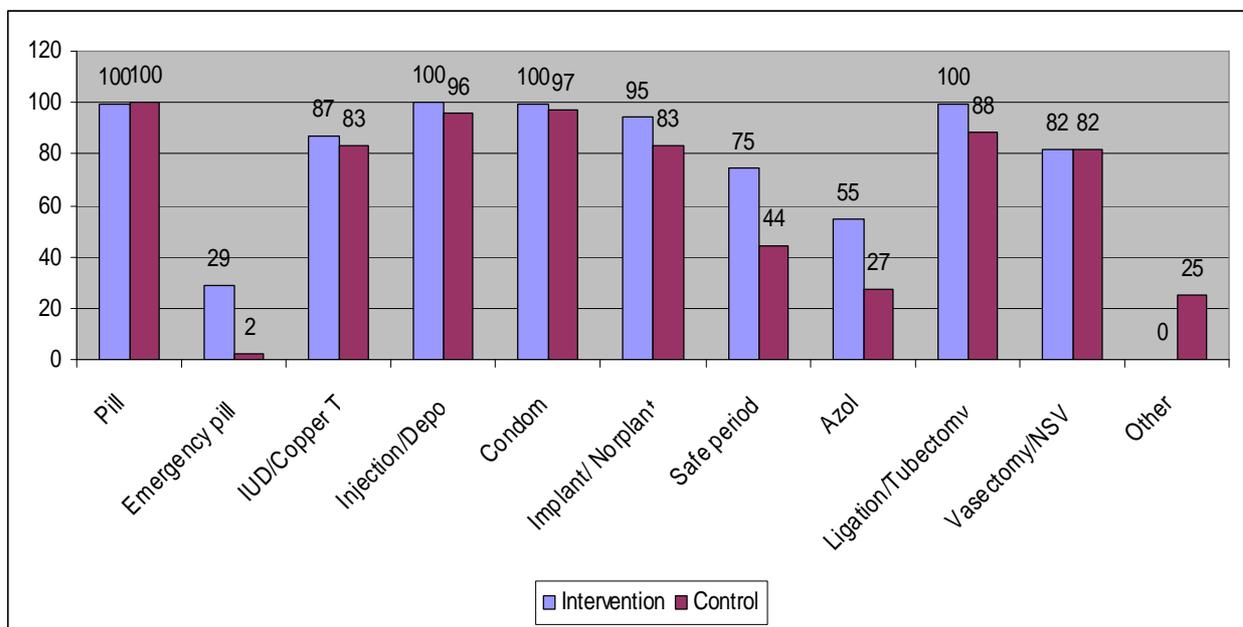
The women and the MR clients were asked whether they have heard about different methods of family planning. Little variation was found among women and MR clients about their knowledge on pill, IUD/Copper T, injection, condom and some other FP methods by intervention and control areas. However, the women and the MR clients in intervention

areas were more aware of emergency pill, *azol*/withdrawal and safe period as compared to control area (Figure 7.2 and 7.3).

**Figure 7.1** Percentage distribution of the women respondents who have knowledge about different FP methods by area



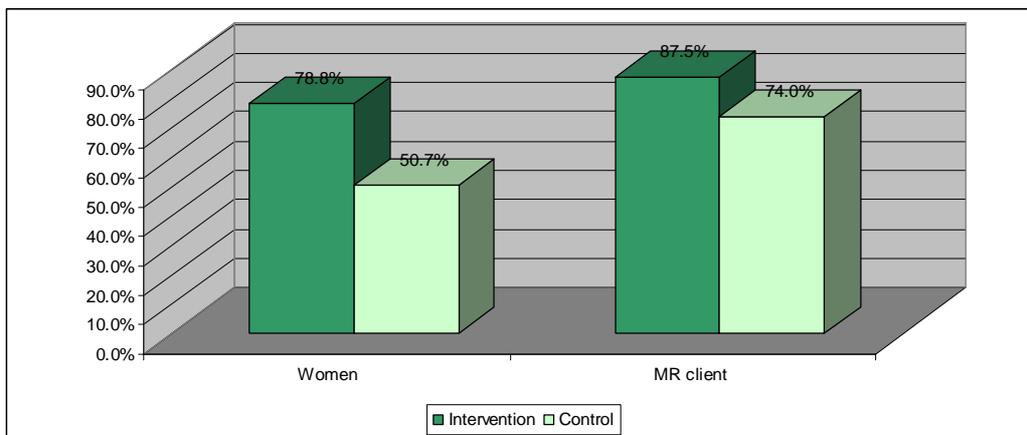
**Figure 7.2** Percentage distribution of MR clients who know about different types of FP methods



## Timeline for MR

Knowledge about timeline of MR is crucial for safe MR. The present study also assessed the knowledge of women and MR clients based on their awareness on this timeline of MR. It was found that 51% of women and 74% 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% and 88% respectively, Figure 7.4).

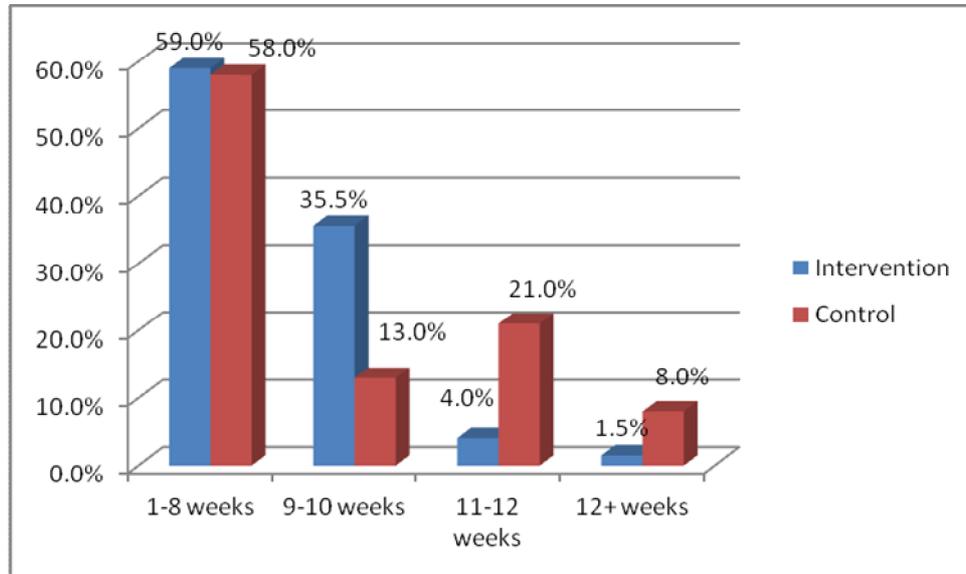
**Figure 7.3** Percentage distribution of the respondents (women and MR clients) having correct knowledge on the timeline of safe MR in intervention and control areas



The 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 behavior.<sup>13</sup>

<sup>13</sup>See annex 1

**Figure 7.4 Percentage distribution of the MR Clients according to the time line when they had the MR performed**

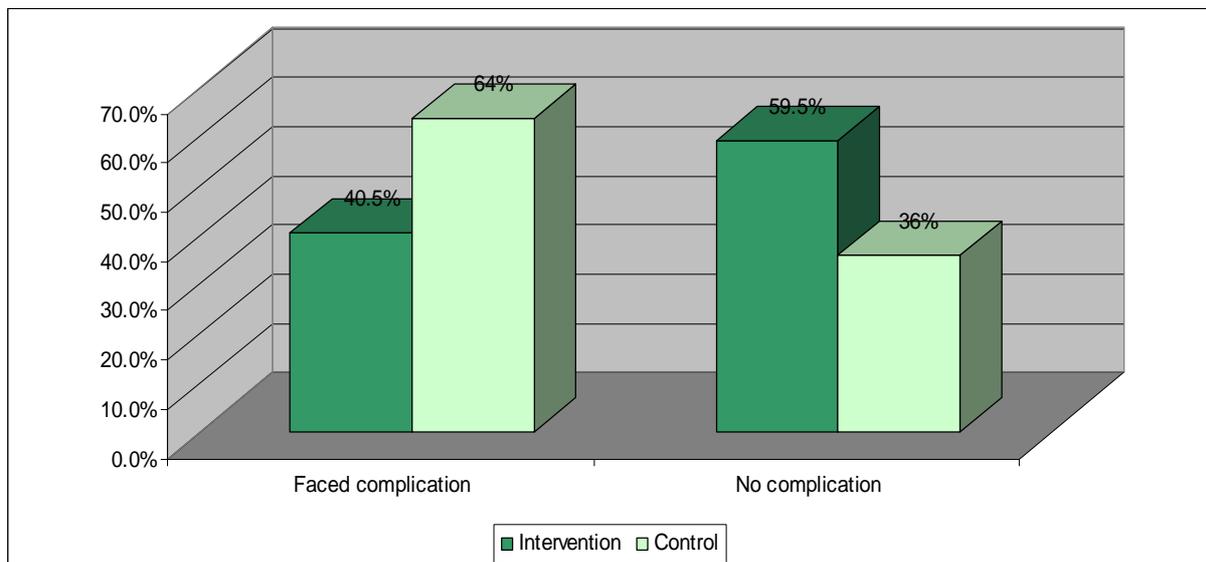


### 7.3 Quality of care

#### 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).

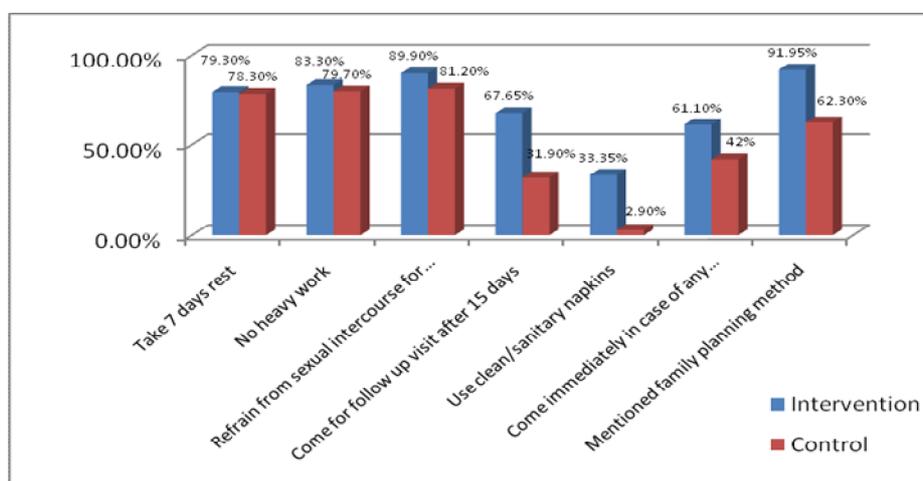
**Figure 7.5 Percentage distribution of MR clients who faced complications after MR by area**



Complications occurred more frequently in the control area and the difference is statistically significant. Clients in the intervention area also received more frequently suggestions 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 nor in the control area.<sup>14</sup>

### Post-MR counseling

**Figure 7.6** Percentage distribution of MR clients who received suggestion from provider after MR performed



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

Whether faced any barriers from family/society for doing MR	Sylhet		Maulvibazar		Hobigonj	
	N	%	N	%	N	%
Yes	20	20.0	15	15.0	33	33.0

<sup>14</sup>Annex 1 provides details on the statistical analysis.

No	80	80.0	85	85.0	67	67.0
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#### 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 utilization. In this paragraph, the research questions (chapter 2) will be answered succinctly. Where possible, the achievements will be explained by identifying some success factors and lessons.

##### Awareness and knowledge

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

Regarding social awareness increasing (RQ 2) 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 area. and posit?

##### Services utilization

MR services utilization was not higher in the intervention area than in the control area (RQ4), but regarding post-MR counseling there was a difference: it was carried out more frequently in the intervention area and more often it include 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 an skilled provider was significantly higher in the intervention area than in the control area.

##### Quality of care

Clients in the intervention area faced less complication than clients in the control area, although there is still room for improvement in the intervention area. The quality of pre- and post- counseling was also better in the intervention area (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 in improving overall knowledge and changing attitude towards safe MR. However, there still remains scope to enhance the knowledge on time line of MR and to improve quality of care.

## References

- Akhter H, Abortion in Bangladesh, in: Sachdev P, ed., *International Handbook on Abortion*, New York: Greenwood Press, 1988.
- Akhter H, Current status and access to abortion: the Bangladesh experience, in: Klugman B and Budlender D, eds., *Advocating for Abortion Access: Eleven Country Studies*, Johannesburg, South Africa: Women's Health Project, School of Public Health, University of the Witwatersrand, 2001.
- Akhter H, Midlevel provider in menstrual regulation, Bangladesh experience, paper presented at the conference Expanding Access: Advancing the Roles of Midlevel Providers in Menstrual Regulation and Elective Abortion Care, South Africa, Dec. 2-6, 2001.
- Caldwell B et al., Pregnancy termination in a rural sub district of Bangladesh: a micro study, *International Family Planning Perspectives*, 1999, 25(1):34–37 & 43.
- Chowdhury S N and Moni D, A situation analysis of the menstrual regulation programme in Bangladesh, *Reproductive Health Matters*, 2004, 12 (24 Suppl): 95–104.
- Da Vanzo J and Rahman M, Safe vs. unsafe pregnancy termination in Matlab Bangladesh: trends and correlates, paper presented at the annual meeting of the Population Association of America, San Francisco, CA, USA, May 3–5, 2012.
- Department of Economic and Social Affairs, United Nations, World Urbanization Prospects, the 2011 revision, no date, <<http://esa.un.org/unpd/wup/CD-ROM/Urban-Rural-Population.htm>>, accessed Apr. 10, 2012.
- Fauveau V and Blanchet T, Deaths from injuries, and induced abortion among rural Bangladeshi women, *Social Science and Medicine*, 1989, 29 (9): 1121–1127.
- Government of the People's Republic of Bangladesh, Memo No. 5-14/MCH-FP/Trg.79, Dhaka, Bangladesh: Population Control and Family Planning Division, 1979.
- Hashemi A, Rashid S and Rashid M, Where do women go and why? Understanding the barriers to safe MR services in Bangladesh, unpublished manuscript, Dhaka, Bangladesh: James P. Grant School of Public Health, BRAC University, 2012.
- Hossain A et al., Menstrual regulation, unsafe abortion and maternal health in Bangladesh, *In Brief*, New York: Guttmacher Institute, 2012, No. 3.
- Hossain A, Kamal H and Akhter R, *Septic Abortion: Results From an Anthropological Study* Dhaka, Bangladesh: Bangladesh Association for Prevention of Septic Abortion (BAPSA), 1997.
- Hossain A, Performance statistics, *Health and Rights*, 2011, 4(4): 4.  
Institute for Health Metrics and Evaluation (IHME), Maternal mortality estimates and MDG 5 attainment by country, 1990–2011, Sept. 23, 2011  
<<http://www.healthmetricsandevaluation.org/ghdx/record/maternal-mortality-estimates-and-mdg-5-attainment-country-1990-2011>>, accessed Apr. 21, 2012.

- Johnston H *et al.*, Health system costs of menstrual regulation and care for abortion complications in Bangladesh, *International Perspectives on Sexual and Reproductive Health*, 2010, 36(4): 197–204.
- Johnston H *et al.*, Scaled up and marginalized: a review of Bangladesh's menstrual regulation programme and its impact, in: Blas E, Sommerfeld J and Karup A, eds., *Social Determinants Approaches to Public Health: From Concept to Practice*, Geneva: World Health Organization, 2011, pp. 9–24.
- Johnston H *et al.*, Scaled up and marginalized: a review of Bangladesh's menstrual regulation programme and its impact, in: Blas E, Sommerfeld J and Karup A, eds., *Social Determinants Approaches to Public Health: From Concept to Practice*, Geneva: WHO, 2011, pp. 9–24.
- MR services: performance statistics, in: *Health and Rights*, Dhaka: Bangladesh, Sexual and Reproductive Health and Rights (SRHR) Consortium, No. 4, Issue 4, 2011, p. 4.
- Mridha M, Anwar I and Koblinsky M, Public-sector maternal health programmes and services for rural Bangladesh, *Journal of Health, Population and Nutrition*, 2009, 27(2):124–138.
- NIPORT, *Bangladesh Maternal Mortality and Health Care Survey 2010, Summary of Key Findings and Implications*, Dhaka, Bangladesh: NIPORT, 2011.
- NIPORT, Mitra and Associates and Macro International, *Bangladesh Demographic and Health Survey, 2007*, Dhaka, Bangladesh and Calverton, MD, USA: NIPORT, Mitra and Associates, Macro International, 2009.
- NIPORT, Mitra and Associates and Macro International, *Bangladesh Demographic and Health Survey, 2007*, Dhaka, Bangladesh: NIPORT and Mitra and Associates; and Calverton, MD, USA: Macro International, 2009.
- Oliver *et al.*, *Situation Analysis of Unsafe Abortion and Menstrual Regulation in Bangladesh*, Dhaka, Bangladesh: International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), 2008.
- Rashid S, Akram O and Standing H, The sexual and reproductive health care market in Bangladesh: where do poor women go? *Reproductive Health Matters*, 2011, 19(37): 21–31.
- Rashid S, Quality of care and pregnancy terminations for adolescent women in urban slums, in: *Abortion in Asia: Local Dilemmas, Global Politics*, New York: Bergahn Books, 2010.
- Singh S *et al.*, The incidence of menstrual regulation procedures and abortion in Bangladesh, *International Perspectives on Sexual and Reproductive Health*, 2012 (forthcoming).
- United Nations, 2015 Millennium Development Goals: a gateway to the UN system's work on the MDGs, no date, <<http://www.un.org/millenniumgoals/>>, accessed Apr. 4, 2012.
- Unpublished data from the Health Professionals Survey, Bangladesh, 2010.

**Annex 1: Summary of statistical analysis on a selection of data**

**Table 1a. Household survey: male descriptives**

Variable	Description	N	$\mu$	$\sigma$	Min	Max
Intervention	Indicates whether the respondent lives in the intervention area (1:intervention)	300	.67	.47	0	1
District Hospital	Indicates the respondent's health seeking behaviour: visiting District hospital	300	.74	.44	0	1
FWC	Indicates the respondent's health seeking behaviour: visiting FWC	300	.42	.49	0	1
UHC	Indicates the respondent's health seeking behaviour: visiting Upazila Health Complex	300	.42	.49	0	1
Unqualified	Indicates the respondent's health seeking behaviour: unqualified village doctors	300	.29	.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	.37	.03	0	1
	- Primary	278	.23	.03	0	1
	- Secondary	278	.21	.02	0	1
	- Higher education	278	.19	.02	0	1
Occupation	Factor variable indicating the occupation of the head of the household	-	-	-	-	-
	- Informal	290	.75	.03	0	1
	- Agriculture	290	.07	.01	0	1
	- Formal (base category)	290	.19	.02	0	1
Hindu	Indicates that the respondent is of the Hindu religion rather than Muslim	300	.16	.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	.86	.34	0	1
House owner	Indicates that the respondent's household owns the house	300	.71	.46	0	1
Urban	Indicates whether the respondent lives in an urban area 1: yes	300	.50	.50	0	1
Age	Indicates the age of the respondent	300	34.88	7.60	17	60
Knowledge MR 1	<i>"Do you know within how many weeks of pregnancy MR should be performed?"</i> 1: correct	272	.78	.42	0	1
Knowledge MR 2	<i>"Do you know the service providers/performers of MR at your locality?"</i> 1: yes	272	.89	.32	0	1
UTP	Universality of terminating pregnancies: <i>"Do you think that every one, whether unmarried/married/widowed/divorced women have the right to terminate their unwanted pregnancies?"</i> 1: yes	300	.71	.45	0	1
PTUP	Perception on terminating unwanted pregnancies: <i>"What is your perception on ways of termination/management of unwanted pregnancies?"</i> 1: MR 0: else	300	.66	.47	0	1
FPU	Family Planning User: <i>"Are you currently using any family planning method?"</i> 1: yes	300	.63	.48	0	1
Emergency pill	Indicates that the respondent is familiar with an emergency pill 1: yes	300	.14	.34	0	1
Iud	Indicates that the respondent is familiar with an Iud 1: yes	300	.46	.50	0	1
Injection	Indicates that the respondent is familiar with an injection 1: yes	300	.90	.30	0	1
Implant	Indicates that the respondent is familiar with an implant 1: yes	300	.47	.50	0	1
Safe period	Indicates that the respondent is familiar with a safe period 1: yes	300	.45	.50	0	1
Azol	Indicates that the respondent is familiar with azol 1: yes	300	.39	.49	0	1
Ligation	Indicates that the respondent is familiar with a ligation 1: yes	300	.75	.43	0	1
Vasectomy	Indicates that the respondent is familiar with a vasectomy 1: yes	300	.64	.48	0	1

NB: The solid line divides the explanatory variables from the variables of interest

**Table 1b. Household survey: female descriptives**

Variable	Description	N	$\mu$	$\sigma$	Min	Max
Intervention	Indicates whether the respondent lives in the intervention area (1:intervention)	600	.67	.47	0	1
District Hospital	Indicates the respondent's health seeking behaviour: visiting District hospital	600	.59	.49	0	1
FWC	Indicates the respondent's health seeking behaviour: visiting FWC	600	.52	.50	0	1
UHC	Indicates the respondent's health seeking behaviour: visiting Upazila Health Complex	600	.58	.49	0	1
Unqualified	Indicates the respondent's health seeking behaviour: unqualified village doctors	600	.37	.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	.22	.02	0	1
	- Primary	585	.38	.02	0	1
	- Secondary	585	.30	.02	0	1
	- Higher education	585	.10	.01	0	1
Occupation	Factor variable indicating the occupation of the head of the household	-	-	-	-	-
	- Informal	558	.67	.02	0	1
	- Agriculture	558	.10	.01	0	1
	- Formal (base category)	558	.22	.02	0	1
Hindu	Indicates that the respondent is of the Hindu religion rather than Muslim	600	.17	.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	.87	.34	0	1
House owner	Indicates that the respondent's household owns the house	600	.63	.48	0	1
Urban	Indicates whether the respondent lives in an urban area 1: yes	600	.50	.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	<i>"Do you know within how many weeks of pregnancy MR should be performed?"</i> 1: correct	535	.72	.45	0	1
Knowledge MR 2	<i>"Do you know the service providers/performers of MR at your locality?"</i> 1: yes	535	.90	.29	0	1
UTP	Universality of terminating pregnancies: <i>"Do you think that every one, whether unmarried/married/widowed/divorced women have the right to terminate their unwanted pregnancies?"</i> 1: yes	600	.85	.36	0	1
PTUP	Perception on terminating unwanted pregnancies: <i>"What is your perception on ways of termination/management of unwanted pregnancies?"</i> 1: MR 0: else	600	.71	.45	0	1
FPU	Family Planning User: <i>"Are you currently using any family planning method?"</i> 1: yes	600	.67	.47	0	1
Emergency pill	Indicates that the respondent is familiar with an emergency pill 1: yes	600	.12	.33	0	1
Iud	Indicates that the respondent is familiar with an Iud 1: yes	600	.81	.40	0	1
Injection	Indicates that the respondent is familiar with an injection 1: yes	600	.98	.13	0	1
Implant	Indicates that the respondent is familiar with an implant 1: yes	600	.88	.33	0	1
Safe period	Indicates that the respondent is familiar with a safe period 1: yes	600	.58	.49	0	1
Azol	Indicates that the respondent is familiar with azol 1: yes	600	.39	.49	0	1
Ligation	Indicates that the respondent is familiar with a ligation 1: yes	600	.94	.23	0	1
Vasectomy	Indicates that the respondent is familiar with a vasectomy 1: yes	600	.81	.39	0	1

NB: The solid line divides the explanatory variables from the variables of interest

<b>Table 2. MR client data survey descriptives</b>						
<b>Variable</b>	<b>Description</b>	<b>N</b>	<b>μ</b>	<b>σ</b>	<b>Min</b>	<b>Max</b>
Intervention	Indicates whether the respondent lives in the intervention area (1:intervention)	300	.67	.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	.27	.03	0	1
	- Primary	290	.33	.03	0	1
	- Secondary	290	.31	.03	0	1
	- Higher education	290	.09	.02	0	1
Occupation	Factor variable indicating the occupation of the head of the household	-	-	-	-	-
	- Informal	286	.68	.01	0	1
	- Agriculture	286	.09	.02	0	1
	- Formal (base category)	286	.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	.81	.40	0	1
Emergency pill	Indicates that the respondent is familiar with an emergency pill 1: yes	300	.20	.40	0	1
Implant	Indicates that the respondent is familiar with an implant 1: yes	300	.91	.29	0	1
Safe period	Indicates that the respondent is familiar with a safe period 1: yes	300	.64	.48	0	1
Azol	Indicates that the respondent is familiar with azol 1: yes	300	.45	.50	0	1
Ligation	Indicates that the respondent is familiar with a ligation 1: yes	300	.96	.20	0	1
Complication	"Did you face any problem after MR?" 1: yes	300	.48	.50	0	1
Post MR FP	"Did the service provider tell you about post MR family planning? 1: yes	300	.85	.36	0	1
Explain step	"Did the service provider explain each step of the MR procedure and assured you about them?" 1: yes	300	.77	.42	0	1
Explain clearly	"Did the service provider explain to you clearly about the MR procedure?" 1: yes	300	.87	.34	0	1
Pre-counselling	"Did the service provider give you any counselling before MR?" 1: yes	300	.81	.39	0	1
Pre-counselling2	"Did you get proper counselling before MR? 1: yes	300	.86	.35	0	1
Post-counselling	"After the MR did the service provider give any counselling?" 1: yes	300	.89	.31	0	1
Follow up	"Did the provider ask you to come for a follow up visit? 1: yes	300	.80	.40	0	1
Barrier	"Did you face any barrier in your family or within community for doing MR?" 1: yes	300	.23	.42	0	1
Buy medicine	"Did you spend any money for getting the medicines?" 1: yes	296	.94	.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	.30	.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	.87	.34	0	1
Satisfaction pre	Level of satisfaction derived from pre-counselling	298	3.38	.74	1	5
Satisfaction post	Level of satisfaction derived from post-counselling	295	3.45	.70	1	5
Satisfaction MR	Level of satisfaction derived from MR procedure	297	3.34	.66	1	5
Quality MR	Quality of MR services	300	3.63	.70	1	5
Knowledge	Rating of provider's knowledge and skill	300	3.63	.72	1	5

## Results

<b>Knowledge MR 1</b>			
	<b>Male</b>	<b>Female</b>	<b>Female</b>
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 <sup>2</sup>	.24	.09	.10
Log likelihood	-.98.82	-257.00	-255.42

Logit estimation; average marginal effects. Standard errors presented in parentheses. \* $p < .05$ ; \*\* $p < .01$

<b>Knowledge MR 2</b>		
<b>Gender</b>	<b>Male</b>	<b>Female</b>
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 <sup>2</sup>	.23	.26
Log likelihood	-68.45	-127.57

Logit estimation; average marginal effects. Standard errors presented in parentheses. \* $p < .05$ ; \*\* $p < .01$

**What is your perception on ways of termination/management of unwanted pregnancies?"**

**1: 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 <sup>2</sup>	.14		.22	
Log likelihood	-138.48		-185.11	

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

**Do you think every one, whether unmarried/married/widowed/divorced women have the right to terminate their unwanted pregnancies (1:yes)**

Gender	Male		Female					
	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 <sup>2</sup>	.20		.10		.07		.26	
Log likelihood	-138.90		-296.08		-231.41		-49.83	

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

<b>Are you currently using any Family Planning methods? (1: yes)</b>		
<b>Gender</b>	<b>Male</b>	<b>Female</b>
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 <sup>2</sup>	.05	.03
Log likelihood	-168.55	-331.41

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

<b>We will now ask you about some of the family planning methods and if you know about them</b>							
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 <sup>2</sup>	.12	.16		.15	.03	.13	.07
Log likelihood	-86.17	-161.46		-157.01	-257.48	-161.32	-191.24

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

<b>We will now ask you about some of the family planning methods and if you know about them</b>								
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 <sup>2</sup>	.20		.16		.16		.09	
Log likelihood	-148.58		-313.16		-171.20		-334.48	

Logit estimation; average marginal effects. Standard errors presented in parentheses. \* $p < .05$ ; \*\* $p < .01$

<b>We will now ask you about some of the family planning methods and if you know about them</b>				
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 <sup>2</sup>	.28	.06	.34	.09
Log likelihood	-123.64	-255.51	-101.31	-117.75

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

<b>Quality of the MR procedure</b>																		
	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 <sup>2</sup>	.19			.05			.10			.02			.13			.04		
Log likelihood	-136.48			-182.02			137.12			-109.78			-119.07			-112.87		

Logit estimation; average marginal effects. Standard errors presented in parentheses. \* $p < .05$ ; \*\* $p < .01$

<b>Quality of the MR procedure</b>								<b>Other</b>											
	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																			
- Agriculture	.00	(.05)		.07	(.05)		-.05	(.07)		-.03	(.03)	-.01	(.06)		.06	(.05)		-.03	(.06)
	-.10	(.09)		.01	(.07)		-.01	(.10)		-.14	(.08)	-.12	(.09)		.06	(.05)		-.05	(.09)
N	276		276		276		276		276		276		276		276		276		
Pseudo R <sup>2</sup>	.19		.33		.06		.11		.27		.23		.02		.02		.02		
Log likelihood	-98.29		-65.00		-140.86		-56.68		-104.12		-84.45		-122.68						

Logit estimation; average marginal effects. Standard errors presented in parentheses. \* $p < .05$ ; \*\* $p < .01$

<b>We will now ask you about some of the family planning methods and if you know about them</b>															
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 <sup>2</sup>	.23			.17			.18			.10		.26			
Log likelihood	-101.69			-76.34			-149.68			-171.50		-34.03			

Logit estimation; average marginal effects. Standard errors 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.

<b>The cost of performing the procedure</b>			
(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		
R <sup>2</sup> (unadjusted)	.09		

OLS Estimation; Standard errors 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 <sup>2</sup>	.08			
Log likelihood	-284.86			

*Ordered logit estimation; average marginal effects. Standard errors presented in parentheses. \*p<.05; \*\*p<.01*

## **Annex 2 Information on the two implementing agencies (Marie Stopes International and Family Planning Association Bangladesh)**

### **Marie Stopes Clinic Society: (MSCS)**

Marie Stopes (MS) is the foremost organization 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 Sexual and Reproductive Health (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 eighty thousand 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% of the total client-mix comes from the poor communities while only 11% of Marie Stopes' clients are full fee-payers.

### **Services Provided at MS Clinics:**

- **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**
- **Immunization**
- **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
<b>Total</b>	<b>132</b>
<b>Outreach Services</b>	
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
<b>Monthly Delivery of Services</b>	<b>500 locations</b>
<b>Spread of Services</b>	
<b>Service Delivery</b>	<b>62 Districts</b>
<b>Roving Teams:</b>	<b>10</b>
• VSC services	29 Districts
<b>Collaborating Teams with GoB</b>	
• Organizing 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 projects 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 Jan 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 programs; 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 until 2008.

- **EC Co-Financing:**

This EC funded project supports the establishment of 3 SRH centers in 3 hard to reach areas of Shariatpur, Bhola and Barisal. These centers will provide general health and SRH services 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 until 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 percent in 1975 to 47.5 percent in 2007.

### ***Family Planning Association Bangladesh (FPAB)***

FPAB is the oldest NGO in Bangladesh and provides a range of reproductive health, family planning services, including MR services. 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 under privileged 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% of 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 mid 90s of the last century. Instead of targeting fertile couples, interventions of FPAB now involve men and women of all ages with special focus on the

disadvantaged segment of the population. Beneficiaries of FPAB have now exceeded ten million people.

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

### **Project Resource Mobilization and Awareness (PRMA)**

FPAB has implemented Project Resource Mobilization 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 (RHP) 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 structured questionnaires. 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 needs 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.
- To use the survey data to evaluate the project at the end of the project period.
- To measure 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 other 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 Reproductive Health Promoter (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**

#### **Institutionalization increased access of marginalized to safe motherhood:**

FPAB developed Community Institutions (CI) 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 organizing monthly satellite clinic sessions with the assistances of FPAB clinic 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
- 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 sensitize the community stakeholders towards safe motherhood. Some materials have been developed for individual and community counseling.

In addition, campaign on safe motherhood is organized at the eve of safe motherhood day. CIs organize 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 who are technically sound and provide assistance to the project. Secondly, the local level advisory groups who are involved in planning, implementation and monitoring of project activities.

The project utilized the credibility and expertise of the eminent maternal health professionals and program experts from GoB and NGO sectors who have contributed providing technical assistances to the project time to time both by reviewing the progress and also by visiting

project sites. Again, Local Level Project Advisory Groups helped in planning, implementation and monitoring of 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 and 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 the 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.