

Preference for home births in rural Bangladesh: A qualitative exploratory study

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ABSTRACT

Despite the renewed commitment to increase the rate of health facility-based delivery, more than half of all deliveries still take place at home in rural Bangladesh with the support of traditional birth attendants (TBAs), which leads to high maternal mortality as well as poor maternal health and pregnancy outcomes. The aim of this study was to identify the reasons for preferring home delivery among rural communities in Bangladesh. The data were gathered through three Focus Group Discussions (FGDs) among three different groups of stakeholders, viz., nine women, seven men, and nine health service providers. Thus, 25 individuals participated in this study. FGDs were conducted in a rural sub-district of Bangladesh. Thematic analysis was performed. The findings revealed a high preference for home delivery attended by TBAs among rural communities, as it was convenient, easily affordable, comfortable, and suitable for maintaining social rituals during labor and after delivery. Cultural practices and belief systems are the most frequently cited reasons for preferring home delivery with the help of a TBA. Other major reasons for choosing home delivery included financial constraints, inadequate knowledge about services offered by the health care facilities and lack of awareness about service delivery points, poor road conditions, and lack of transportation to reach the nearest health facility. Poor quality of services at the health care facility, perceived fear of undergoing cesarean delivery at the health care facility, and lack of lady doctors at the health care facilities also had a significant impact on the choice of home delivery. To further increase health facility-based delivery in Bangladesh, there is an urgent need to design a comprehensive maternal health program with culturally appropriate interventions, duly addressing the reasons for preferring home delivery that have been identified in this study. In the long run, promoting women's education, reducing poverty, and improving the quality of all services at the health care facilities, particularly in the rural hinterlands of Bangladesh, would improve maternal health and pregnancy outcomes in the communities and reduce high maternal mortality.

Key words: home childbirth, pregnancy, rural community, Bangladesh, maternal health

INTRODUCTION

Maternal mortality rate (MMR) is one of the most important and sensitive indicators used in public health to highlight significant disparities between developed and developing countries. The MMR in the least developed countries (LDCs) was reported to be 415 maternal deaths per 100,000 live births in 2017 compared to only 12 maternal deaths per 100,000 live births in more developed regions.¹ The remarkably high incidence of maternal mortality in developing countries has been attributed to poor utilization of available maternity services, and partly to the limited availability and poor accessibility of services, rampant poverty, low socio-economic status of women, and high rates of illiteracy.¹⁻³ Proper utilization of maternity services and provision of delivery at health care facilities supported by skilled birth attendants (SBAs) and emergency obstetric care could prevent up to 75% or more of maternal deaths.^{4,6} Yet in most developing countries, MMR remains high and the use of and access to maternal health services (MHS) remains low, and delivery of birth at home is widespread.⁷

Bangladesh, a very densely populated (approximately 1200 people/sq km) developing country of South-East Asia, has made notable strides in the reduction of MMR and under-five mortality during the Millennium Development Goals (MDG) era.⁸⁻⁹ Between 1990 and 2010, MMR in Bangladesh decreased from 574 maternal deaths to 194 maternal deaths per 100,000 live births.¹⁰ This decline may be attributed to a reduction in fertility rates (from 5 births per woman in 1990 to around 2 in 2011), increased skilled attendance at delivery (from 5% in 1991 to 32% in 2011),¹⁰ and development of the maternal health care

system in both public and private sectors. Despite such appreciable progress, maternal health remains a major public health concern in Bangladesh, with limited access to and low rate of utilization of quality maternal health care services. The quality of care refers to four or more antenatal visits, with at least one visit by a medical provider, measurement of weight and blood pressure, testing of blood and urine, and receiving information on danger signs during pregnancy. By this definition, only 18% of the pregnant women in Bangladesh received quality care, as reported by the latest Demographic and Health Survey (DHS) 2017–2018 in Bangladesh.⁹ Home delivery is widely preferred and practiced in Bangladesh as half (50%) of the deliveries still occur at home.¹⁰ The situation is worse in rural areas where more than half (55%) of the deliveries occur at home. Moreover, Bangladesh is largely a rural country as more than three-fourths (77%) of the total population live in rural areas.¹¹ The lifetime risk of death from pregnancy and childbirth-related causes in Bangladesh is very high. According to a study of UNFPA, it is one in 21 women in Bangladesh, compared to one in over 4,000 women in developed countries, and 69% of the total maternal deaths occur due to direct obstetric causes, 14% due to injury and violence, while 17% due to indirect causes.¹² Therefore, it becomes important to understand the contributory factors to women's health-seeking behavior during delivery and to design an effective maternal health intervention program. A few studies have quantitatively examined the factors contributing to the high prevalence of home delivery in Bangladesh.¹³⁻¹⁷ These quantitative studies have focused on socio-economic, demographic, and physical

factors only. However, in addition to socio-economic, demographic and physical factors, there are many cultural, social, and behavioral factors affecting the preference for home delivery, which are qualitative in nature and thus difficult to quantify. These factors can be better understood through a qualitative study. Strauss and Corbin¹⁸ stated, Qualitative research produces findings that are not arrived at by statistical procedures or other means of quantification. It can refer to research about persons' lives, lived experiences, behaviors, emotions, and feelings as well as social movements, cultural phenomena, and interactions between nations.¹⁸ Qualitative research enables the researchers to discover the participants' inner experience and to figure out how meanings are shaped through and in culture.¹⁹ Besides, qualitative research design has a flexible structure as the design can be constructed and reconstructed to a greater extent.²⁰

The aim of this qualitative study was to obtain in-depth information on social, cultural, and behavioral factors that act as barriers to child delivery at a health care facility and/or facilitate home delivery from the perspectives of community members and health service providers. This study forms part of a larger multi-method study that is aimed at exploring the reasons and factors influencing the choice of home delivery among mothers in rural Bangladesh.

MATERIALS AND METHODS

Study setting

The study was conducted in a purposely selected rural *Upazila* (sub-district), named Madhupur in Tangail district in Dhaka division of Bangladesh, which is 140 km northwest of the capital city Dhaka. The total population of Madhupur was 296,729 in 2011.¹¹ Majority

(about 90%) of the population of the district are Muslims. The sub-district has different levels of public, private, and non-government organization (NGO) health facilities. Public health facilities include one public health complex with 50 beds, nine health and family welfare centers, and 30 community clinics. There are five private hospitals/clinics with a total occupancy of 50 beds. There are two NGO clinics/facilities with 23 beds.

Study design and study participants

This qualitative study, conducted under the auspices of the Daffodil International University (DIU), Dhaka, Bangladesh, was funded by the Bangladesh Medical Research Council (BMRC)—a research and training institute under the Ministry of Health (MoH), Bangladesh. Department of Public Health of DIU implemented the survey.

The study was conducted using Focus Group Discussions (FGDs). A total of three groups were conducted with three separate groups of stakeholders. The three FGDs were: (1) women, (2) men, and (3) health service providers. Both men and women participants were selected and mobilized with the help of Family Welfare Assistants (FWAs) - the local health workers, while the health service providers were selected by the research team. FWAs are government-appointed full-time trained female health workers at a community level.

The women group had nine participants: six mothers who had a delivery within the past 12 months, one elderly mother, one mother-in-law, and one female traditional birth attendant (TBA). The men group consisted of seven participants: two local school teachers, one elected councilor of local government, three married men, and one local influential senior citizen. The health service providers group consisted of nine persons, including

two medical officers, two midwives, two nurses, two FWAs, and one community clinic manager. Thus a total of 25 people participated in the three FGDs. All the FGDs were conducted in the conference room of the Madhupur *Upazila* (sub-district) Health Complex in September 2019.

Data collection and Analysis

For conducting FGDs, a professional group with rich experience in qualitative data collection and analysis was engaged. It comprised one moderator, one rapporteur (note taker), and one observer-cum-recorder. The educational background of the moderator was Masters in Sociology with good skills in both English and Bangla (the native language). Besides, the whole research team (authors of this paper) actively participated in listening and observing the FGDs as well as extensive note-taking. The relevant information was collected as per the semi-structured FGD guideline. We first formulated FGD guidelines in English and then translated them into Bangla, which were finalized after field-testing in a similar rural setting to confirm the contents of the FGD as well as to identify any missing themes. The FGDs were recorded using a voice recorder. Data collection continued until saturation was reached.

Based on the objectives of the study, an outline of the data analysis was prepared. After data collection, the research team, in collaboration with the professional FGD team compiled and transcribed interview notes. We used a thematic framework to classify and organize data according to key themes, concepts, and emergent categories.²² The data were systematically indexed, synthesized, and interpreted to provide explanations for the findings. The themes, which were commonly being reflected across the participants, were grouped. Transcriptions were initially in

Bangla but subsequently back-translated into English. The findings were systematically arranged under different themes. The results from respondents from different groups were compared to strengthen the validity and reliability of the findings.

ETHICAL STATEMENT

At the outset of each FGD, we explained the objectives and importance of the study, the extent of involvement and commitment expected from the participants. We informed the participants on maintaining the confidentiality of their responses and their freedom to withdraw anytime from the study during the FGD session. Participation in this study was voluntary for all the selected respondents. Before participating in the FGD, all participants signed a consent form. The FGD moderator read the informed consent form out to illiterate participants and took their thumbprint on the informed consent form. The study was approved by the competent Ethics committee from the Ministry of Health (MoH) Bangladesh and by the Facility-based Review Board of the Bangladesh Medical Research Council (BMRC) (Ref. BMRC/HPNSP-projects/2019/185 dated 05 September 2019).

RESULTS

As emerged from FGDs, the reasons for preferring home delivery among the rural community were summarized under several common themes. These were lack of awareness about the importance of facility-based delivery, perceived traditional views about home delivery, socio-cultural norms toward home delivery, comfortable and convenient home delivery, cost of facility-based delivery, poverty

levels, distance to the health facility, poor road conditions, and lack of proper transportation facilities.

Key themes are summarized below.

Lack of awareness about the importance of facility-based delivery

Many participants were unaware of the importance of facility-based delivery and the risk associated with home delivery. Most of the participants, women and men alike, did not think it worthwhile to visit a health care facility for normal delivery until and unless they encountered a serious problem. They also felt that they could easily obtain help at home in case of complications.

“In our rural community, we prefer home delivery with the assistance of a TBA. If the delivery develops a complication, we move to a health facility or call midwives at home.” (Quote from a mother)

One of the service providers mentioned:

“Most of the people in this rural community think that deliveries at health facilities are only for those pregnant women with delivery complications. If TBAs cannot manage the deliveries, only then women used to come to the health facility or call SBA at home.”

“They think deliveries assisted by midwives are only for those with delivery complications...If TBAs cannot manage the deliveries, then they used to call us. Otherwise, calling midwives is unnecessary.” (a midwife)

Some participating service providers in one FGD further said:

“We had to handle many cases, for example, an obstructed labor with excessive bleeding, or retained placenta

cases when TBAs could no longer manage it and the condition of mothers became very critical.”

The illiteracy rate among adult males and females was high in the study area. Due to a lack of education, a large number of people had no right information about the modern health care facilities as well as the merits of facility-based delivery and demerits of home delivery. During our discussion in FGD sessions, many participants of the male and female groups expressed their ignorance about the modern health care facilities and underlined the need for more information, education, and motivational program by the government through both formal and informal channels.

Perceived traditional views and socio-cultural norms toward home delivery:

There is a perception among most of the female and male participants that delivering a child is a natural rite of passage for women, and in the absence of complications, a facility-based delivery is not needed. Therefore, home delivery was preferred. The community leaders (teachers and elected councilor) were also found to have the same opinion that pregnancy and delivery is not a serious issue that deserves medical attention under all circumstances. The participating service providers in FGD also confirmed these prevailing traditional views among most of the rural people.

This is obvious by the following statement by some mothers:

“Pregnancy and childbirth are natural processes in our life and are not an illness. I delivered my son at my home with the support of a TBA. By the grace of Almighty Allah, there was no problem. So, I do not foresee the necessity to deliver at the health facility.”

Many women and men participants in the FGDs mentioned that giving birth at

home had been a long tradition in their community as their elder sisters and mothers used to deliver at home with the assistance of a TBA.

One elderly mother said as below:

“I have delivered all my six children at home without any difficulty. Also, most other women are delivering at home successfully with one or two exceptions... , so, why do women need to go to the hospital to have their deliveries?”

Some participants of men and women FGDs explained that it was their ‘custom’ or ‘habit’ to give birth at home. This ‘custom’ prevented them from attending health facilities during childbirth, although they used to visit health facilities or doctors at the time of antenatal care (ANC) or illness. They further added that grandmothers or mothers-in-law usually advise women to deliver at home, in accordance with their own experience of childbirth without any problem.

“My mother always delivered at home, so she advised me the same, and nothing has gone wrong”, said one young mother.

Some participants from both men and women FGDs said, *“TBAs claim themselves as experienced as health service providers and assure the mothers about safe delivery at home.”*

All kinds of FGD participants stated that women living in the rural community are very conservative and strictly maintain the Islamic principle of *Purdah* (veil) that limits them from going outside the home. They added that many people in the rural community even believe that it is a sin to deliver outside of the home because it violates the age-old *purdah system*. Because of strict adherence to religious *purdah system*, women feel ashamed of explaining their problems to people unknown to them and to expose their bodies to unknown male or female health workers.

Participants of the men and women FGDs added,

“As both male and female health workers are working in the health facilities and the pregnant mothers have no option of discussing with the female health professionals only, most of the families decide not to go to the health facility for delivery”.

A male participant in the FGD added, *“Child-delivery by a woman in a health care facility is culturally offensive and anti-Islamic.”*

Some men and women participants showed a sense of shame in attending a health care facility rather than giving birth normally at home because, in case of delivery at a health facility, they have to expose themselves to other community members and violate the religious veil (*Purdha*) system.

Home delivery is comfortable, convenient, and close to the family:

Ease, convenience, and closeness to family members and relatives were the most cited reasons for preferring home delivery.

“I preferred to deliver at home because at home it is comfortable for me. I can accommodate my relatives and husband who can extend all kinds of support to me at home”, said one mother.

One male participant said: *“I would like my wife to deliver at home because it is easy, cheap, and convenient for me to support my wife during labor.”*

The availability of family support was also mentioned by participants. In the case of home delivery, husbands and other family members could stay close to the women and provide psychological support and physical care. In hospitals, the husband and other male members of the family are not permitted to enter the delivery room.

“At home, we have close relatives holding our hands, doing massage on our

body, encouraging, and comforting us during labor and childbirth. In a hospital, our relatives are not allowed to take care of us, and nurses do not give proper attention to us. Doctors come only at the time of delivery and lack time to listen to our problems,” said few mothers.

Women themselves perceived the presence of their husbands and other family members as an advantage to giving birth at home.

“I like to deliver at home because I like my husband and other close relatives staying near me during labor; I feel comfortable, and I am not afraid”, said one mother.

“In addition to close relatives, other family members and neighbors also visit women giving birth. However, giving birth at a health care facility makes this difficult,” as one woman pointed out:

“It is impossible to drag my family to visit me at the hospital as I have three children and my relatives as well....” (a woman)

In rural Bangladesh, women usually remain busy with household chores and child care even on the last day of pregnancy. Many women lack adequate family support to plan and go to the health facility for delivery, leaving behind their children and livestock. This problem becomes more acute in a nuclear family or the family in which husbands stay away from home due to their jobs.

A women participant who delivered her last child in a health care facility narrated her experience as below:

“During my last delivery, I went to a government health complex for delivery with my husband, as I had some complications. I left my elder son and livestock with a neighbor. I was very worried about them during my stay at the health complex. So, it was not a good option for me.”

“One of the important factors deterring women from health facility delivery is that health facilities do not permit relatives to accompany a woman into the delivery room. Consequently, many women perceived loneliness during labor, despite the presence of attending health professionals.” (a health manager)

“After birth, the mother and her baby traditionally rest in the corner of the house, and they have the opportunity to have hot and soft food of their choice. At the hospital, who would give us the food of our choice? We do not have money to buy nutritious food from a hotel.” Few mothers said.

Cost of facility-based delivery and poverty

The cost involved with the health facility-based delivery was cited consistently by all types of FGD participants as the major reason for preferring home delivery. Giving birth at home costs little or sometimes nothing at all, while giving birth at a health care facility involves paying for the delivery, any needed medicines, the hospital room, transport to the health facility, and food.

One young woman supported the views of others by saying,

“I know it is safer to have the delivery at a health facility, but the cost associated with delivery at a health facility is very high, which my family cannot afford, while for home delivery, we pay very little to a TBA or sometimes pay no money except a gift.”

Poverty also prevents some women from visiting health care facilities for child delivery. Even if there are nil hospital fees or clinic charges, many people cannot afford the additional cost of transportation, accommodation, medicine, and food. Participants in all the three types of FGDs indicated that most of the people in their villages are poor and do not have enough money to pay for a facility-based delivery

and so they deliver at home with the help of a TBA as they have to pay very little money or just a mere gift to TBA.

“I am a school teacher. I am struggling with my daily expenses with my low salary. How can you expect me to bear the cost of facility-based delivery or calling a midwife at my home for safe delivery?” (Quote from a husband)

“Most of the people in our village are farmers or manual workers. It is very difficult on our part to manage the cost of a midwife or facility-based delivery.” (a member of the FGD with women)

Distance, poor road conditions, and lack of transportation

In addition to the costs associated with delivery at a health care facility, physical distance, poor road connectivity, and lack of transportation are other hindrances to delivery at health care facilities. The ambulance system is almost non-existent; it is not timely and often unavailable, or if at all exists, the cost is very high. Some participants from both men and women FGD groups stated that the road condition remained poor all the seasons. The same situation prevails in most of the rural areas in Bangladesh.

“I wanted to have the delivery of my wife at the nearby health facility, but when her labor started, I could not get any transport to take her to the health facility. Then I called a midwife at my home for delivery” said a male participant of an FGD

Physical distance from home to health facilities was reported by all participants of the three FGDs to be an issue for community members living far away from the health care facilities and also a common barrier for facility-based delivery.

One male participant opined, *“People somehow can overcome the problem of distance and lack of transportation to receive timely care from health facilities during illness, routine visit for ANC or*

preventive health measures. However, at the time of delivery, a similar approach may not be applicable.”

Perceived poor quality of services at health facility and fear of Cesarean section

In line with the objectives of the government health programs, birthing facilities have been set up at the community level, such as in the local community clinic (CC), family welfare Centre (FWC), and Upazilla (sub-district) health complex. The quality of the infrastructure, including the availability of the necessary equipment, especially in relation to complicated deliveries, cleanliness of the delivery room, as well as the competence of health personnel and their harsh and discriminatory behavior, were discussed by many participants in the group discussions. Besides, many male and female discussants highlighted the non-availability of health personnel round the clock and during weekends. The participating health professionals in the FGD also agreed with some of the above mentioned complaints such as lack of equipment and facilities for handling complicated delivery cases, non-availability of health personnel round the clock and weekends, as well as lack of expertise and cleanliness in health facilities. However, they attributed all these issues to the low budget allocated by the government and lack of adequate in-service training.

The discussions revealed the existence of fear of cutting or pain in-hospital delivery. Concerns over cesarean sections and episiotomy were communicated through the language, *“the fear of cutting.”* Most of the mothers and the men in the FGDs expressed their apprehensions that if they would go to health facilities for delivery, the doctors would conduct a cesarean delivery instead of trying for a normal vaginal delivery even for a minor problem because doctors will get more money for the cesarean delivery.

They also stated that cesarean delivery costs a lot of money, and the surgery might result in physical harm to women. On account of these apprehensions, many women prefer home delivery.

DISCUSSIONS

This qualitative study identified a broad range of factors influencing the place of delivery among the rural community in Bangladesh. The current study identified many reasons for favoring home delivery. These include traditional mindset and socio-cultural norms toward home delivery, strong faith in TBAs, cost and accessibility to birthing facilities, poor road connectivity and transportation system in the rural area, lack of proper knowledge, perceived poor quality of services, and fear of cesarean delivery in the health facility, and an acute lack of female doctors in health facilities. The most common reasons for preferring home delivery are the traditional mindset and socio-cultural norms toward home delivery. Other studies also showed similar results in developing countries in South Asia and Africa. For example, previous studies in Bangladesh,¹⁷ India,²² Nepal,²³ and Ethiopia²⁴ have reported traditional mindset and socio-cultural norms toward home delivery of children as the major reasons for preferring home delivery.

It was observed that most women in the rural community feel comfortable or find it more convenient to deliver at home. To them, home delivery offers adequate privacy and emotional support. Also, they can take care of their children and do household chores at home-based deliveries. Gebrehiwot et al.²⁵, Sarkar et al.²⁶, and Sychareun et al.²⁷, in their studies on Ethiopia, rural India, and rural Laotian, respectively, also reported similar findings.

The enormous faith in TBAs as experienced and trusted birth attendants

among the rural community leads to a preference for home delivery. People in the rural community find TBAs as the most easily accessible at any time. Besides, the cost of TBAs is insignificant. Similar findings of heavy dependence on TBAs for home delivery in rural settings were documented in other developing countries in South Asia and Africa.^{22,23,28}

Our findings demonstrated poverty as a major factor influencing people's decision-making about health services. This has also been observed in many other developing countries in other parts of the world.^{23,25,29} The latest Bangladesh Demographic and Health Survey 2018 also highlights an association between wealth index and the use of health care services.⁹

Another factor for home delivery was reported to be lack of transport combined with poor road condition and distance to the nearest health facility. Several studies showed difficult accessibility to be the most cited reason for not delivering at a health care facility.^{26,27} Gabrysch et al.³⁰ observed that proximity to the closest health facility doubled the odds of facility delivery.

Our study found a lack of awareness about the importance of trained delivery attendants at a health facility. Many people considered childbirth as a normal biological phenomenon and normal work, requiring no medical attention unless serious obstetric complications occur. Recognition of the need for health services is important to ensure appropriate healthcare-seeking behavior. It is, therefore, important to generate more community awareness about the importance of delivery at a health facility.

Although Bangladesh has shown some progress in achieving some of the health-related MDGs, the health system still faces numerous challenges such as lack of public health facilities, scarcity of skilled workforce, inadequate financial resource allocation, corruption, inefficiency, and

political instability.^{31,32} It also has an acute shortage of nurses, medical technologists, and allied health professionals such as physiotherapists, laboratory assistants, X-ray technicians, etc.³²

RECOMMENDATIONS

To increase health facility-based delivery and reduce the heavy dependence on TBAs among rural communities in Bangladesh, there is an urgent need to structure comprehensive maternal health programs with appropriate interventions, duly addressing the identified reasons for preferring home delivery. It would be unrealistic to expect that rural communities comply with health facility-based deliveries unless the basic features of the maternal health service delivery are not socially and culturally acceptable to them. Service providers need reorientation about culturally appropriate and evidence-based maternity care. Allowing a family member or husband to accompany a woman during labor and ensuring female health service provider during delivery might be a possible intervention to honor cultural sensitivities of the family to be around and witness the delivery and not to expose to male service providers. Also, health policies should have ample room for local and context-specific community requirements to make maternal health services acceptable to them. Since one of the major reasons for TBA-assisted home deliveries is the easy availability, accessibility, low cost, and strong faith in the skill of TBAs in the community, utilizing TBAs for home delivery of normal pregnancies after providing necessary training can be explored as an option.

To address the effect of culture on the utilization of home delivery, health education needs to be intensified through community awareness and behavior change interventions. Educating mothers and

increasing the awareness of their spouses and in-laws regarding the benefits of facility-based delivery could be the important areas of intervention to encourage facility-based delivery. Educating the community with accurate information about the reasons for and likelihood of undergoing a Cesarean section (CS) delivery might help reduce the fear of Cesarean deliveries at health care facilities. Persistent monitoring, supervision, and evaluation of the service providers' activities by the health program managers would ensure that no unnecessary CS is done by the health professionals for monetary gain.

To increase health facility-based delivery, the adoption and enforcement of the new WHO guideline on antenatal care (ANC)⁸ by the health authorities at all levels of health services delivery could be an important strategy. Since the ANC clinic is the first point of contact with the women, service providers should exploit this opportunity and devote more time than is currently given to each pregnant mother to give appropriate health education and counseling for facility-based delivery.

To ensure the continuation of the health facilities for delivery by the women, strong action is desirable to improve service providers' attitudes toward the women and their relatives. Women should be treated with respect, understanding, and dignity. The managers of health facilities should ensure that services are friendly for the users. Adequate skilled staff should be made available round the clock in the health care facilities.

The issue of timely transportation facilities at the time of delivery and poor road condition should also be addressed by the concerned authorities to improve the facility-based delivery in the rural areas. Poverty alleviation strategies will definitely contribute to improving access and utilization of maternal and child health care

services. One rapid action could be the free arrangement for facility-based delivery for the poor rural mothers, which has already been proved effective in the neighboring country Nepal.²³

Finally, adequate budget allocation to the maternal healthcare system, equipping healthcare units and centers with needed medical supplies, an experienced workforce, cleanliness, and adequate infrastructure can also lead to increased access to maternal health.

CONCLUSION

Overall, the findings of this study might help public health educators, women's health activists, and policymakers to better understand the factors affecting the place of delivery in rural Bangladesh and develop new strategies and interventions for the improvement of maternal and child health in Bangladesh. In the long run, promoting women's education, poverty reduction, and quality of services of the health facilities in rural areas would certainly improve maternal health in Bangladesh. As the reduction of maternal mortality rate and improvement of maternal and child health remarkably depends on the proper utilization of ANC services and delivery at health facilities, improving the rate of facility-based delivery is suggested to be the key strategy for the maternal and child health program in Bangladesh. If the situation does not improve rapidly, the prospect of achieving the maternal and child health-related SDGs by 2030 in Bangladesh would be very low.

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