

Original Article

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Perceptions and Utilization of MCH Services among the Women of Childbearing Age in Rural Communities

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Abstract

Background: Maternal deaths are still high and unsolicited incidence in the world, significantly in the low and lower-middle-income countries. Above half of the maternal deaths occur due to preventable or treatable medical conditions, which are associated with pregnancy and childbirth.

Methods: A community-based cross-sectional study was designed to assess the perceptions and utilization of MCH services among the 122 women of childbearing age (WCBA) of rural communities in Ramu Upazila, Cox's Bazar, Bangladesh.

Results: The majority (70.5%) of the WCBA were in the age group 18-32 years. Above two-thirds (69.7%) of mothers were literate; four-fifth (79.5%) were homemakers and above one-third of them (36.9%) delivered their first child below the age of 18 years. Majorities knew the importance of ANC services (85.2%) and 97.1% of them knew ANC visit schedules, but more than half (54.9%) cannot describe it correctly. During their last pregnancy, above four-fifths (84.4%) received antenatal checkups, but half (50.5%) of them did not take four ANC visits. The mode of the last delivery (93.4%) was a vaginal delivery, and more than half of the deliveries (54.9%) occurred in different hospital settings. Three-fifths of the mothers (60.7%) used contraceptive methods and about four-fifths (78.4%) of them took OCP. One-third of the mothers (31.2%) expressed their interest for permanent contraceptive methods. The majority (92.6%) took the TT vaccine and half of them (51.3%) completed 5 doses of TT vaccine during their teenage period. Above one-third of the mothers (36.9%) didn't suffer any notable complications. Above half of the maternal deaths occur due to preventable or treatable medical conditions, which are associated with pregnancy and childbirth.

Conclusion: Strengthening MCH services is a health priority for Bangladesh. The study has demonstrated that the perceptions of WCBA about MCH services were good and utilization of MCH services is satisfactory, which reflects the effectiveness of community-based intervention in the study place through the implementation of MCH services.

Keywords: Perceptions, Utilization, MCH services, WCBA mothers, Rural communities, Bangladesh.

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Introduction

Safe motherhood is an initiative to improve the quality of healthcare so that women can enjoy an optimal level of healthcare.

The six pillars of safe motherhood are antenatal care (ANC), obstetric and newborn care, postnatal care (PNC), family planning, post-abortion care, and STDs/HIV/AIDS control. It is designed to ensure and improve the quality of maternal and child healthcare services with the provision of family planning services to target couples aiming at a reduction of plausible risks.¹⁻⁴

According to World Health Organization (WHO), maternal and child health (MCH) services are a core component of universal health coverage (UHC).⁵ The key aim of MCH services are maternal death reduction and provision of reproductive healthcare services with family planning. The MCH package

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services are providing comprehensive healthcare to WCBA and under-five children.⁶ During the maternity cycle, utilization of MCH services components is still poor in low and lower-middle-income countries, particularly in the rural and hard-to-reach areas of Bangladesh.⁷

Maternal morbidity and mortality both are critical health challenges for Bangladesh.⁸ About 54.8% of the total female population of this country is categorized under WCBA, and the maternal mortality ratio (MMR) is 182 per 100,000 live births in rural areas, where the national MMR is 172 per 100,000 live births reported in 2017.⁹ Approximately 810 mothers die each day worldwide due to maternal complications, accounting for about 295,000 deaths in 2017. 94% of these maternal deaths occur in low and lower-middle-income countries.^{10,11} Improving maternal health and reducing MMR to less than 70 per 100,000 live births by 2030 is an imperative health-related target of Sustainable Development Goals (SDG).^{12,13} For reducing both maternal and child morbidity and mortality periodic antenatal, intranatal, and post-natal care services are essential for all mothers.¹⁴ Community-based safe motherhood interventions must be designed appropriately and effectively to address socio-economic and cultural barriers at all levels so that women's health during pregnancy gets the priority it deserves.¹⁵

The Government of Bangladesh (GOB) has significantly increased the provision of emergency obstetric care services along with appropriate referrals to combat maternal deaths. WHO collaborating with the GOB to ensure continued assistance to further accelerate fighting through capacity building with evidence-based practice in maternal and neonatal care.¹⁶ Increased availability, accessibility, and proper utilization of existing MCH services should be prioritized in every part of the country to ensure safe motherhood.

Methods

Study design and settings

This community-based cross-sectional study was carried out to assess the perceptions and utilization of MCH services among rural WCBA

(15-49 years). The study was conducted from November 2015 to January 2016 in different communities of Ramu upazila, Cox's Bazar, Bangladesh.

Data sources and tool

Data collection were carried out by face-to-face interviews and using a semi-structured questionnaire in Bengali. Based on convenience, data were collected from purposively selected 122 women who gave birth within the last five years from the data collection point in time. As a part of Residential Field Site training (RFST), 4th year medical students from Sylhet Women's Medical College collected data on socio-economic characteristics, mothers' perceptions, and utilization of MCH services.

Statistical analysis

The data were checked and cleaned followed by categorizing. The statistical analysis was performed for descriptive analysis and presented as tables and bar diagram.

Ethical consideration

Participation was voluntary and confidentiality was maintained by using an individual code number for each respondent. The study was validated by the Department of Community Medicine, Sylhet Women's Medical College, Sylhet 3100, Bangladesh.

Results

Socio-demographic characteristics of the mothers

Table 1 characterizes the socio-demographic profile of the mothers. The interviewed mother's age range was 18-49 years, where majorities (70.5%) were in the age group 18-32 years and no one was found below 18 years. More than two-thirds (69.7%) of mothers were literate. By profession, four-fifths of the participants (79.5%) were homemakers and one-third (30.3%) of their husbands were day laborers. One-third of the mothers (36.9%) gave birth to their first child at or under 18 years of age, while 12.3% were mothers of more than five children.

Table 1: Socio-demographic characteristics (n=122)

Characteristics		n(%)
Age group (years)	<18	0(0)
	18-32	76(70.5)
	33-49	36(29.5)
Education	No formal education	37(30.3)
	Literate	85(69.7)
Occupation	Homemaker	97(79.5)
	Services	5(4.1)
	Teacher	2(1.6)
	Others (student, day labor etc.)	18(14.8)
Husband's occupation	Services	14(11.5)
	Business	24(19.7)
	Farmer	18(14.8)
	Day laborer	37(30.3)
	Abroad	6(4.9)
	Others (teacher, unemployed etc.)	23(18.9)
Age at first delivery	<18 years	45(36.9)
	≥18 years	77(63.1)
Number of alive child	≤2	72(59.0)
	3-4	35(28.7)
	≥5	15(12.3)

Perceptions and utilization of MCH services by mothers

Table 2 demonstrates the mother's perceptions about MCH services and utilization of these services in their maternity cycle. The majority (85.2%) was aware of the importance of ANC services during pregnancy, and among them, 97.1% could recall correct ANC visit schedules, but 54.9% were wrong about the minimum ANC visit number. Among the participants, around 85% received antenatal checkups during their last pregnancy, and only half of the participants took four ANC visits.

Cent percent of mothers were informed about the availability of ANC services from different health facilities, i.e. public and private hospitals. Hence, a small percent (6.6%) visited traditional healers for antenatal checkups. Majorities (87.7%) were found familiar with the danger signs during pregnancy, where the most uttered were per-vaginal bleeding and leg oedema (37.4%), followed by blurring of vision (25.2%).

During the intra-natal period, spontaneous vaginal delivery was the mode of last delivery for the majority (93.4%), while the cesarean section was only 6.6% and 54.9% of these deliveries were institutional.

60.7% of mothers were contraceptive users; 78.4% were on oral contraceptive pills (OCP), whereas intrauterine device (IUD) users were nil. The interview revealed that 31.2% of women have an unmet need for permanent methods (i.e., tubal ligation).

Figure 1 shows the percentage of mothers who developed different complications during their pregnancy. Around one-third of mothers enjoyed their pregnancy devoid of any complications whereas other experienced severe vomiting (32.0%), followed by anemia (27.9%) and hypertension (16.4%).

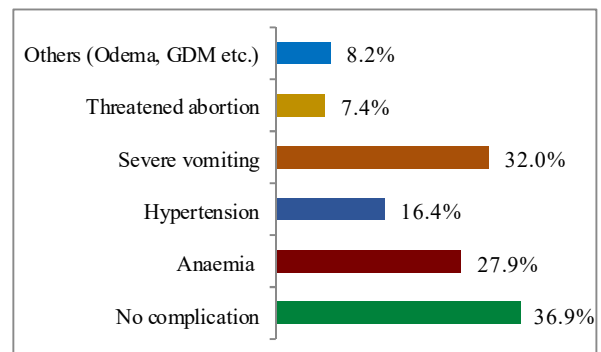


Figure 1: Complications developed during antenatal period

Discussion

Safe motherhood program is intended to establish through comprehensive activities as well as by addressing risk factors of maternal deaths.¹⁷ To make this combination of preventive and therapeutic care available to the most peripheral level population, the only approach which can succeed is the MCH services.

Socio-demographic characteristics of the mothers

According to the current study, the age of the majority (70.5%) was 18–32 years of age, which is similar to the studies conducted in Somalia (72.1%) and Ethiopia (75.4%).^{18,19}

Table 2: Perceptions and utilization of MCH services by mothers

		n(%)
Perceptions and utilization of ANC services		
Knowledge about importance of ANC services during pregnancy (n=122)	Yes	104(85.2)
	No	18(14.8)
Knowledge about the timing of receiving ANC visits (n=101)	Known (conception to delivery)	101(97.1)
	Don't know	3(2.9)
Knowledge about minimum numbers of ANC visit (n=122)	Known (4 times)	55(45.1)
	Don't know	67(54.9)
Received antenatal checkup during last pregnancy (n=122)	Yes	103(84.4)
	No	19(15.6)
Numbers of the ANC has taken (n=103)	<4 times	52(50.5)
	4 times	51(49.5)
Knowledge about the places of ANC services provided (n=122)	Healthcare facilities	110(90.2)
	Doctor's chamber	12(9.8)
Places of ANC services taken during the last pregnancy (n=122)	Healthcare facilities	101(82.8)
	Doctor's chamber	17(13.9)
	Others (traditional healers)	4(3.3)
ANC services taken from in the last pregnancy (n=122)	Doctor	77(63.1)
	Healthcare providers	37(30.3)
	Others (traditional healers)	8(6.6)
Knowledge about warning signs (n=122)	Yes	107(87.7)
	No	15(12.3)
Responses about warning signs (n=107)	Per-vaginal bleeding	40(37.4)
	Leg oedema	40(37.4)
	Convulsion or fits	21(19.6)
	Blurred vision	27(25.2)
	Headache	23(21.5)
	High fever	22(20.6)
Utilization of delivery services		
Mode of last delivery (n=122)	Normal vaginal delivery (NVD)	114(93.4)
	Caesarean section	8(6.6)
Place of last delivery (n=122)	Home	55(45.1)
	Hospital settings	67(54.9)
Perceptions and utilization of contraceptive methods		
Contraceptive user status (n=122)	Used	74(60.7)
	Not used	47(39.3)
Type of contraceptives uses (n=74)	Oral contraceptive pills (OCP)	58(78.4)
	Injectable	12(16.2)
	Nor-plant	2(2.7)
	Condom	2(2.7)
	Copper-T	0(0)
Intent to affirm permanent method (n=122)	Yes	38(31.2)
	No	84(68.9)
Utilization of tetanus toxoid (TT) vaccine		
Status of TT vaccination (n=122)	Vaccinated	113(92.6)
	Non-vaccinated	9(7.4)
Time of taking TT vaccine (n=113)	5 doses from at the 15 years	58(51.3)
	<5 doses from at the 15 years	10(8.9)
	2 doses during in each pregnancy	40(35.4)
	<2 doses during in each pregnancy	5(4.4)

69.7% of mothers were literate, which is more than the national average literacy rate (63.2%).²⁰ Most respondents were homemakers, whereas their spouses were involved in different services (i.e., services, business, staying abroad, and teachers) and belonged to middle-class families. One-third of the mothers (36.9%) gave birth to their first child at or under 18 years of age, similar to the study findings conducted in North West Ethiopia (37.0%).²¹

Perceptions and utilization of MCH services by mothers

The current study reveals that the majority (85.2%) was aware of the importance of ANC services during pregnancy, and 97.1% could recall correct ANC visit schedules. Among the participants, around 85% received antenatal checkups during their last pregnancy, and only half of the participants took four ANC visits which are higher than national figures (82.0% and 47.0%). The 4th HPNSP aims to reach 50% coverage by 2022.²²

Most of the mothers (77.0%) took ANC services from doctors during their last pregnancy, and only 6.6% visited traditional healers. In Bangladesh Demographic and Health Survey (BDHS) reports, it's conveyed that receiving ANC from a qualified doctor was 76.0% in 2017.²² It's construed that the utilization of ANC services is related to the mother's education.

During the intra-natal period, vaginal delivery was the mode of last delivery for the majority (93.4%), while cesarean section was only 6.6%, and 54.9% of these deliveries were institutional. In 2017, 50.0% of deliveries were performed in health facilities, which is similar to the current study. The current study's finding is contradictory to the national data in terms of cesarean section delivery (6.6% in comparison to 33.0%).²²

According to the current study, 60.7% of mothers were contraceptive users, and among them, 78.4% were on oral contraceptive pills (OCP). In Bangladesh, 62% of mothers use contraceptives, the most commonly used method was OCPs in 2017.²² The interview revealed that 31.2% of women have an unmet need for

permanent methods (i.e., tubal ligation) and showed interest in the permanent method of contraception. The proportion of female sterilization was 32.0% in the 2017-18 BDHS reports.²²

During the child-bearing period, the majority (92.6%) took the TT vaccine; around half (51.3%) completed the schedule of the TT vaccine within adolescence. The EPI-CES 2016 reports that the tetanus toxoid coverage (%) among WCBA was 52.3%, and 98.2% took only the TT 1st dose.²³

These findings demonstrate that, perceptions about MCH services by the WCBA mothers were satisfactory and observed maximum of them utilizing any sort of MCH services components in their maternity cycle to ensure their safe motherhood.

Conclusion

The study has demonstrated that the perceptions of WCBA about MCH services are good and utilization of MCH services is satisfactory, other than place of delivery. But more operative community-based interventions are needed for strengthening the MCH services in the rural communities of Ramu, specially in relation to place of delivery. To improve the quality of the MCH services, maternal health-related barriers needed to be identified and removed in both health and community settings for accessible and available preventive and promotive maternal healthcare and family planning services including emergency obstetric care services in life-threatening conditions. The GOB needs to work in collaboration with private settings, NGOs, and stakeholders to improve MCH services for safe motherhood.

Limitation of the study

45.1% of mothers delivered their child in home, where those done by skilled birth attendants (SBA) or not were asked the respondents.

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