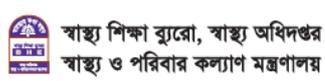




# PRE-ASSESSMENT FINDINGS: EHEALTH PILOT FOR FIELD, FACILITY and NGO-BASED WORKERS BANGLADESH KNOWLEDGE MANAGEMENT INITIATIVE

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## Acknowledgements

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## Abbreviations

ANC	Antenatal Care
BCC	Behavior Change Communication
BKMI	Bangladesh Knowledge Management Initiative
eHealth	Electronic Health
eLearning	Electronic Learning
EPI	Expanded Program on Immunization
eToolkit	Electronic Toolkit
FP/RH	Family Planning/Reproductive Health
FW	Field Worker
FWA	Family Welfare Assistant
GoB	Government of Bangladesh
HA	Health Assistant
HPN	Health, Population, and Nutrition
IPCC	Interpersonal Communication and Counseling
IUD	Intrauterine Device
JHU-CCP	John Hopkins Bloomberg School of Public Health, Center for Communication Programs
K4Health	Knowledge for Health
KM	Knowledge Management
LAM	Lactational Amenorrhea
LAPM	Long-acting and Permanent Method
MNCH	Maternal Newborn and Child Health
MoHFW	Ministry of Health and Family Welfare
ORS	Oral Rehydration Solution
PNC	Post-Natal Care
QC	Quality Control
RH	Reproductive Health
TBA	Traditional Birth Attendant
TT	Tetanus Toxoid
UHC	Upazila Health Complex
UHFWC	Union Health and Family Welfare Centre

# 1. BACKGROUND

## 1.1 Implementation of the eHealth Pilot

K4Health, funded by USAID and led by JHU-CCP seeks to strengthen KM around global, regional, and country-specific public health programs through innovations, partnerships, and local capacity building. K4Health aims to facilitate knowledge capture and information sharing among key stakeholders, such as program managers, health care providers, policy makers, and health information specialists/librarians, working to promote health, particularly in the areas of reproductive health and family planning.

As a component of the K4Health project in Bangladesh, called BKMI, an eHealth pilot will be implemented from May-August 2013. The eHealth pilot will deploy an eToolkit with BCC resources and eight eLearning video courses via netbooks and existing facility and NGO-based computers developed for use by field and NGO-based workers.

The objectives of this eHealth initiative are as follows:

- Improve **access** to family planning/reproductive health (FP/RH), nutrition, and maternal newborn and child health (MNCH) resources.
- Improve **worker** knowledge, attitudes, and practice in FP/RH, nutrition, and MNCH.
- Improve **client** knowledge, attitudes, and practice in FP/RH, nutrition, and MNCH.
- **Strengthen capacity** of workers to deliver eHealth interventions.

Responding to a call for proposal, Eminence was chosen as the subcontractor for the eHealth pilot activities, based on prior experience. The pilot implementation was preceded by a pre-assessment of workers' FP/RH, nutrition and MNCH knowledge levels, communication and technology skills. This pre-assessment also included an assessment of existing client health behaviors. Throughout the pilot period Eminence plans to conduct routine monitoring of the eHealth pilot, and help troubleshoot any technology-related issues experienced by the field workers (FWs) with netbooks. A post-assessment survey using the same tools as the pre-assessment will then be administered to measure any changes in knowledge and skills of field workers, or intentions to change behaviors among clients. These activities will be carried out in Sylhet and Chittagong, two-low performing districts in Bangladesh identified by the Ministry of Health and Family Welfare (MoHFW).

## 1.2 Objectives of the Study

The objectives of the of the pre-assessment are to measure:

- Workers' competencies in the following:
  - Knowledge about FP/RH, nutrition and MNCH;
  - IPCC and integrated messaging skills using information communication technology with clients in households, communities and/or clinics;
  - Ability to function at a basic level on a netbook.
- Clients' behavioral health intentions regarding key FP/RH, nutrition and MNCH issues.

### 1.3 Study Areas

The pre-assessment and pilot activities were carried out in two selected low-performing districts of Bangladesh, identified by the GoB's MoHFW in collaboration with BKMI and USAID. These were the low-performing Chittagong and Sylhet districts. The following are the 12 sub-districts or *upazilas* within the districts selected for the eHealth pilot:

- Sylhet District: 1) Sadar, 2) South Surma, 3) Bianibazar, 4) Biswanath, 5) Golapgonj, and 6) Balagonj
- Chittagong District: 1) Patia, 2) Mirsarai, 3) Hathazari, 4) Chandanaish, 5) Boalkhali and 6) Anowara

### 1.4 Participants

The participants of the pre-assessment were workers and clients in participating pilot areas.

#### Workers:

- **Community-based field workers:** Family Welfare Assistants (FWAs) and Health Assistants (HAs) who visit communities to deliver health information and services.
- **Facility and NGO-based workers:** MIS/Statisticians from UHCs, as well as Surjer Hashi (the NGO Health Service Delivery clinics) counselors and paramedics who provide health information and services from medical facilities.

**Clients:** Women of reproductive age (~15-49 years old) with at least one child under the age of 24 months, accessing health, population and nutrition (HPN) services in the community.

### 1.5 General study design and method

Quantitative data was collected at pre-assessment in the two study districts from FWs, facility and NGO-based workers, and clients.

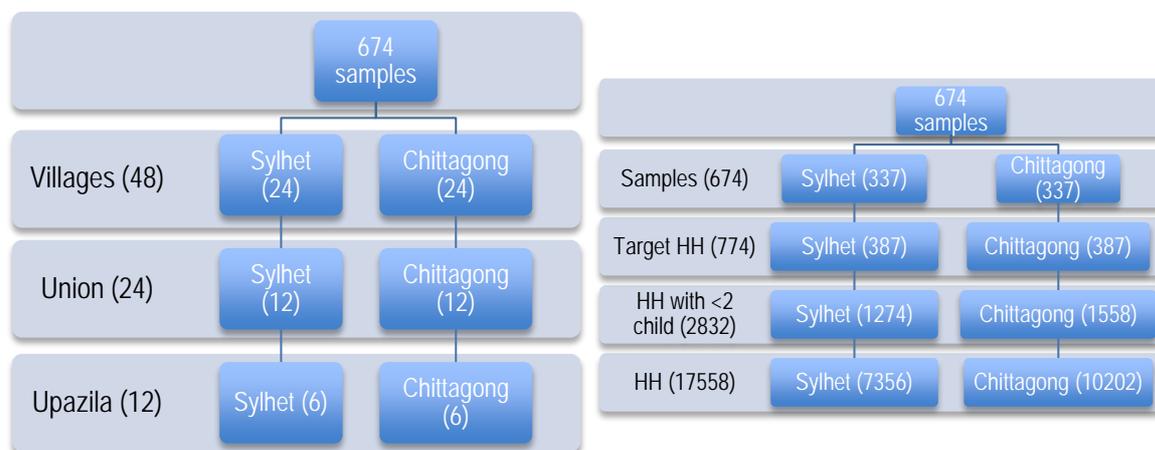
For the pre-assessment, 349 workers (303 FWs and 45 facility-based workers) were selected based on the list provided by the district level health and family welfare managers. Around 300 community-based FWs received netbooks followed by orientations. 45 facility-based workers were also oriented on the use of the digital resources. Both types of workers were included in the pre-assessment data collection.

From each of the 12 upazilas, two (2) unions were randomly selected to be the primary sampling unit for each upazila. Community-based clients (mothers with a child <= 2 years) were selected from a sampling frame of all mothers (<= 2 years) using a systematic random sampling approach.

The sample size for the collected information according to respondent type is as follows:

			Chittagong		Sylhet
<b>Workers</b>					
<b>Community</b>	Structured questionnaire	Purposive	151	153	<b>304</b>
<b>Government FWs</b>	„	„	17	28	<b>45</b>

<b>SURJER HASHI Clinic</b>	„	„	9	16	<b>25</b>
<b>Clients</b>					
<b>Community Mothers (&lt; = 2 yrs)</b>	„	Systematic random sampling	338	337	<b>675</b>
<b>Total</b>			<b>514</b>	<b>534</b>	<b>1078</b>



For the community level survey of mothers, a total of 48 villages – 24 from each of the districts were covered. These villages were selected from 24 unions – 12 unions from each district – from 12 upazila – six upazilas from each district. From each of the villages a household listing took place before the survey. During the household listing, each house from the village, having at least one child age less than 24 months was identified. Then, the survey was administered to those households. In those 48 villages, there were 17,558 households – 7,356 in Sylhet and 10,202 in Chittagong. Among those households, 2,832 had at least one child under 24 months – 1,274 in Sylhet and 1,558 in Chittagong. With the systemic random sampling approach, a total of 387 households were targeted of which 337 were taken under consideration as the study respondent. The total number of samples was 674 – 337 from each district.

Pre-coded questions were used in the survey, and all responses were recorded on paper by trained interviewers. After the initial data processing –including input, coding, and cleaning – the data was analyzed using SPSS statistical software.

Eminence provided a five-day comprehensive training to the field data collectors. There were a total of four (4) Quality Control (QC) officers that guided and supervised the 20 enumerators. The QC officers were responsible for ensuring:

- Proper site selection;
- Quality of data;
- Guiding enumerators during data collection;
- Checking some randomly chosen data that were interviewed by the enumerators;
- Checking the entire completed data sheet; and
- Holding discussion meetings at the end of the day with the enumerators.

In addition, the QC officers were also responsible for repeating 5% of the interviews conducted by the enumerators that worked on his/her team, selected at random. The data collection took place simultaneously in two districts with two separate teams.

Eminence trained the interviewers in confidentiality and consent procedures because the community level survey did not track the identity of the respondents.

## 2. FINDINGS FROM CLIENTS

The mean age of the respondents was 26.7 years with a range of 18-40 years. Of the 86.2% of respondents that ever attended school, 59.2% of them reported receiving a secondary education. Approximately, 78% of households reported having electricity, and 88.1% use a mobile telephone as a means of communication. Details in Table 1.

**Table 1: Social Demographic Background of the Respondents in the pilot areas**

Indicators	Sylhet	Chittagong	Total
<b>Age (Mean =26.7; Median =26; Mini=18; Max=40)</b>			
<i>15-19 years</i>	2.1% (14)	3.4% (23)	5.5% (37)
<i>20-24 years</i>	14.1% (95)	17.7% (119)	31.8% (214)
<i>25-29 years</i>	18.4% (124)	15.7% (106)	34.1% (230)
<i>30-34 years</i>	12.6% (85)	10.8% (73)	23.4% (158)
<i>35-39 years</i>	2.2% (15)	2.4% (16)	4.6% (31)
<i>&gt;39 years</i>	0.6% (4)	0	0.6% (4)
<b>Ever attended school</b>	41.5% (280)	44.7% (301)	86.2% (581)
<b>Highest completed level of school</b>			
<i>Primary</i>	24.1% (140)	12.7% (74)	36.8% (214)
<i>Secondary</i>	22% (128)	37.2% (216)	59.2% (344)
<i>Higher Secondary</i>	2.1% (12)	1.9% (11)	4% (23)
<b>Reading capacity</b>			
<i>Easily</i>	36.6% (247)	41.4% (279)	78% (526)
<i>With Difficulty</i>	4.9% (33)	3.3% (22)	8.2% (55)
<i>Not at all</i>	8.5% (57)	5.3% (36)	13.8% (93)
<b>Religion</b>			
<i>Islam</i>	48.8% (329)	45.8% (309)	94.7% (638)
<i>Hindu</i>	0.9% (6)	3.9% (26)	4.7% (32)
<i>Christian</i>	0.3% (2)	0.1% (1)	0.4% (3)
<i>Buddhist</i>	0	0.1% (1)	0.1% (1)
<b>Household Assets</b>			
<i>Electricity</i>	41.2% (278)	36.8% (248)	78% (526)
<i>Radio</i>	5.9% (40)	3.6% (24)	9.5% (64)
<i>Television</i>	26.9% (181)	23.6% (159)	50.4% (314)
<i>Mobile Phone</i>	41.7% (281)	46.4% (313)	88.1% (594)
<i>Landline</i>	5% (34)	1.6% (11)	6.7% (45)
<i>Refrigerator</i>	12% (81)	11.7% (79)	23.7% (160)

Currently, 5.2% of respondents reported being pregnant (3.4% in Sylhet and 1.8% in Chittagong), and among them 37.1% were in their first or second trimester while 25.7% were in their third trimester. The highest number of respondents got pregnant just after their menstrual period (36.9%) or halfway between two periods (31.6%). Respondents rarely got pregnant during their period (3.6%) or just at the beginning of their period (3.9%). Details in Table 2.

**Table 2: History of being pregnant in pilot areas**

Indicators	Sylhet	Chittagong	Total
Currently Pregnant	3.4% (23)	1.8% (12)	5.2% (35)
<b>Completed Months of Pregnancy</b>			
<i>First Trimester</i>	28.6% (10)	8.6% (3)	37.1% (13)
<i>Second Trimester</i>	14.3% (5)	22.9% (8)	37.1% (13)
<i>Third Trimester</i>	22.9% (8)	2.9% (1)	25.7% (9)

In most of the cases, respondents (77.7%) got pregnant at the time they wanted, but 22.3% of the current pregnancies occurred at a time when respondents wanted to wait or did not want more children. Details in Table 3.

**Table 3: Information about expected pregnancy**

Indicators	Sylhet	Chittagong	Total
During last pregnancy the respondent wanted to get pregnant at that time	37.4% (252)	40.4% (272)	77.7% (524)
During last pregnancy the respondent wanted to wait or wanted no (more) child	12.6% (85)	9.6% (65)	22.3% (150)

A total of 89.8% of client respondents sought Antenatal Care (ANC) during their last pregnancy, of these 43.8% were from Sylhet and 46% were from Chittagong. Overall, 37.8% of respondents received ANC from Private Hospitals/Clinics, whereas 19.7% from UHCs, 18.7% from her own home, 16.5% from district hospitals, and 15.1% from Upazila Health and Family Welfare Complex (UHFWC). Around 60% of them visited doctors, 14.7% visited Community/Village field worker, and 10.2% did not go anywhere.

Of those clients who sought ANC care, 59.1% received their first ANC during the first trimester, 35.7% received first ANC during the second trimester, and 5.2% received first ANC during the third trimester. Around 46% of mothers said that a pregnant woman should seek ANC during the second trimester, whereas 29.1% reported that it is appropriate during the first trimester. Among respondents, 39.8% received ANC more than four times during the last pregnancy, whereas 16.5% received it four times, 20.5% received it three times, 19% received it two times and 4.3% received it one time.

Around 70% of respondents received Tetanus Toxoid (TT) during the last pregnancy. Among them, 31.2% received TT more than four times during the last pregnancy, whereas 4.9% received it four times, 17.6% received it three times, 16.2% received it two times and 30% received it one time respectively. Details in Table 4.

**Table 4: ANC Care during last pregnancy**

Indicators	Sylhet	Chittagong	Total
Sought ANC during the last pregnancy	43.8% (295)	46% (310)	89.8% (605)
<b>Place to sought ANC</b>			
<i>Own Home</i>	9.9% (67)	8.8% (59)	18.7% (126)
<i>Others home</i>	1.5% (10)	1.6% (11)	3.1% (21)
<i>Govt. Hospital</i>	9.3% (63)	7.1% (48)	16.5% (111)
<i>Upazila Health Complex</i>	7.6% (51)	12.2% (82)	19.7% (133)
<i>Union Health Center</i>	6.4% (43)	8.8% (59)	15.1% (102)
<i>Community Clinic</i>	2.7% (18)	5.8% (39)	8.5% (57)
<i>Private hospital/clinic</i>	20.6% (139)	17.2% (116)	37.8% (255)
<b>Person visited</b>			
<i>No one</i>	6.2% (42)	4% (27)	10.2% (69)
<i>Doctor</i>	34.3% (231)	31.9% (215)	66.2% (445)
<i>Nurse</i>	1.2% (8)	3.6% (24)	4.7% (32)
<i>Traditional Birth Attendants</i>	1.5% (10)	2.7% (18)	4.2% (28)
<i>Community/Village Health Worker</i>	6.8% (46)	7.9% (53)	14.7% (99)
<b>First ANC received within the following trimesters</b>			
<i>During First Trimester</i>	29.1% (167)	30% (172)	59.1% (339)
<i>During Second Trimester</i>	16.7% (96)	19% (109)	35.7% (205)
<i>During Third Trimester</i>	3% (17)	2.3% (13)	5.2% (30)
<b>Number of times a pregnant women should sought ANC</b>			
<i>During First Trimester</i>	18.4% (109)	10.6% (63)	29.1% (172)
<i>During Second Trimester</i>	20.6% (122)	25.7% (152)	46.3% (274)
<i>During Third Trimester</i>	12% (71)	12.7% (75)	24.7% (146)
<b>Number of times received ANC during the last pregnancy</b>			
Once	2.5% (17)	1.8% (12)	4.3% (29)
Twice	11.6% (78)	7.4% (50)	19% (128)
Thrice	9.8% (66)	10.7% (72)	20.5% (138)
Four times	6.7% (45)	9.8% (66)	16.5% (111)
More than four times	19.4% (131)	20.3% (137)	39.8% (268)
Received TT during the last ANC	35.3% (238)	39.8% (268)	75.1% (506)
<b>Number of times receiving TT</b>			
Once	13% (66)	17% (86)	30% (152)
Twice	5.7% (29)	10.5% (53)	16.2% (82)
Thrice	8.9% (45)	8.7% (44)	17.6% (89)
Four times	2.8% (14)	2.2% (11)	4.9% (25)
More than four times	16.6% (84)	14.6% (74)	31.2% (158)

Table 5 shows that 29.8% of respondents reported that a doctor provided assistance during delivery, whereas 15% reported a nurse present, 27.4% said midwife, and 21.4% reported a traditional birth attendant assisted their birth. Roughly, 57% of the women said that their delivery was assisted at their home, whereas 21.1% said their delivery was assisted within a private hospital and 15.3% at a government hospital.

**Table 5: Assisted delivery during last pregnancy**

Indicators	Sylhet	Chittagong	Total
<b>Person provided assistance during delivery</b>			
<i>Doctor</i>	13.5% (91)	16.3% (110)	29.8% (201)
<i>Nurse</i>	5% (34)	9.9% (67)	15% (101)
<i>Midwife</i>	15.7% (106)	11.7% (79)	27.4% (185)
<i>Traditional Birth Attendants</i>	12.5% (84)	8.9% (60)	21.4% (144)
<i>Community/Village Health Worker</i>	3.3% (22)	3.1% (21)	6.4% (43)
<b>Place for assisted delivery</b>			
<i>Own Home</i>	32.8% (221)	24.3% (164)	57.1% (385)
<i>Govt. Hospital</i>	7.3% (49)	8% (54)	15.3% (103)
<i>Upazila Health Centre</i>	1.3% (9)	4.3% (29)	5.6% (38)
<i>Union Health Center</i>	0.1% (1)	0.1% (1)	0.3% (2)
<i>Community Clinic</i>	0.1% (1)	0.4% (3)	0.6% (4)
<i>Private hospital/clinic</i>	8.3% (56)	12.8% (86)	21.1% (142)

Only 2.5% of respondents were found to read the newspaper daily, while 84.3% reported not having access to newspapers at all. In terms of electronic media access, 42.6% reported watching television daily, whereas 49.6% of respondents reported no access at all. Only 3.6% respondents have access to radio daily. Details in Table 6.

**Table 6: Access to Media**

Indicator	Sylhet	Chittagong	Total
<b>Newspaper or magazine</b>			
<i>Everyday</i>	1.8% (12)	0.7% (5)	2.5% (17)
<i>Once a Week</i>	1.6% (11)	1.5% (10)	3.1% (21)
<i>Occasionally</i>	4% (27)	6.1% (41)	10.1% (68)
<i>Not at all</i>	42.6% (287)	41.7% (281)	84.3% (568)
<b>Listening the radio</b>			
<i>Everyday</i>	1.9% (13)	1.6% (11)	3.6% (24)
<i>Once a Week</i>	0.7% (5)	0.1% (1)	0.9% (6)
<i>Occasionally</i>	3.3% (22)	1.8% (12)	5% (34)
<i>Not at all</i>	44.1% (297)	46.4% (313)	90.5% (610)
<b>Watching television</b>			
<i>Everyday</i>	23.3% (157)	19.3% (130)	42.6% (287)
<i>Once a Week</i>	0.4% (3)	0.7% (5)	1.2% (8)

Indicator	Sylhet	Chittagong	Total
	(3)	(5)	(8)
Occasionally	3.1% (21)	3.6% (24)	6.7% (45)
Not at all	23.1% (156)	26.4% (178)	49.6% (334)

Evaluation of the knowledge of the respondents in the pilot areas on contraception method found that the pill (99.1%), condom (95.4%), injectables (97.5%) and female sterilization (95.1%) are the major family planning methods recognized. One half of the study population (53%) acknowledged the withdrawal method, while only around 10% recognized the Lactational Amenorrhea (LAM) and emergency contraceptive method. Details in Table 7.

**Table 7: Knowledge on methods of contraception**

Methods for Contraception	Sylhet	Chittagong	Total
Female Sterilization	49.7% (335)	45.4% (306)	95.1% (641)
Male Sterilization	43.6% (294)	35.8% (241)	79.4% (535)
IUD	32.2% (217)	27.7% (187)	59.9% (404)
Injectable	49% (330)	48.5% (327)	97.5% (657)
Implants	47.6% (321)	38.9% (262)	86.5% (583)
Pill	49.6% (334)	49.6% (334)	99.1% (668)
Condom	48.1% (324)	47.3% (319)	95.4% (643)
LAM	4.3% (29)	5.9% (40)	10.2% (69)
Rhythm Method	34.4% (232)	33.4% (225)	67.8% (457)
Withdrawal	28.9% (195)	24.3% (164)	53% (359)
Emergency Contraceptive	3.7% (25)	7.1% (48)	10.8% (73)

95.4% of respondents (47.6% in Sylhet and in Chittagong 47.8%) reported using any method to delay pregnancy, but only 27.9% of them were told about the side effects of using different methods of contraception, and furthermore only 25.2% received knowledge on how to remedy the side effects. Details in Table 8.

**Table 8: Sources of Information on using FP**

Indicator	Sylhet	Chittagong	Total
Intention of using any method for delay pregnancy	47.6% (321)	47.8% (322)	95.4% (643)
Ever told by a health or family planning worker about side effects of method	16.2% (109)	11.7% (79)	27.9% (188)
Ever told by a health or family planning worker what to do if experienced side effects with the method	15.6% (105)	9.6% (65)	25.2% (170)
Ever told by a health and/or family planning worker about other family planning methods	13.6% (92)	9.8% (66)	23.4% (158)

**Table 9: Knowledge on place where FP methods can be sought**

Indicator	Sylhet	Chittagong	Total
Know a place from where family planning method can be obtained	50% (337)	50% (337)	100% (674)
<b>Name of the place</b>			
<i>Govt. Hospital</i>	5.2% (35)	5.3% (36)	10.5% (71)
<i>Govt. Health Center</i>	4.7% (32)	7% (47)	11.7% (79)
<i>Family Planning Clinic</i>	6.1% (41)	8.3% (56)	14.4% (97)
<i>Mobile/Satellite Clinic</i>	2.8% (19)	2.4% (16)	5.2% (35)
<i>Field Worker</i>	9.2% (62)	4.9% (33)	14.1% (95)
<i>Private hospital</i>	4.2% (28)	2.4% (23)	7.6% (51)
<i>Pharmacy</i>	14.2% (96)	16% (108)	30.3% (204)
<i>Private doctors</i>	1.5% (10)	1.5% (10)	3% (20)
<i>Friends or relatives</i>	2.1% (14)	1.2% (8)	3.3% (22)
Know a place from where emergency contraception can be obtained	50% (337)	50% (337)	100% (674)
<b>Name of the place</b>			
<i>Govt. Hospital</i>	8.6% (58)	9.8% (66)	18.4% (124)
<i>Govt. Health Center</i>	12.5% (84)	12.5% (84)	25% (168)
<i>Family Planning Clinic</i>	8.6% (58)	7.9% (53)	16.5% (111)
<i>Mobile/Satellite Clinic</i>	0	0	0
<i>Field Worker</i>	0	0.1%(1)	0.1%(1)
<i>Private hospital</i>	6.8% (46)	7.6% (51)	14.4% (97)
<i>Pharmacy</i>	1.2% (8)	3.1% (21)	4.3% (29)
<i>Shop</i>	4.9% (33)	3.1% (21)	8% (54)
<i>Private doctors</i>	0	0	0
<i>Friends or relatives</i>	0	0	0
<i>Other Government Sectors</i>	7.4% (50)	5.9% (40)	13.4% (90)

Around 43% of the respondents said that FWs had discussed the danger signs of a newborn with them. Among respondents, 69% have in-depth knowledge (based on the information given in their service trainings) on sepsis, 67.2% have knowledge on birth asphyxia, and 14.8% have knowledge about low birth weight. Details in Table 10.

**Table 10: Knowledge on danger sign of newborn**

Indicators	Sylhet	Chittagong	Total
During this last pregnancy fieldworker talked about danger signs for a newborn	24.6% (166)	18.7% (126)	43.3% (292)
<b>Danger signs of newborn</b>			
<i>Birth Asphyxia</i>	34.6% (233)	32.6% (220)	67.2% (453)
<i>Low Birth Weight</i>	9.1% (61)	5.8% (39)	14.8% (100)
<i>Sepsis</i>	31.8% (214)	37.2% (251)	69% (465)

Within the study area, 44.7% of respondents reported that the FW talked about how to care for a newborn baby during their last pregnancy. Around 26% of woman did not know how long they

should delay bathing a newborn child after birth. Moreover, most women (61.9%) agreed that a mother and her newborn child should attend one to two Post-Natal Care (PNC) visits.

When asked about how many vaccines a child needs, 80% of the women said that 1-5 vaccines should be given, whereas 22.1% said it should be 6-8 vaccines. To prevent diarrhea 86.5% of the respondents spoke of using oral saline, 33.5% said washing hands with soap before, after eating, and after using the toilet and 30.3% said using Oral Rehydration Solution (ORS) and a zinc supplement. Details in Table 11.

**Table 11: Knowledge of Newborn & Child Health**

Indicator	Sylhet	Chittagong	Total
During this last pregnancy a field worker talked about how to care for a newborn baby	24.5% (165)	20.2% (136)	44.7% (301)
<b>After birth delay bathing a newborn child (Hour)</b>			
<i>One day</i>	13.2% (89)	12% (81)	25.2% (170)
<i>Two days</i>	12.2% (82)	9.1% (61)	21.2% (143)
<i>Three days</i>	9.8% (66)	6.4% (43)	16.2% (109)
<i>Four days</i>	1.3% (9)	2.7% (18)	4% (27)
<i>More than four days</i>	2.5% (17)	4.5% (30)	7% (47)
<i>Do not Know</i>	11% (74)	15.4% (104)	26.4% (178)
<b>Number of PNC a mother and child should take</b>			
<i>1-2 Times</i>	33.2% (224)	28.6% (193)	61.9% (417)
<i>2-3Times</i>	6.7% (45)	11.6% (78)	18.2% (123)
<i>More Than four times</i>	10.1% (68)	9.8% (66)	19.9% (134)
<b>Number of vaccines</b>			
<i>1-5 vaccines</i>	37.5% (214)	40.4% (230)	77.9% (444)
<i>6-8 vaccines</i>	12.3% (70)	9.8% (56)	22.1% (126)
<b>Prevention of diarrhea</b>			
Hand wash with soap before and after eating and after using the toilet	19.4% (131)	14.1% (95)	33.5% (226)
Use ORS and Zinc supplements	15% (101)	15.3% (103)	30.3% (204)
Give the child water	8.8% (59)	7.9% (53)	16.6% (112)
Do Not Know	2.4% (16)	5.9% (40)	8.3% (56)
Using Oral Saline	44.5% (300)	42% (283)	86.5% (583)

In the pilot areas, 65.7% of women said that exclusive breastfeeding means infants only breastfeed for six months (not even receiving water), whereas 29.2% believed that infants breastfeed with water for six months. Approximately, 97% of the studied women have ever breastfed their last child. Among them 34.5% have breastfed their last child less than one hour after birth, whereas 60.8% have breastfed between 1-3 hours after birth. 27% of the woman reported to exclusively breastfeed their child for the first six months. However, there were 41.2% of women who gave honey, 25.8% who gave plain water, 21.4% who gave milk (other than breast milk) to their last child within the first six months of its life. Around 93% of the women are continuing breastfeeding and 96.4% of them have intention to breastfeed their future child. Details in Table 12.

**Table 12: Knowledge about breastfeeding**

Indicators	Sylhet	Chittagong	Total
<b>Understanding on exclusive breastfeeding</b>			
<i>Infants only breastfeed for six months (not even water)</i>	35.2% (237)	30.6% (206)	65.7% (443)
<i>Breastfeeding with water for six month</i>	13.9% (94)	15.3% (103)	29.2% (197)
<i>Does not know</i>	0.3% (2)	1.9% (13)	2.2% (15)
<i>Breastfeeding with other regular food for six month</i>	0.7% (5)	2.2% (15)	3% (20)
Ever breastfed the last child	47.9% (323)	49% (330)	96.9% (653)
<b>Initiation of breastfeeding</b>			
<i>Less than one hour</i>	23.4% (153)	11% (72)	34.5% (225)
<i>1 – 3 hours</i>	25% (163)	35.8% (234)	60.8% (397)
<i>4 – 8 hours</i>	0.6% (4)	1.5% (10)	2.1% (14)
<i>9 – 24 hours</i>	0.5% (3)	2.1% (14)	2.6% (17)
<i>More than 24 hours</i>	0	0	0
Child was given anything other than breast milk	11.1% (75)	15.9% (107)	27% (182)
<b>Types of liquid given</b>			
<i>Milk (other than breast milk)</i>	5.5% (10)	15.9% (29)	21.4% (39)
<i>Plain Water</i>	13.2% (24)	12.6% (23)	25.8% (47)
<i>Sugar or Glucose water</i>	0	0	0
<i>Gripe Water</i>	0	0	0
<i>Sugar-Salt-Water Solution</i>	6.6% (12)	1.6% (3)	8.2% (15)
<i>Fruit Juice</i>	0	0	0
<i>Infant Formula</i>	0	0	0
<i>Tea/Infusions</i>	0	0	0
<i>Coffee</i>	0	0	0
<i>Honey</i>	12.1% (22)	29.1% (53)	41.2% (75)
Continuing breastfeeding	45.4% (306)	47.2% (318)	92.6% (624)
Intention to breastfeed the future child	47.6% (321)	48.8% (329)	96.4% (650)

The respondents' knowledge of good complementary food options was high. Around 78.3% of respondents mentioned hotchpotch, 71.5% said family foods, and 41.2% said suji. Additionally, mothers were also asked about the appropriate consistency of complementary foods, and 46% said that it should be semi-solid and 45.3% said it should be liquid. They were also asked for the appropriate time for starting complementary foods. Most of them (53.4%) agreed that it should be started after 6 months. Also 43.5% of them agreed that complementary food to a child age 6-24 months should be given twice daily, whereas 32.6% said three times daily. Details in Table 13.

**Table 13: Knowledge about complementary feeding**

Indicator	Sylhet	Chittagong	Total
<b>Good complementary food options</b>			
<i>Hotchpotch</i>	36.5% (246)	41.8% (282)	78.3% (528)
<i>Suji</i>	19% (128)	21.7% (146)	40.7% (274)
<i>Family food</i>	35.5% (239)	36.1% (243)	71.5% (482)
<i>Animal based food</i>	11.3% (76)	10.4% (70)	21.7% (146)
<i>Package food</i>	11.1% (75)	2.4% (16)	13.5% (91)
<b>Consistency of complementary foods</b>			
<i>Liquid</i>	25.5% (172)	19.7% (133)	45.3% (305)
<i>Semi Solid</i>	18.8% (127)	27.2% (183)	46% (310)
<i>Initially well mashed gradually in small pieces</i>	1.2% (8)	0.7% (5)	1.9% (13)
<i>Do not know</i>	4.5% (30)	2.4% (16)	6.8% (46)
<b>Appropriate time for starting complementary food</b>			
<i>Before 6 month</i>	7.3% (49)	5.2% (35)	12.5% (84)
<i>After 6 month</i>	27.9% (188)	25.5% (172)	53.4% (360)
<i>After 7 month</i>	3.7% (25)	4.7% (32)	8.5% (57)
<i>After 8 month</i>	1.5% (10)	1% (7)	2.5% (17)
<i>After 9 month</i>	0.6% (4)	1.2% (8)	1.8% (12)
<i>Not Applicable</i>	6.1% (41)	8.6% (58)	14.7% (99)
<i>Not Started</i>	3% (20)	3.7% (25)	6.7% (45)
<b>Number of times given complementary food to a child age 6-24 months in the last 24 hours</b>			
<i>Do not Remember</i>	9.1% (61)	12.3% (83)	21.4% (144)
<i>Once</i>	1% (7)	1.5% (10)	2.5% (17)
<i>Twice</i>	22.6% (152)	20.9% (141)	43.5% (293)
<i>Three Times</i>	17.4% (117)	15.3% (103)	32.6% (220)

Approximately 30% of respondents from Sylhet and Chittagong are currently using methods of contraception. Taking contraceptive pills was found to be the most common method of contraception (49.9%). Other methods that have been used by the respondents are injectables (17.6%), condoms (10.1%), female sterilization (7%), implants, (3.5%) and safe period/standard days (6.8%). Details in Table 14.

**Table 14: Currently using FP method**

Indicator	Sylhet	Chittagong	Total
Currently using any method	30.1% (203)	33.2% (224)	100% (427)
<b>Method that is being currently used</b>			
Female Sterilization	4.9% (21)	2.1% (9)	7% (35)
IUD	1.2% (5)	0.9% (4)	2.1% (9)
Injectables	11% (47)	6.6% (28)	17.6% (75)
Implants	1.9% (8)	1.6% (7)	3.5% (15)
Pills	18.7% (80)	31.1% (133)	49.9% (213)
Condom	5.6% (24)	4.4% (19)	10.1% (43)
Diaphragm	0	0	0
Foam/Jelly	0	0	0
LAM	0	0	0
Rhythm Method	0	0	0
Withdrawal	0	0	0
Other modern method	0	0	0
Other traditional method	0	0	0
Safe Period	2.8% (12)	4% (17)	6.8% (29)

Overall, when a client seeks health information, their main points of contact are the government hospital (28.6%), UHC (27.9%) and private hospital or other private sector facility (66%), specifically 38.6% of clients seek family planning information from FWs and 19.4% seek MNCH information from FWs. When the respondents need information on FP/RH issues, most of them (62.2%) contacted a doctor, while 38.6% contacted a FW. When the respondents need information on MNCH issues, only 19.4% contacted the FW. Similarly, when the respondents needed information on nutrition related issues, 66.8% contacted a doctor and 28.6% contacted a worker. When the respondents needed information on health related issues, 37.7% went to a private hospital or clinic, whereas 28.3% visited a private sector clinic, 27.9% went to a UHC and 27.3% went to a government hospital respectively. Details in Table 15.

**Table 15: Information seeking behavior**

Indicator	Sylhet	Chittagong	Total
<b>Point of contact for getting FP/RH related information</b>			
<i>Field worker</i>	22.7% (153)	15.9% (107)	38.6% (260)
<i>Doctors</i>	30.1% (203)	32% (216)	62.2% (419)
<i>Elder family member</i>	4% (27)	4.9% (33)	8.9% (60)
<i>Others</i>	0.6% (4)	1.9% (13)	2.5% (17)
<b>Point of contact for getting MNCH related information</b>			
<i>Field worker</i>	11% (74)	8.5% (57)	19.4% (131)
<i>Doctors</i>	41.4% (279)	40.5% (273)	81.9% (552)
<i>Elder family member</i>	2.2% (15)	2.4% (16)	4.6% (31)
<i>Others</i>	0.6% (4)	2.2% (15)	2.8% (19)
<b>Point of contact for getting nutrition related information</b>			
<i>Field worker</i>	15.7% (106)	12.9% (87)	28.6% (93)

Indicator	Sylhet	Chittagong	Total
<i>Doctors</i>	32.8% (221)	34% (229)	66.8% (450)
<i>Elder family member</i>	4.2% (28)	5% (34)	9.2% (62)
<i>Others</i>	0.6% (4)	1.8% (12)	2.4% (16)
<b>Place of getting information on health</b>			
<i>Govt. Hospital</i>	15.4% (104)	11.9% (80)	27.3% (184)
<i>Upazila Health Center</i>	12.8% (86)	15.1% (102)	27.9% (188)
<i>Community Clinic</i>	3.7% (25)	5.9% (40)	9.6% (65)
<i>Union Health Center</i>	4% (27)	5.2% (35)	9.2% (62)
<i>Private Hospital/ Clinic</i>	22.8% (154)	14.8% (100)	37.7% (254)
<i>Other Private Sector</i>	16.2% (109)	12.2% (82)	28.3% (191)

In Sylhet and Chittagong, 35% and 30% respectively, of respondents acknowledged that FWs visited them in the last three months and discussed family planning (65.4%), nutrition (53.1%), and MNCH (59.6%). Among facility-based workers, 53.1% of respondents reported discussing family planning. Details in Table 16.

**Table 16: Information about visit by a field worker in the last three months in the pilot areas**

Indicator	Sylhet	Chittagong	Total
Respondent visited by a field worker who talked about family planning	35% (236)	30.4% (205)	65.4% (441)
Respondent visited a health facility for care for the respondents own or child's need	27.2% (183)	32.5% (219)	59.6% (402)
Any staff member at the health facility spoke to the respondent about nutrition	30.9% (208)	22.3% (150)	53.1% (358)

### 3. FINDINGS FROM WORKERS

Of the targeted FWs interviewed during the course of the pre-assessment, 43.3% were HAs and 43.8% were FWAs. In addition, 15 facility-based workers were interviewed from 12 UHCs, as well as 30 Surjer Hashi staff from the clinics located in the pilot areas. Details on Table 17.

**Table 17: Type of respondents**

Type of Health worker	Pilot Areas		
	Sylhet % (n)	Chittagong % (n)	Total
<b>Field Workers</b>			
Health Assistant (HA)	42%(76)	44.6%(75)	43.3%(151)
Family Welfare Assistant (FWA)	42.5%(77)	45.2%(76)	43.8%(153)
<b>Facility-based Workers</b>			
UHC Staff	3.9%(7)	4.8%(8)	4.3%(15)
Surjer Hashi Staff	11.6%(21)	5.4%(9)	8.6%(30)

Within these pilot areas, the survey found large gaps in worker knowledge and training, more than 50% of FWAs passed SSC (completion of 10<sup>th</sup> grade), while only 10% Surjer Hashi staff passed SSC. More than 40% of HAs and 32.7% of FWAs have completed their HSC level. 67% of Surjer Hashi staff completed their graduation and this is the highest percentage while 39.7% of HAs and 13.1% of FWAs have completed their graduation. All of the UHC staff hold a Masters degree, while only 20% of Surjer Hashi staff have a Masters degree. Details in Table 18.

**Table 18: Educational qualification of the workers**

Educational background of the field workers	Sylhet % (n)				Chittagong % (n)				Total % (n)				
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Total
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	
SSC	1.3% (1)	49.4% (38)	-	14.3% (3)	0.0% (0)	53.9% (41)	-	-	0.7% (1)	51.6% (79)	-	10% (3)	23.8% (83)
HSC	48.7% (37)	40.3% (31)	-	4.8% (1)	38.7% (29)	25.0% (19)	-	-	43.7% (66)	32.7% (50)	-	3.3% (1)	33.5% (117)
Graduate	32.9% (25)	5.2% (4)	-	52.4% (11)	46.7% (35)	21.1% (16)	-	100% (9)	39.7% (60)	13.1% (20)	-	66.7% (20)	28.7% (100)
Masters	17.1% (13)	5.2% (4)	100% (7)	28.6% (6)	14.7% (11)	-	100% (8)	-	15.9% (24)	2.6% (4)	100% (15)	20% (6)	14% (49)

The age of workers range from 20 to 56, with 39% of all workers in the 20-29 age category, 26% in the 30-39 age category, and 30.9% in the 40-49 age category.

The age distribution of the workers is categorized into four different groups. The mean age of the workers is 34.94 years, ranging from 20 to 56. The largest percentage (39%) of workers belongs to the 20-29 age category. In Sylhet, the majority of both the HAs (42.1%) and FWAs (41.6%) were in the 40-49 age category. Comparatively, the facility-based workers were younger, having 39% in the 20-29 age category. In contrast, workers in Chittagong were younger on average than workers in Sylhet, with 61.3% of HAs and 39.5% of FWAs in the 20-29 age category, whereas the facility-based workers were a bit older. UHC staff (50%) and Surjer Hashi staff (66.7%) were in the 30-39 age category. Details in Table 19.

**Table 19: Age group of workers (Mean =34.94, Median =33, SD =±8.884, Min= 20, Maxi=56)**

Age	Sylhet % (n)				Chittagong % (n)				Total % (n)				Total
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	
20-29 years	30.3% (23)	27.3% (21)	42.9% (3)	42.9% (9)	61.3% (46)	39.5% (30)	37.5% (3)	11.1% (1)	45.7% (69)	33.3% (51)	40% (6)	33.3% (10)	39% (136)
30-39 years	26.6% (20)	24.7% (19)	14.3% (1)	38.1% (8)	25.3% (19)	18.4% (14)	50% (4)	66.7% (6)	25.8% (39)	21.6% (33)	33.3% (5)	46.7% (14)	26.1% (91)
40-49 years	42.1% (32)	41.6% (32)	14.3% (1)	19% (4)	12% (9)	36.8% (28)	12.5% (1)	11.1% (1)	27.2% (41)	39.2% (60)	13.3% (2)	16.7% (5)	30.9% (108)
50-59 years	1.3% (1)	6.5% (5)	28.6% (2)	0.0% (0)	1.3% (1)	5.3% (4)	0.0% (0)	11.1% (1)	1.3% (2)	5.9% (9)	13.3% (2)	3.3% (1)	4% (14)

The job tenure for many of the current workers exceeds 10 years, with a mean of 11.5 years for all health worker cadres.

Within the study area, 55.3% of HAs and FWAs worked for ten years or more. Furthermore, 73.3% of the Surjer Hashi and UHC staff have been reported to work more than or equal to ten years. In Sylhet, 81% of Surjer Hashi staff have been working more than or equal to ten years. The same job tenure has been reported for 57.1% of UHC staff, 47.4% of HAs and 40.3% of FWAs in Sylhet. Similarly, in Chittagong 87.5% of UHC staff, 55.6% of Surjer Hashi staff, 77.3% of HAs and 46.1% of FWAs have been found with the same job tenure (10 years or more). Details in Table 20.

**Table 20: Job tenure of workers (Mean =11.55, Median =9, SD =±8.9, Mini=1, Maxi=26)**

Job	Sylhet % (n)				Chittagong % (n)				Total % (n)				Total
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	
≤ 10 years	47.4% (36)	40.3% (31)	57.1% (4)	81% (17)	77.3% (58)	46.1% (35)	87.5% (7)	55.6% (5)	62.3% (94)	43.1% (66)	73.3% (11)	73.3% (22)	55.3% (193)
> 10 years	52.6% (40)	59.7% (46)	42.9% (3)	19% (4)	22.7% (17)	53.9% (41)	12.5% (1)	44.4% (4)	37.7% (57)	56.9% (87)	26.7% (4)	26.7% (8)	44.7% (156)

The percentage of FWs receiving basic or advanced computer training is quite low, whereas the UHC staff and Surjer Hashi staff have a higher percentage of basic computer training.

In the pilot areas, 40.4% of HAs and 19.6% FWAs had previously received computer training, while 40% of UHC staff and 90% of Surjer Hashi workers received computer training. Among FWs that had received training, HAs (65.6%) and FWAs (56.7%) received basic computer training, while 34.4% and 43.3% of HAs and FWAs respectively, received some advanced computer training. Among the UHC staff that had received computer training, 66.7% received basic computer training and 33.4% received advanced training. Finally, 92% of Surjer Hashi staff received basic training, and 7.4% of received advance training. Details in Table 21.

**Table 21: Exposure to computer training**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
% of FWs received any computer training	30.3% (23)	15.6% (12)	42.9% (3)	95.2% (20)	50.7% (38)	23.7% (18)	37.5% (3)	77.8% (7)	40.4% (61)	19.6% (30)	40% (6)	90% (27)
<b>Types of training received</b>												
Basic Course	73.9% (17)	66.7% (8)	66.7% (2)	90% (18)	60.5% (23)	50% (9)	66.7% (2)	100% (7)	65.6% (40)	56.7% (17)	66.7% (4)	92.6% (25)
Advance Course	26.1% (6)	33.3% (4)	33.3% (1)	10% (2)	39.5% (15)	50% (9)	33.3% (1)	0% (0)	34.4% (21)	43.3% (13)	33.3% (2)	7.4% (2)

Overall, the benefits of proper birth spacing are recognized by workers, including improved health for mother and child, and economic benefits such as lower family expenses and better schooling, yet workers did not agree that the economic benefits of proper spacing would equate to feeding children more nutritious foods or help children to be more prosperous.

Table 22 shows the workers' perception about the benefits of birth spacing. Overall, a majority of all workers agreed that birth spacing results in healthier mothers (100% Surjer Hashi, 60% UHC, 62% FWAs, and 69% HAs). Among the facility-based staff, 83.3% of Surjer Hashi staff agreed that birth spacing decreases a mother's likelihood to die during childbirth, whereas UHC staff (26.7%), HAs (45.7%) and FWAs (17.6%) agreed. Further, 67% of Surjer Hashi staff agreed that birth spacing reduces maternal complications such as seizure (eclampsia), fistula, etc., compared to 27% of UHC staff, 38% of HAs and 11% of FWAs.

Among the HAs, 53.6% agreed that when babies are spaced between pregnancies, they are born healthier, but FWAs (30.7%), UHC staff, (46.7%) and Surjer Hashi staff (33.3%) agreed less. This survey also found that half of the Surjer Hashi staff believed that proper birth spacing leads to children that will grow up healthier, and HAs (46.4%), FWAs (37.3%) and UHC staff (26.7%) also reported this benefit. Although, only a small percentage of workers thought that birth spacing would help children to have futures that are more prosperous. Most of the HAs, FWAs, and UHC staff agreed that proper birth spacing would improve the economic status of the family. Similarly, half of HAs and FWAs agreed that children could go to better schools if proper birth spacing among pregnancies was practiced, yet 33.8% of HAs and 39.2% of FWAs said that families would have more money left to feed children nutritious foods. Details in Table 22.

**Table 22: Knowledge of Benefits of Birth Spacing**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
Mothers are healthier	89.5% (68)	64.9% (50)	71.4% (5)	100% (21)	48% (36)	59.2% (45)	50% (4)	100% (9)	68.9% (104)	62.1% (95)	60% (9)	100% (30)
Less likely to die during childbirth	75% (57)	27.3% (21)	57.1% (4)	85.7% (18)	16% (12)	7.9% (6)	0% (0)	77.8% (7)	45.7% (69)	17.6% (27)	26.7% (4)	83.3% (25)
Less likely to suffer maternal complications	67.1% (51)	14.3% (11)	57.1% (4)	71.4% (15)	8% (6)	6.6% (5)	0% (0)	55.6% (5)	37.7% (57)	10.5% (16)	26.7% (4)	66.7% (20)
Babies born healthier	72.4% (55)	23.4% (18)	71.4% (5)	33.3% (7)	34.7% (26)	38.2% (29)	25% (2)	33.3% (3)	53.6% (81)	30.7% (47)	46.7% (7)	33.3% (10)
Children grow up healthier	53.9% (41)	46.8% (36)	28.6% (2)	47.6% (10)	38.7% (29)	27.6% (21)	25% (2)	55.6% (5)	46.4% (70)	37.3% (57)	26.7% (4)	50% (15)
Children grow up being more prosperous	38.2% (29)	16.9% (13)	42.9% (3)	19% (4)	42.7% (32)	30.3% (23)	12.5% (1)	11.1% (1)	40.4% (61)	23.5% (36)	26.7% (4)	16.7% (5)
Less expenses for the family	56.6% (43)	50.6% (39)	28.6% (2)	4.8% (1)	53.3% (40)	46.1% (35)	62.5% (5)	-	55% (83)	48.4% (74)	46.7% (7)	3.3% (1)

Indicators	Sylhet % (n)				Chittagong % (n)				Total% (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
Children can go to better schools	53.9% (41)	53.2% (41)	14.3% (1)	-	46.7% (35)	44.7% (34)	25% (2)	-	50.3% (76)	49% (75)	20% (3)	-
More money to feed children nutritious foods	38.2% (29)	39% (30)	43.9% (3)	-	29.3% (22)	39.5% (30)	12.5% (1)	-	33.8% (51)	39.2% (60)	26.7% (4)	-
Women in the family can work to earn	17.1% (13)	13% (10)	-	-	16% (12)	30.3% (23)	-	-	16.6% (25)	21.6% (33)	-	-
More happiness in conjugal life	31.6% (24)	22.1% (17)	-	-	44% (33)	36.8% (28)	25% (2)	-	37.7% (57)	29.4% (45)	13.3% (2)	-
Other	3.9% (3)	23.4% (18)	28.6% (2)	-	8.8% (6)	18.4% (14)	12.5% (1)	-	6% (9)	20.9% (32)	20% (3)	-

A large majority of workers agree that the mother's health will improve with a small family size, although the FWs dispute that a small family size enhances a mother's survival.

There are various perceptions about the benefits of having a small family among the workers. 74% of HAs and 69.3% of FWAs along with 73.3 % of facility-based workers (UHC and Surjer Hashi staff) perceived that mothers will remain healthy if the family size is small. Among the facility-based workers, 26.7% UHC staff and 50% Surjer Hashi staff believed that a small family size could minimize the likelihood of maternal death during childbirth. 46.7% of HAs and 22.9% of FWAs reported having the same perception. Meanwhile, 72.7% of HAs and 49% of FWAs perceived that children grow up healthier in small families. 90% of Surjer Hashi staff and 46.7% of UHC staff reported believing the same. Details in Table 23.

**Table 23: Knowledge of Benefits of Small Family**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
Mothers are healthier	88.2% (67)	71.4% (55)	85.7% (6)	66.7% (14)	59.5% (44)	67.1% (51)	62.5% (5)	88.9% (8)	74% (111)	69.3% (106)	73.3% (11)	73.3% (22)
Less likely to die during childbirth	76.3% (58)	22.1% (17)	57.1% (4)	52.4% (11)	16.2% (12)	23.7% (18)	0.0% (0)	44.4% (4)	46.7% (70)	22.9% (35)	26.7% (4)	50% (15)
Less likely to suffer maternal complication	68.4% (52)	10.4% (8)	57.1% (4)	28.6% (6)	4.1% (3)	2.6% (2)	0.0% (0)	22.2% (2)	36.7% (55)	6.5% (10)	26.7% (4)	26.7% (8)
Babies born healthier	50% (38)	16.9% (13)	28.6% (2)	23.8% (5)	45.9% (34)	39.5% (30)	25% (2)	22.2% (2)	48% (72)	28.1% (43)	26.7% (4)	23.3% (7)
Children grow up healthier	76.3% (58)	54.5% (42)	71.4% (5)	90.5% (19)	68.9% (51)	43.4% (33)	25% (2)	88.9% (8)	72.7% (109)	49% (75)	46.7% (7)	90% (27)
Children grow up being more prosperous	43.4% (33)	20.8% (16)	42.9% (3)	-	47.3% (35)	40.8% (31)	12.5% (1)	-	45.3% (68)	30.7% (47)	26.7% (4)	-
Less expenses for the family	65.8% (50)	70.1% (54)	42.9% (3)	28.6% (6)	70.3% (52)	64.5% (49)	62.5% (5)	44.4% (4)	68% (102)	67.3% (103)	53.3% (8)	33.3% (10)
Children can go to better schools	71.1% (54)	77.9% (60)	57.1% (4)	66.7% (14)	54.1% (40)	69.7% (53)	75% (6)	44.4% (4)	62.7% (94)	73.9% (113)	66.7% (10)	60% (18)
More money to feed children nutritious foods	51.3% (39)	54.5% (42)	57.1% (4)	47.6% (10)	52.7% (39)	63.2% (48)	37.5% (3)	44.4% (4)	52% (78)	58.8% (90)	46.7% (7)	46.7% (14)
Women in the family can work to earn	10.5% (8)	24.7% (19)	0.0% (0)	28.6% (6)	18.9% (14)	36.8% (28)	12.5% (1)	11.1% (1)	14.7% (22)	30.7% (47)	6.7% (1)	23.3% (7)
More happiness in conjugal life	0.0% (0)	11.7% (9)	14.3% (1)	-	2.7% (2)	6.6% (5)	12.5% (1)	-	9.2% (14)	1.3% (2)	13.3% (2)	-

Workers viewed long acting and permanent methods (LAPMs) as long-acting methods that are less troublesome to use for the clients, yet almost none of them had knowledge that LAPMs could be accessed free of charge and that clients are offered assistance to access LAPM services.

More than 80% of FWs in the pilot areas reported that LAPMs last longer and are easier to use. Among the facility-based workers, more than 88% of Surjer Hashi staff, FWAs and HAs agreed that these methods create less harassment for clients, but only 46.7% of Surjer Hashi workers agreed. Very few of the workers reported to know that LAPM services are free of cost, with only 8.6% of HAs, 15% of FWAs and 6.7% of UHC staff having knowledge on this provision while no Surjer Hashi staff reported knowing about it at all. Details in Table 24.

**Table 24: Knowledge about benefits of LAPMs**

Benefits of LAPM	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
Lasts longer	94.7% (72)	87% (67)	85.7% (6)	100% (21)	66.7% (50)	78.9% (60)	75% (6)	100% (9)	80.8% (122)	83% (127)	80% (12)	100% (30)
Less harassment	90.8% (69)	90.9% (70)	100% (7)	52.4% (11)	90.7% (68)	85.5% (65)	100% (8)	33.3% (3)	90.7% (137)	88.2% (135)	100% (15)	46.7% (14)
Less likely to fail	9.2% (7)	11.7% (9)	14.3% (1)	47.6% (10)	37.3% (28)	47.4% (36)	37.5% (3)	22.2% (2)	23.2% (35)	29.4% (45)	26.7% (4)	40% (12)
There is no service charge/fee for clients	1.3% (1)	11.7% (9)	0.0% (0)	-	16% (12)	18.4% (14)	12.5% (1)	-	8.6% (13)	15% (23)	6.7% (1)	-
Client gets travel or transportation cost	2.6% (2)	13% (10)	-	-	8% (6)	7.9% (6)	-	-	5.3% (8)	10.5% (16)	-	-
Other	3.9% (3)	20.8% (16)	0.0% (0)	-	2.7% (2)	2.6% (2)	25% (2)	-	3.3% (5)	11.8% (18)	13.3% (2)	-

In terms of short-term family planning methods, the vast majority of workers have knowledge about condoms, oral pills and injectable drugs as short-term family planning methods. In the health service facilities, all (100%) Surjer Hashi staff knew about using condoms and oral pills. Less than 10% of workers knew about the LAM method. Details in Table 25.

**Table 25: Field worker knowledge about short-term methods**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
Condoms	97.4% (74)	97.4% (75)	100% (7)	100% (21)	90.7% (68)	94.7% (72)	100% (8)	100% (9)	94% (142)	96.1% (147)	100% (15)	100% (30)
Oral pills	98.7% (75)	97.4% (75)	100% (7)	100% (21)	85.3% (64)	97.4% (74)	75% (6)	100% (9)	92.1% (139)	97.4% (149)	86.7% (13)	100% (30)
Injectables	86.8% (66)	90.9% (70)	85.7% (6)	95.2% (20)	73.3% (55)	86.8% (66)	75% (6)	88.9% (8)	80.1% (121)	88.9% (136)	80% (12)	93.3% (28)
Lactational Amenorrhea	2.6% (2)	7.8% (6)	0.0% (0)	9.5% (2)	5.3% (4)	11.8% (9)	12.5% (1)	11.1% (1)	4% (6)	9.8% (15)	6.7% (1)	10% (3)
Traditional/Natural methods	9.2% (7)	10.4% (8)	14.3% (1)	9.5% (2)	9.3% (7)	18.4% (14)	12.5% (1)	11.1% (1)	9.3% (14)	14.4% (22)	13.3% (2)	10% (3)

Long-term family planning methods (IUD and Hormonal Implant) are more or less known to the pilot area workers. In both districts, 100% of Surjer Hashi staff knew about these two methods - IUD and Hormonal Implant, while more than 80% of HAs and FWAs had knowledge about these methods. Details in Table 26.

**Table 26: Knowledge of long-term methods**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
IUD	80.3% (61)	96.1% (74)	100% (7)	100% (21)	53.3% (40)	77.6% (59)	50% (4)	100% (9)	66.9% (101)	86.9% (133)	73.3% (11)	100% (30)
Hormonal Implant	100% (76)	97.4% (75)	85.7% (6)	100% (21)	93.3% (70)	90.8% (69)	75% (6)	100% (9)	96.7% (146)	94.1% (144)	80% (12)	100% (30)

All of the Surjer Hashi workers and more than 90% of UHC staff in the pilot areas reported to have knowledge on permanent methods of family planning (tubectomy for women and vasectomy for men). Among the FWs, 90.1% of HAs and 98% of FWAs had knowledge of a tubectomy while 94% of HAs and 94.8% of FWAs had knowledge on vasectomy. Details in Table 27.

**Table 27: Knowledge of permanent methods**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
Tubectomy for women	98.7% (75)	100% (77)	100% (7)	100% (21)	81.3% (61)	96.1% (73)	87.5% (7)	100% (9)	90.1% (136)	98% (150)	93.3% (14)	100% (30)
Vasectomy for men	97.4% (74)	97.4% (75)	100% (7)	100% (21)	90.7% (68)	92.1% (70)	100% (8)	100% (9)	94% (142)	94.8% (145)	100% (15)	100% (30)

The perception of the FWs on advising newly married couples in the pilot areas about family planning was evaluated and the results are provided in Table 13. A good percentage of FWs (64.9% of HAs and 71.2% of FWAs) and facility-based workers (86.7% of UHC staff and 76.7% Surjer Hashi staff) reported providing information on how to delay the birth of the first child to a newly married couple. Approximately, 61.6% of HAs and 62.7% of FWAs reported explaining to couples the benefits of delaying their first born, while 53.3% of UHC staff and 66.7% of Surjer Hashi staff did the same in the facility centers. Among the FWs, 52.3% of HAs and 32% of FWAs reported informing newly married couples about the benefits of birth spacing while 40% of the UHC staff and 23.3% of Surjer Hashi staff also reported providing this information to the couples.

**Table 28: Worker counseling to a client who has a child**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
Provide Family Planning options available to her	81.6% (62)	64.9% (50)	71.4% (5)	100% (21)	38.7% (29)	56.6% (43)	50% (4)	100% (9)	60.3% (91)	60.8% (93)	60% (9)	100% (30)
Benefits of spacing children	67.1% (51)	61% (47)	57.1% (4)	61.9% (13)	74.7% (56)	61.8% (47)	62.5% (5)	77.8% (7)	70.9% (107)	61.4% (94)	60% (9)	66.7% (20)
Other	2.6% (2)	19.5% (15)	14.3% (1)	-	9.3% (7)	9.2% (7)	0.0% (0)	-	6% (9)	14.4% (22)	6.7% (1)	-

**Table 29: Worker counseling to a newly married couple**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
Information on how to delay the birth of their first child	80.3% (61)	80.5% (62)	100% (7)	76.2% (16)	49.3% (37)	61.8% (47)	75% (6)	77.8% (7)	64.9% (98)	71.2% (109)	86.7% (13)	76.7% (23)
Information on the benefits of delaying the birth of the first child	73.7% (56)	63.6% (49)	28.6% (2)	66.7% (14)	49.3% (37)	61.8% (47)	75% (6)	66.7% (6)	61.6% (93)	62.7% (96)	53.3% (8)	66.7% (20)
Detailed available information about Family Planning options	46.8% (36)	69.7% (53)	71.4% (5)	71.4% (15)	53.3% (40)	43.4% (33)	25% (2)	55.6% (5)	61.6% (93)	45.1% (69)	46.7% (7)	66.7% (20)
Information on the benefits of birth spacing their children	46.1% (35)	28.6% (22)	57.1% (4)	19% (4)	58.7% (44)	35.5% (27)	25% (2)	33.3% (3)	52.3% (79)	32% (49)	40% (6)	23.3% (7)
Other	3.9% (3)	13% (10)	0% (0)	-	6.7% (5)	5.3% (4)	25% (2)	-	5.3% (8)	9.2% (14)	13.3% (2)	-

100% of facility-based workers and more than 80% of FWs perceived newly married couples as their target group while adolescent girls received far less attention from the workers. Only 9.3% of HAs, 36.6% of FWAs, and 20% of UHC staff perceived adolescent girls as their target group while no Surjer Hashi staff reported perceiving adolescent girls as their target group. In addition, 57.8% of HAs and 30.3% of FWAs provided family planning methods during the Expanded Program on Immunization (EPI) sessions, and approximately 40% provided this information during ANC and PNC visits. Among the facility-based workers, Surjer Hashi staff provided family planning services only during the ANC and PNC visits. Details in Table 30.

**Table 30: Knowledge about when and who to counsel**

Indicators	Sylhet % (n)				Chittagong % (n)				Total % (n)			
	Field Workers		Facility-based Workers		Field Workers		Facility-based Workers		Field Workers		Facility-based Workers	
	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI	HA	FWA	UHC	SURJER HASHI
<b>Target Group</b>												
Adolescent girls	7.9% (6)	33.8% (26)	14.3% (1)	-	10.7% (8)	39.5% (30)	25% (2)	-	9.3% (14)	36.6% (56)	20% (3)	-
Unmarried men	9.2% (7)	29.9% (23)	14.3% (1)	-	29.3% (22)	28.9% (22)	25% (2)	-	19.2% (29)	29.4% (45)	20% (3)	-
Newly married couples	98.7% (75)	97.4% (75)	100% (97)	100% (21)	73.3% (55)	81.6% (62)	100% (8)	100% (9)	86.1% (130)	89.5% (137)	100% (15)	100% (30)
Couples who just had a baby	90.8% (69)	57.1% (44)	85.7% (6)	90.5% (19)	81.3% (61)	72.4% (55)	87.5% (7)	77.8% (7)	86.1% (130)	64.7% (99)	86.7% (13)	86.7% (26)
<b>Targeted Times</b>												
During EPI session	51.6% (16)	26.2% (11)	50% (2)	-	63.6% (21)	34% (16)	75% (3)	-	57.8% (37)	30.3% (27)	62.5% (5)	-
During ANC and PNC visits	58.1% (18)	23.8% (10)	25% (1)	100% (17)	24.2% (8)	55.3% (26)	25% (1)	100% (8)	40.6% (26)	40.4% (36)	25% (2)	100% (25)
Others	22.6% (7)	73.8% (31)	50% (2)	-	42.4% (14)	29.8% (14)	50% (2)	-	32.8% (21)	50.6% (45)	50% (4)	-