

RESEARCH

Open Access



Using the theoretical domains framework to identify the sociocultural barriers and enablers to access and use of primary and maternal healthcare services by rural Bangladeshi women: a qualitative study

Sanjoy Kumar Chanda^{1*} , Gretl A. McHugh² and Maria Horne²

Abstract

In Bangladesh, increasing the use of primary healthcare (PHC) and maternal healthcare (MHC) services is the main focus of achieving the United Nations Sustainable Development Goal-3, ensuring healthy lives and wellbeing for all. However, little is known about the sociocultural barriers and enablers to accessing and using PHC and MHC services among rural Bangladeshi women. This qualitative study aimed to identify sociocultural barriers and enablers to accessing and using PHC and MHC services among Bangladeshi rural women by using the Theoretical Domains Framework (TDF). This exploratory qualitative study used focus groups and interviews to collect data from women (28), their husbands (8) and healthcare providers (18). Data were analysed using Framework approach underpinned by the TDF. Four main themes emerged from data analysis, of which key barriers were summarised in three themes: (i) family barriers including lack of family reinforcement, (ii) social barriers including gender of healthcare providers, and (iii) cultural barriers including superstition to access and use of healthcare services. The remaining theme, sociocultural support, included information about key enablers, such as family support, neighbourhood connection and media influence. Several key behavioural constructs that aligned with the TDF need to be targeted when developing an intervention to promote access and use of PHC and MHC services.

Keywords Bangladesh, Barriers and enablers, Maternal healthcare, Primary healthcare, Sociocultural, WomenFV

*Correspondence:

Sanjoy Kumar Chanda
skchanda@soc.ku.ac.bd

¹Sociology Discipline, Social Science School, Khulna University, Khulna, Bangladesh

²School of Healthcare, University of Leeds, Leeds, UK



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

Introduction

The purpose of primary healthcare (PHC) is to achieve equitable and cost-effective universal health coverage for all and for this reason, it has become a pressing sustainability issue worldwide [1, 2]. On the basis of this goal, the Alma-Ata Declaration was held in 1978, and then PHC services have been introduced worldwide to strengthen the provision of healthcare for all [1, 2]. The contribution of PHC, a first level of contact for rural women with the primary healthcare centres (PHCCs) for preventive, curative and rehabilitative services [1], has been observed. This includes: the improvement of communicable diseases, such as tuberculosis and diarrhoea; and noncommunicable diseases (NCDs), such as cancer and diabetes [2, 3]. In addition to PHC services, maternal healthcare (MHC) services, which encompass the community maternity services and care for rural women, have improved maternal health worldwide. These services have also contributed to reducing healthcare costs, increasing efficiency by improving access to preventive and promotive services, and coordinating people-centric care based on the needs of its community members [4, 5].

Bangladesh, like other WHO member nations, provides PHC and MHC services in response to the United Nations Sustainable Development Goal-3 (SDG-3) call to ensure healthy lives and well-being for all by 2030 [6]. Bangladesh has also made significant progress in many of the SDG-3 targets set by the United Nations. For example, the recent SDG progress report indicates that the maternal mortality rate has persistently dropped (165 per 100,000 live births in 2019 from 447 in 1995), and the number of births attended by skilled health personnel (doctors or nurses) has greatly improved (9.5% in 1994 to 59% in 2019) [7]. However, the full potential of healthcare services at all levels (i.e. tertiary, secondary and primary levels) has never been equitably met due to lower concentration on the PHCCs [8], the lowest healthcare service level covering the *upazila* (subdistrict), union and village. Therefore, progress towards the health achievements of Bangladesh remains almost same to its other South Asian neighbours. For example, in 2018, the overall national antenatal care (ANC) visits of pregnant women were 56% [9], which is almost similar to India (58%) and Pakistan (52%) [10]. However, the ANC coverage rate of Bangladesh is far behind the standard level of ANC coverage observed in developed countries such as the United States of America (92.2%) [9].

Local PHCCs provide both PHC and MHC services to rural Bangladeshi women, but several challenges in accessing and utilising the services have been identified in the literature. For example, some of the key challenges in accessing PHC and MHC services by rural Bangladeshi women include healthcare costs [11], lack of transport [11], physician preference to work in urban health

centres [12] and women's lifelong dependence on men [13]. Sociocultural barriers and enablers in accessing and utilising PHC and MHC services by rural Bangladeshi women were minimally focused upon in the literature. However, women's health is a pressing sustainability issue in developing countries such as Bangladesh, where women are often discriminated, which is rooted in local sociocultural factors [14]. Therefore, the study aimed to identify sociocultural barriers and facilitators associated with PHC and MHC services by rural Bangladeshi women.

Theoretical framework

Theoretical domains framework (TDF) and the capability, opportunity, motivation and behaviour (COM-B) model

Since it was planned to identify the barriers and facilitators to women accessing healthcare services and to contextualise factors in order to achieve targeted behaviour changes, the TDF [15] and COM-B model [16] were used as the underpinning frameworks instead of other models such as the Three Delays Model [17], which is mostly used for identifying barriers or challenges that individuals face to access healthcare facilities. The TDF was used to guide data collection and analysis for the study. TDF provides a theoretical lens to understand how various factors, such as cognitive, emotional, social and environmental factors, influence healthcare behaviour [15]. TDF combines behaviour change theories into a single framework with 14 validated domains underpinned by psychological theories. The updated TDF includes 14 domains and 84 theoretical constructs [15]. The Focus Group (FG) and interview topic guides for the study were formulated through the lens of the TDF framework of behaviour change [15, 18]. The 14 domains were mapped onto the COM-B model (Fig. 1), which consists of three key components, including capability, opportunity and motivation [16]. The COM-B model suggests that human behaviour (B) results from the interaction between personal, physical and psychological capabilities (C) to utilise social and environmental opportunities (O) via motivators (M) that are reflective (thinking with the head) or automatic (emotional-‘thinking’ with the heart) [16]. Research evidence supports the use of TDF and COM-B model to explore barriers and facilitators to changing behaviour to inform the choice of intervention components [16, 19, 20].

Materials and methods

Design

An exploratory qualitative approach [21] was used to explore the sociocultural barriers and facilitators associated with access to and use of PHC and MHC services by rural Bangladeshi women through FGs and interviews with women, men and healthcare providers (HCPs).

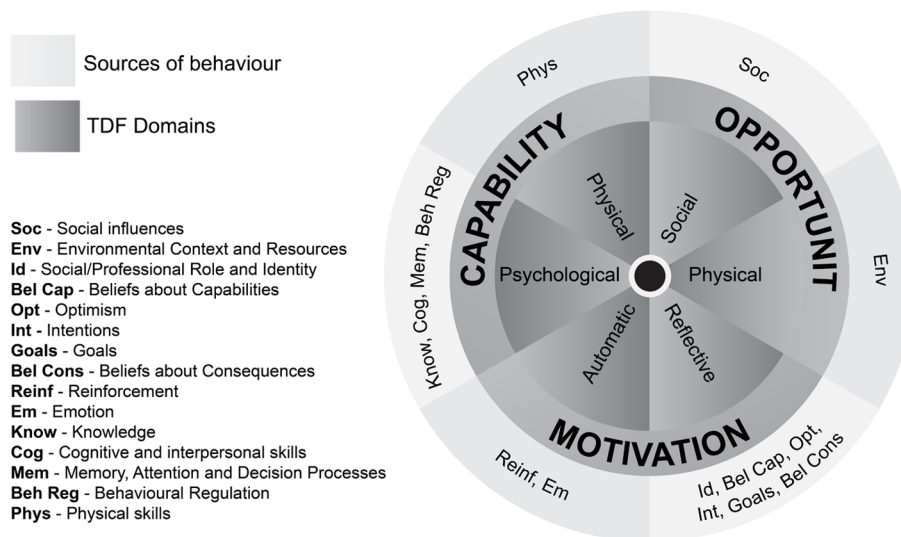


Fig. 1 Map of the TDF to COM-B system [16]

Setting

Accessing and utilising PHC and MHC services from primary level healthcare centre services is difficult for some populations such as women who reside in particularly remote rural regions [22]. In 2014, rural women (26%) in Bangladesh were less likely than urban women (46%) to have made the WHO recommended four or more antenatal visits [23]. The study was undertaken at Batiaghata *upazila*, a local administrative division under Khulna district in Bangladesh, where most of the women were unable to access PHC and MHC services from all primary level healthcare centres [24]. This area was chosen as the healthcare services of this region are not as good as those in other parts of Bangladesh [23, 24].

Sample and sample size

Participants were purposively selected for FGs and interviews from the study area based on their age, gender, professions and locations. In principle, purposive sampling is one of the most widely used techniques in qualitative research to identify and select information-rich cases [25]. Although the sample size for data saturation cannot be predetermined in qualitative research, data saturation can be achieved in three FGs and 10 interviews [26]. The FG/interview data were collected from three groups of participants: (i) women, (ii) husbands and (iii) HCPs. The FGs with women aged 16–49 years were organised by location. A total of three FGs were conducted from the two selected villages (Birat and Surkhali). In addition, a total of 31 participants, including women, husbands and HCPs for interviews, were purposively selected from *upazila*, unions and villages. HCPs are the persons (i.e. doctors, nurses) who provide different types of healthcare services to rural women, such as advising, assisting during childbirth, providing medicines, etc. HCPs have

at least a bachelor's degree in various public health disciplines, such as doctors have a bachelor's degree in medicine, nurses have nursing, pharmacists have pharmacy, etc. In addition, they are trained by different institutes such as the local Health Ministry in their health-related services. The recruitment process of study participants included various strategies. For example, women were recruited with the help of the community healthcare providers (CHCPs) at village community clinics (CCs), as they were known to the women. In addition, husbands were recruited with the help of women who participated in the FGs, and the *upazila* health and family planning officer, upon receipt of a letter, assisted the researcher by nominating the HCPs involved in the PHC and MHC services to rural women. Informed written consent was obtained from all groups of participants once they verbally agreed to take part in this study. For in-person FGs and interviews, the informed consent form was shared with the participants and the completed form was collected from them face-to-face, whereas the informed consent form was sent to the participants, who took part in virtual interviews, via postal mail with a return envelope and they were asked to return the completed form using a self-addressed the envelope.

Data collection

FGs and interviews were undertaken with women to explore participants' experiences, barriers and facilitators, and interviews were undertaken with husbands and HCPs. The FG and interview topic guides (see Additional files 1–3) were developed using the TDF [15]. Open-ended questions helped to obtain detailed information on the access to and utilisation of healthcare services. The topic guides were firstly prepared by the lead author in English language and was shared with the research team.

Afterwards, these were translated into Bengali for use in the local language before going to the field. FGs and interviews were organised by location and gender of the participants.

One female interviewer and two research assistants were engaged to conduct FGs with women, and the lead author conducted interviews with women, husbands and HCPs. The lead author had training on how to conduct FGs and interviews from the University of Leeds, UK and Khulna University, Bangladesh. He conducted FGs and interviews in his previous research prior to this PhD study. In addition, the female interviewer and research assistants who were employed were given a one-day training by the lead author. They had also prior knowledge of qualitative data collection in the study setting where FGs and interviews were conducted. Data collection was undertaken between January and June 2020 through face-to-face and virtual communication via telephone. Both face-to-face and telephone interview methods were followed, as it was not possible to conduct all interviews face-to-face due to COVID 19 restrictions, which led to some interviews being conducted by telephone. The face-to-face interview means the process of interviewing the participants in person by the interviewer whereas the telephone interview refers to the process of interviewing the participants over the telephone call or without direct contact by the interviewer. In total, 20 face-to-face interviews were undertaken and 11 telephone interviews. A number of techniques and skills were used to ensure accuracy and completeness of data collection during face-to-face and telephone interviews, including using reliable recording devices with permission to record the interview, using verbal and non-verbal cues to establish rapport, avoiding leading or suggestive questions, using active listening and probing skills, and taking notes and memos.

Data saturation in this study was attained when sufficient data had been collected to draw the necessary conclusions and no further data collection would produce value-added insights. This was reached at 26 interviews. To ensure that this was the case, an extra five interviews were undertaken, to ensure no new themes/ideas emerged from the interviews. The FGs lasted between 65 and 110 minutes, and individual interviews lasted between 35 and 65 minutes.

Data analysis

Verbatim data transcription in Bengali following FGs and interviews was undertaken by the lead author and the female lead interviewer accompanied by female research assistants. The back-translation process suggested by Brislin [27] was adopted to translate data. First, the lead author translated verbatim the Bengali transcripts into English, and a translator, who graduated in English,

back-translated transcripts into Bengali. Second, findings were then shared with the coauthors who are native English speakers.

To maintain confidentiality of data, the anonymity of participants was maintained by assigning pseudonyms, which were known only to the research team. In addition, electronic data, such as audio recordings of interviews, transcripts and field notes, were kept in a password protected OneDrive computer storage system.

Qualitative data from FGs and interviews were analysed based on the TDF using the five steps of Framework Analysis (FA) [28]: (i) familiarisation, (ii) initial thematic framework, (iii) indexing and sorting, (iv) reviewing data extracts and (v) data summary and display. Although FA shares some similarities with thematic analysis [29], it has an added step, summary and display, which shows transparency and associations between the stages of analysis [28, 30]. Data from each transcript were inductively coded and assigned initial code names after reading the entire dataset. Data were imported into one computer-assisted qualitative data analysis software (CAQDAS), NVivo 12 [31], which is fully integrated for FA [32] and assisted in coding from several uploaded data sources, for example running word clouds to identify common patterns, cross-referencing, storage and data retrieval. An additional step was taken to match code names to themes represented by the 'domains' within the TDF. This needed the researcher to reread data within the codes and then allocate the codes to the appropriate domains. It was essential to reread the data, as the data coded under one code name may have been categorised into two or three different domains within the TDF. All codes could be applied to at least one domain. To ensure trustworthiness, care was taken to remain open to all possibilities during transcribing, coding and analysing the data. The research team also objectively checked, discussed and agreed the coding interpretations to avoid bias or influence of previous research findings. In addition, themes were adjusted and refined several times through discussion and agreement with the research team. The process of triangulation of FG and interview data involved data source triangulation [33] as data was collected from different individuals to gain multiple perspectives and data validity.

Results

Characteristics of the participants

Twenty-three females participated in three FGs, and five women, eight husbands and 18 HCPs participated in interviews. The participants' demographics are presented in Table 1. In the main, the level of education of participants was primary and secondary education, and most participants were housewives (Table 1). Husbands of the women, who participated in the study, were also

Table 1 Demographic characteristics of the FG and interview participants

Characteristics	Participants		
	Female	Husbands	HCPs
Number of FGs and interviews	Three FGs (n = 23) and five interviews	Eight interviews	18 interviews
Location	Village	Village	UHC, UHFWC and CC
Average age	33	39	36
Gender (Male/Female)	Female = 28	Male = 8	Male = 8 and Female = 10
Average education	Primary and secondary	Secondary	Tertiary
Occupation/designation	Housewives (n = 23); Service (n = 3); and Student (n = 2)	Business (n = 3), Labour (n = 2); and Others (n = 3)	Doctor and nurse (n = 6); SACMO, FWV, pharmacist, FPI, FWA (n = 8); and CHCP (n = 4)
Marital Status	Married = 26 and Unmarried = 2	Married = 8	Married = 18
Religion	Islam = 19 and Hindu = 9	Islam = 6 and Hindu = 2	Islam = 6 and Hindu = 12

Table 2 Themes and subthemes related to sociocultural barriers and enablers to PHC and MHC services by women

Themes	Subthemes
Family-related barriers to access and use of healthcare services by women	• Lack of family reinforcement for primary care • Role of in-laws during pregnancy and childbirth of women • Family norms preventing husbands from supporting their wives
Social barriers to access and use of healthcare services by women	• Gender of the healthcare providers • Social stigma
Cultural barriers to access and use of healthcare services by women	• Superstitions related to women's maternity care • Religious taboo to the uptake of birth control techniques
Sociocultural supports to access and use of healthcare services by women	• Family support • Neighbourhood connection • Mass media influence

interviewed from two different villages of the Batiaghata upazila in Bangladesh. Of the eight husbands interviewed, most (six) were engaged in labour and business. The husbands' average age was 39 years, and most participants had a secondary level of education. As illustrated in Table 1, the HCPs, who were interviewed, represent three different health centres at the primary healthcare level of Bangladesh: upazila health complex (UHC), union health and family welfare centre (UHFWC) and CC. The HCPs represented: (i) doctors and nurses (6) working at the Batiaghata UHC; (ii) sub-assistant community medical officer (SACMO), family welfare visitor (FWV), pharmacist, family planning inspector (FPI) and family welfare assistant (FWA) (8) working at Shurkhali and Amirpur UHFWCs; and (iii) CHCP (4) working at village CCs. Of the HCPs, 10 were female and eight were male, with an average age of 36 years. Most participants completed a tertiary level of education. Most FG and interview participants were married, and their religious denominations were Islam and Hinduism.

After categorising the FG and interview data, diverse subthemes contributing to sociocultural barriers and enablers to PHC and MHC services of women emerged from the data analysis. These subthemes were in turn associated with four broad themes: family-related barriers; social barriers; cultural barriers; and sociocultural

support for the access to and use of PHC and MHC services by rural Bangladeshi women (Table 2).

Theme 1 Family-related barriers to access and use of healthcare services by women

This theme consists of three categories: (a) lack of family reinforcement for primary care; (b) role of in-laws during pregnancy and childbirth of women; and (c) family norms preventing husbands from supporting their wives. This theme comprises the findings of four TDF domains: social/professional role, reinforcement, environmental context and resources, and emotion.

Lack of family reinforcement for primary care

Most female participants sometimes faced less support from their family members in seeking healthcare from PHCCs. Narrating the experiences, one FG female participant said:

'Sometimes we can't share our problems with our family members, and they don't even consider if we share. For example, a while back I had a serious headache, and then shared with my family members, but they told me it was a normal problem and would naturally subside within two days' (FG1; Female, 30 years).

Some female participants were not happy with the attitude of their husbands and mothers-in-law. During FG discussions, women shared their experiences with regret. For example, some women felt that

'Our husbands... say not to visit the UHC. Even if our CHCP refers us to visit the UHC, we are not sometimes allowed to go there without convincing our husbands. Why should we convince our husbands? Shouldn't they understand that their wives may face difficulties and for this reason, they want to visit the UHC? Bad luck Apa (referring to the female moderator) ...bad luck. If we ask to go to the UHC, they excuse of the shortage of money...hmm... and so many excuses' (FG3; Female, 42 years).
'... My mother-in-law did not receive a test for cervical cancer and when I shared with her about our CC service for cervical cancer screening, she scolded and discouraged me from taking the test. That is why I could not have that test' (FG1; Female, 28 years).

Most husbands interviewed acknowledged that they could not always manage to find the time to accompany their wives to health services. Sometimes women faced physical abuse from their husbands when they asked their husbands to take them to health centres. In addition, in rural Bangladesh, a culture of polygamy (a family consisting of one husband and more than one wife) is common in some places. Women faced a challenge when seeking treatment if their husband was shared with another woman. An interview with one UHC doctor revealed that the patriarchal attitude of society sometimes hinders women from seeking treatment in Bangladesh.

'We are living in a patriarchal society where men are superior to women, and this tendency is more prevalent in rural societies compared to urban. When any female member of a family gets sick, her problem is not always taken seriously. To some extent, women do not share their problems with other family members as they think their problems will not be a priority issue' (Interview1; Doctor, 40 years).

Role of in-laws during women's pregnancy and childbirth

Family members, including mothers-in-laws and sisters-in-laws, discouraged women's pregnancy care and childbirth at the facility centres. As in-laws did not use the facilities, which women were able to access, they thought it was unnecessary for women to visit health centres. During her interview, one female participant reported that her mother-in-law insisted that she sought a traditional healer that the mother-in-law had previously used

to maintain their cultural identity and intergenerational continuity.

'... My mother-in-law doesn't want me to visit a doctor. She always tells me her own experience of pregnancy and childbirth in her days. She never attended any health centres for maternal services. If she had any problems, she relied on kabiraji treatment (a kind of traditional treatment). She now tells me to see a kabiraj (a traditional healer) and to follow the Islamic way of life' (Interview3; Female, 27 years).

Sometimes mothers-in-law in Muslim families prevented women from taking vaccines to avoid pregnancy complications. During FG discussions, female participants reported that their in-laws react about eating behaviour and trust in HCP services during their pregnancy and childbirth. Two female participants of the same FG said:

'My mother-in-law asked me during my pregnancy why do you need to eat so much? I had a childbirth when I was working in the paddy field. I ate no extra foods and had a normal baby delivery. Why do you need to visit a CC?' (FG1; Female, years).
'When I had a caesarean baby, my elderly sister-in-law told me, do you know why you are in the hospital now? You ate too much as the city doctor advised you to eat. It is their policy that they will receive money when you have your surgery' (FG1; Female, 31 years).

Family norms preventing husbands from supporting their wives

Most joint families (a family that consists of three or more generations and their spouses who live together in a single house) in rural Bangladesh have a norm of following elders' advice for decision-making. Although the elders' decision sometimes contradicts modern ideas of treatment, husbands cannot always ignore their decision to support their wives with modern treatment. They are accustomed to protecting family hierarchy. Speaking about family norms, one husband expressed:

'Always I can't fix my wife's healthcare needs by ignoring my mother. She accompanies my wife to seek CC care. If my mother cannot travel, she then asks me to accompany my wife. Hm...my elder brother followed mother's advice during pregnancy and childbirth care for his wife, and now I am following the same tradition' (Interview8; Husband, 30 years).

Barriers to the utilisation of healthcare services were also found when husbands did not want their wives to take contraception due to having family restrictions. However, some women did take birth control pills, which they kept in a secret place. When the moderator of the FG asked what they would say if their husband asked why they were not conceiving for a long time, the woman would reply deceitfully to her husband.

'[laughing] Apa, you have asked me a good question. Yes, my husband asked me, and I told him that I had some physical problems and that's why I wasn't conceiving' (FG3; Female, 42 years).

Theme 2 Social barriers to access and use of healthcare services by women

This theme includes two categories: (a) gender of the healthcare providers; and (b) social stigma. This theme comprises the findings of three TDF domains: knowledge, environmental context and resources, and emotion.

Gender of the healthcare providers

The gender of HCPs was also found to be an issue with regards to the utilisation of healthcare services among rural Bangladeshi women. The female participants were found to be more interested in seeking treatment from the female HCPs. Most FG female participants expressed that having a female physician was always better for pregnancy care and family planning issues as they could express all physical problems to the doctor and allow them to touch their body. Speaking about this, one female participant during FGs said:

'If a female physician is available, it's always better for us because we can feel free to tell her about our pregnancy problem. If an investigation is needed, we may consent without hesitation for a female doctor to touch our organs instead of a male' (FG1; Female, 30 years).

Women also experienced hesitation with the treatment of some primary care problems, especially those related to their gynaecological concerns.

'Shame sometimes occurs when we meet a male physician to talk about physical problems. For example, I was embarrassed when I met a male doctor at UHC because my problem was related to irregular menstruation' (FG1; Female, 20 years).

In contrast, some participants shared that they did not face any problem consulting with a male HCP, particularly when the problem was not maternal:

'It is not a problem if a female or male doctor is available as I think the service will be the same for all cases. If I can tell my problem to a doctor, there will be no problem ...disease is a disease, it shouldn't be separately identified by the gender of a doctor. Problems must be shared with a doctor, and I didn't face any problem to share my problems with a male CHCP' (Interview4; Female, 35 years).

When women could not share their physical problems with a male HCP, they faced a delay in their treatment or had to change the place of treatment from the primary level health centres to the secondary level. A female participant shared:

'Around two years ago...right hmm... I was feeling pain in my left breast [pause] and went to the UHC to see a female doctor. However, I couldn't find any female doctor and was unable to disclose to a male physician at UHC. Later, I went to a female doctor at Khulna Medical (district level hospital) and then got my solution' (FG2; Female, 35 years).

Social stigma-the hidden threat of sharing illness

Sometimes women living with a health illness were unable to share their problems with people in their community as they were afraid of being stigmatised.

'If I met a doctor at UHC, people in the neighbourhood would ask why I went to Batiaghata. They think I might be suffering from a major disease; otherwise, I would not go to the UHC. If people know my problem, they simply can't accept it. Because of this, sometimes we don't visit the UHC' (FG1; Female, 20 years).

The consequence of being stigmatised appears to be one reason why women may be reluctant to attend the UHC services, including a fear of being divorced. Two female participants highlighted this:

'This is common because if my relatives or neighbours find out that I have a problem with my private parts, they may take it differently. Therefore, it is better to keep silent and receive treatment from the CC if it's possible. If we go to CCs, no one will suspect as we regularly visit there. However, if we go to the UHC, people around us ask why I went there' (FG1; Female, 30 years).

'My neighbour was divorced because she was unable to conceive due to some physical problems. Although her family and relatives knew about the problems, they didn't take her to a doctor and ignored her. Also,

they influenced her husband to remarry, hoping for a baby. Therefore, So, we sometimes don't share our problems with husbands...' (Interview3; Female, 27 years).

Theme 3 Cultural barriers to access and use of healthcare services by women

This theme includes two categories: (a) superstitions related to women's maternity care; and (b) religious taboo to the uptake of birth control techniques. This theme includes the findings of three TDF domains: social/professional role, reinforcement, and environmental context and resources.

Superstitions related to women's maternity care

Superstitions in rural Muslim families were sometimes challenging to pregnancy care. The pregnant female participants had a very difficult time due to the fear of superstition. Narrating the experiences, both FG and interview female participants said:

'My family members help me to go out to visit HCPs during pregnancy, but it is limited to daytime only. Hmm...I had severe pain during my first pregnancy...umh...not related to labour... and it was in the evening. However, my family members didn't take me then to the hospital as going outside for a pregnant mother during the night was considered to be vile for the family and bad for the foetus in our village. (Tearing...and wiping with her saree) I had a very terrible night that I can still remember and the next day my husband took me to a UHC physician' (FG2; Female, 49 years).

'My father-in-law said it is not good for a baby and family to share pregnancy issues with outsiders. Also, as a Muslim female, I can't talk to an outside male. If I urgently need to go to PHCCs, I must accompany my husband and wear a burkah' (Interview4; Female, 35 years).

The Hindu female participants were also affected by superstition. Hindu families in some 'religious sects' tend not to eat certain protein-related foods, such as meat or fish because they believe that living a vegetarian life during pregnancy will keep the foetus safe. One female participant said:

'In our family it is customary not to eat any kind of meat and fish during pregnancy to avoid illness of mother and foetus. We eat vegetables, beans, milk, etc.' (Interview2; Female, 30 years).

Thus, to reduce the possibility of malnutrition in pregnant women, HCPs always advise specific dietary guidelines for the Muslim and Hindu patients. One HCP participant during one interview shared:

'Some... Hindu pregnant women visit UHFWC for ANC check-ups. During pregnancy, they don't consume meat, fish, eggs, or even some pulses, and consequently, they suffer from low weight. Then, I advise them to avoid dietary family rules and take extra foods that can reduce your nutritional deficiencies; otherwise, both you and your child will suffer' (Interview8; SACMO, 50 years).

Religious taboo to the uptake of family planning methods by women

Adherence to religious faith is commonly considered for the well-being of humans. However, it sometimes becomes controversial when the ideology of religion goes against the modern concept of healthcare. The FG and interview data revealed that the female participants who lived rurally faced some religious barriers to the uptake of family planning methods. For example:

'I may not take oral pills, or my husband doesn't use condoms as a family planning method because my mother-in-law and husband both said it was not in their family practice. If I want to control the pregnancy by taking contraceptives, Allah will be unhappy. Controlling the pregnancy is a task of gun-nah' (offence) (FG2; Female, 19 years).

HCPs also thought that some religious obligations such as the restriction of following the HCP health advice by female participants were barriers to accessing healthcare services. Females are the common victims in this case as mostly superstitions are imposed by society in the name of religion.

'...Some patients shared me that their husbands attended the mosque and then the Imam (priest) threatened them by asking why their wives often needed to be taken to the hospital to get modern services of family planning. In the past, it was not common, people followed Iman (the ethics of Islam), but now it has decreased a lot' (Interview9; FWV, 49 years).

The consequence of taking family planning methods such as implant was not always satisfactory for women. If women faced any problems after taking family planning methods, they were badly treated by the family.

'The family does not seriously take all types of illness. [Pause] Mainly illness was related to the birth control. I faced enormous bleeding after having an implant for the first three months and when I informed my husband, he said are you kidding? Also, when I felt discomfort with the implant, I sometimes took a rest after cooking. My mother-in-law didn't like it and said you are feigning? I then went to the UHFWC and shared my problems with an FWV, and then she advised me to change the implant and to take a three-month injection as an alternative method' (FG3; Female, 18 years).

Theme 4 Sociocultural supports to access and use of healthcare services by women

Although women face several constraints in seeking healthcare services, they receive some support in using PHCC provided healthcare services. This theme includes three categories: (a) family support; (b) neighbourhood connection; and (c) mass media influence on access and utilisation of healthcare services by women. This theme incorporated the findings of four TDF domains: social/professional role, reinforcement, environmental context and resources, and emotion.

Family support

Family members were reported not only to encourage but also to accompany rural women to seek PHC and MHC services. One woman during the FG expressed that her husband usually accompanied her while visiting PHCCs.

'My husband takes me to UHC doctors immediately after I fall in sick. If he doesn't stay at home, my mother-in-law calls upon a doctor. Some days ago, I was vomiting, my mother-in-law came and asked me to take medicines' (FG2; Female, 26 years).

Corroborating these views, interviews with husbands revealed that they were active in supporting their wives in seeking treatment. If husbands sometimes could not accompany their wife, they managed to get somebody else to accompany them to attend PHCCs. Husbands appeared to play a leading role in seeking treatment for their wives, such as hiring transport, managing the money and making contact with the facility. The husbands, who were interviewed, shared that they jointly made the healthcare-related decision with their wives to seek treatment. They were also concerned about access and use of maternity services for their wives.

'If she [my wife] faces physical sickness, I don't feel mentally well. I then take her to the CC' (Interview2; Husband, 42 years).

'I always prayed to God so that my wife would have a risk-free childbirth' (Interview8; Husband, 30 years).

Furthermore, some female participants, who attended the FGs, shared that their in-laws helped them to record the appointment date for ANC visits and monitor whether medicines were being taken in a timely manner by them. Female participants reported that they did not feel fear during physical tests if their family members accompanied them at PHCCs.

'The presence of a family member while taking blood for the UHC lab test reduces my tension' (FG1; Female, 28 years).

Neighbourhood connection

Like family members, neighbours appeared to play a pivotal role in assisting rural Bangladeshi women in accessing and utilising healthcare services. Rural women made connections with neighbours based upon their marital and pregnancy status. Women often used to visit CCs with their neighbours. In addition, the women, who attended the FGs, reported taking the same types of family planning methods that were taken by their neighbours. There was also a culture of sharing the family planning methods among rural women. This neighbourhood connection worked as a source of women's knowledge about healthcare services. Thus, women knew which family planning method their neighbour used and any side effects before taking this.

'I took the same oral pill as a family planning method that was taken by my neighbour. I asked my neighbour if she faced any physical problems after taking the pill. When she said that she didn't face any problem, I took the same oral pill' (FG1; Female, 20 years).

Mass media influence

Mass media emerged as another source of women's knowledge about healthcare services. Information about MHC services is disseminated to rural Bangladeshi women through various mass media, including television and radio. Rural women were inspired by media content, such as local songs and dramas, to know the location of healthcare centres and proper time of contact with HCPs. One female participant during one interview stated:

'We don't have any television, but we listen to the radio where some folk dramas and songs are broadcast about pregnancy care. These programmes

include sources of mothers' nutritious food and their regular healthcare needs from CCs, which inspired me to access CCs' (Interview2; Female, 30 years).

Access to the available local mass media made women aware about accessing CC maternal healthcare.

Discussion

This study aimed to identify sociocultural barriers and facilitators associated with access to and use of PHC and MHC services by rural Bangladeshi women. FG and interview participants identified several sociocultural barriers to accessing and utilising healthcare services by rural Bangladeshi women and these included: lack of family encouragement for PHC; intergenerational continuity and the role of in-laws; superstitions related to MHC; religious taboo; gender of HCPs; family norms and social stigma. These findings are similar to and build on previous studies in Bangladesh and other Asian countries, and Africa [34–40]; however, these studies were only related to pregnancy care and childbirth. Sociocultural barriers can delay the treatment of rural women and as a result may become a threat to their lives. Barriers to women's movement to health centres during emergencies can lead to delays in accessing timely care [41, 42].

A lack of support from family members, including husbands and in-laws, appears to adversely affect access to and utilisation of PHC and MHC services by rural Bangladeshi women. Furthermore, family norms of maintaining the decision of elders often hinder husbands from supporting their wives in a timely fashion. The consent of family members was necessary for rural women to make significant decisions in their lives, from family planning to their choice of consulting with a suitable HCP [43]. It may be the fact that rural people are not aware of the importance of modern treatment. Therefore, it is suggested encouraging rural husbands and other family members so that they reinforce and join women to seek for treatment. Also, raising awareness among husbands about some delayed decision of senior family members so that these cannot be barriers for them to support their wives while seeking care.

The current study also found that the gender of HCPs hinders women from accessing care when they have to see a male doctor about a maternity issue. This can be interpreted as the ideology of purity and shame, which is so important for the status of Bangladeshi women that they feel hesitant to share their physical problems directly with a male HCP [44, 45]. Therefore, it is suggested that the local healthcare centres can encourage women to see healthcare providers who may not be female by maintaining culturally appropriate dress in order to increase their healthcare service accesses. This study can inform the current community awareness raising programmes of the

Government of Bangladesh [6] to take into account the existing issue. In addition to gender issue, consistent with prior studies in LMICs [36, 46], our study demonstrated that social stigma including fear of being labelled was one of the barriers to women accessing healthcare services. Social stigma towards healthcare services used by women is rooted in the stereotypical thinking of the community [46]. Thus, it is suggested to raise awareness among community people to minimise social stigma so that villagers can understand illness is a normal process. Cultural restrictions placed on women accessing healthcare facilities are another barrier noted in the study. Superstitions contributed to the preference of rural families for women to consult a traditional HCP instead of a modern HCP. Religious taboo also inhibited women from using a birth control technique. The strong influence of superstitions and taboos on women's maternity care practices is consistent with previous research by lower- and middle-income countries, including Bangladesh [38, 39, 47, 48]. Thus, it is suggested that the existence of superstitions and taboos be considered when developing interventions for improving healthcare access and use of healthcare by rural Bangladeshi women [39]. Since religious or community leaders are often considered as respected and trusted individuals in rural communities, they can be involved in providing modern healthcare information to rural communities, which can be an effective way to reduce superstitions that delay access to healthcare services [39].

Conversely, in the study, key sociocultural facilitators for rural women accessing and utilising healthcare services included support from family, neighbours and mass media for both PHC and MHC, which can be classified as accompaniment support, leading support, emotional support and health information support. Family and neighbourhood support was also a significant factor in several of the studies undertaken in Bangladesh [49] other countries [34, 37], where support was only identified for MHC. In South Asia, it is suggested that women receiving support from their family members, including husbands [49] and women whose husbands are concerned about complications related to pregnancy [10, 21, 33] are more likely to use MHC services. Likewise, we have found accompaniment and health information related supportive from neighbours for rural women in accessing healthcare services, which are in line with research undertaken in Bangladesh [38, 49] and Zambia [50]. Neighbours were also reported to have monetary [49] and childbirth assistant support [50] to women while accessing care. Strong family ties and social relationships with neighbours in rural Bangladeshi settings can help women to seek care from PHCCs.

Mass media exposure of rural women emerged as a significant facilitator in accessing healthcare services in their area. The finding of health-related information

effects on rural women through mass media are align with evidence in Bangladesh [51] and other parts of the world [52, 53]. WHO [54] emphasised that mass media plays a very effective role to improve health outcomes of women by overcoming their sociocultural and economic barriers. Rural people, compared to urban people, do not receive much media exposure about the importance of women's health, which can improve health behaviour in general [55]. Therefore, the Government of Bangladesh should strengthen sponsoring several health-related information campaigns in rural area through radio or television so that these campaigns may have had a positive outcome.

Strengths and limitations

The strength of this study lies in its theoretical frameworks, TDF and COM-B, which were used to explore sociocultural barriers and facilitators to women in accessing healthcare services, are new in the context of rural Bangladesh. The TDF was useful in guiding the topic guides, providing a 'lens' for the study and framework for the analysis of the data.

This study also has some limitations. First, since it is a qualitative study, the findings cannot be statistically generalised. Although statistical generalisation is not the aim of qualitative research, theoretical generalisation and transferability are adopted in qualitative research [56]. Theoretical generalisation was made in this study at the point of data analysis. Findings were coded based on the *priori* theoretical framework, TDF. Generalising to a theory or conceptualisation is a matter of identifying a fact that supports that conceptualisation [57]. In addition, transferability was maintained in the "Discussion" section by comparing findings of this study with the evidence from Bangladesh and other settings. Second, the recruitment process through which rural women were selected by CHCPs who were known to the participants, which could lead to selection biases. However, CHCPs were asked to select the participants who were only using services from them and to maintain regional balance. These attributes were also checked by the lead author during data collection. Third, the views of rural women during FG may have been influenced by the presence of other members of the group. However, efforts were made to organise groups by gender and location because it was assumed that the same sex and familiarity of participants from the same locality would have less influence on each other, and the moderator and facilitator were trained to organise FGs in an equal and value-free way. Fourth, the absence of visual cues might occur during telephone interviews, which could lead to data loss and undermine data quality [57]. Although nonverbal data are not always

essential due to the possibility of misinterpretation [57], in this study, sometimes women felt emotional while describing their healthcare situation, which were not recorded. Therefore, some compensation for data loss was considered, such as intonation [58], and hesitations and sighs [59].

Conclusion

Some sociocultural issues were reported as barriers experienced by rural women accessing and using PHC and MHC services. These barriers included (i) family-related barriers, including lack of support from families to seek treatment, intergenerational continuity and traditional family norms; (ii) social barriers including gender of HCPs and social stigma; and (iii) cultural barriers including superstitions and religious taboos. Conversely, socio-cultural support, such as family support, neighbourhood connection and mass media influence, was identified as enabler of women accessing and using PHC and MHC services. Since sociocultural practices greatly influence PHC and MHC services by rural women, it is necessary to consider these issues when determining future intervention development. Therefore, in the future, a study related to culturally appropriate interventions to increase PHC and MHC services by rural Bangladeshi women can be undertaken.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12913-024-11657-x>.

Supplementary Material 1

Supplementary Material 2

Supplementary Material 3

Acknowledgements

The authors would like to thank all research assistants who assisted in data collection and all participants who took part in the study for providing the data freely.

Financial and non-financial interests

The authors declare they have no financial or non-financial interests.

Authors' contributions

All authors contributed to the study conception and design. Material preparation, data collection and analysis were undertaken by S.K.C. The first draft of the manuscript was written by S.K.C., and the second (G.A.M.) and third (M.H.) authors commented on subsequent versions of the manuscript. All the authors have read and approved the final manuscript for submission.

Funding

This article is a part of the first author's PhD study, which was funded by the Government of Bangladesh. However, no specific funding was provided for publication.

Availability of data and materials

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

The authors confirm that research involving human participants, such as women, their husbands and healthcare providers were performed in accordance with the Declaration of Helsinki. Informed consent was obtained from all individual participants included in the study. Ethical approval was received from the University of Leeds Ethics Committee (Ref no: HREC 19–001).

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 23 November 2023 / Accepted: 25 September 2024

Published online: 17 October 2024

References

- WHO. Primary health care. World Health Organization. 2021
- WHO and UNICEF. A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals. Geneva: World Health Organization and the United Nations Children's Fund. 2018.
- WHO. A global review of primary health care: emerging messages. Geneva: World Health Organization. 2003.
- Starfield B. Primary care: an increasingly important contributor to effectiveness, equity, and efficiency of health services. *SESPAS report. Gac Sanit.* 2012;26(1):20–6.
- Friedberg MW, Hussey PS, Schneider EC. Primary care: a critical review of the evidence on quality and costs of health care. *Health Aff (Millwood).* 2010;29(5):766–72.
- MOHFW. National strategy for WASH in health care facilities 2019–2023: a framework for action. Dhaka: Directorate General of Health Services (DGHS), Ministry of Health and Family Welfare. 2019.
- GED, BPC. Sustainable Development Goals: Bangladesh Progress Report 2020. General Economics Division (GED) and Bangladesh Planning Commission (BPC), Dhaka. 2020. Available from https://info.undp.org/docs/pdc/Documents/BGD/SDGs-Bangladesh_Progress_Report%202020.pdf.
- WHO. Bangladesh health system review. Manila : WHO Regional Office for the Western Pacific. 2015.
- PAHO/WHO. Evidence and intelligence for action in health/health analysis, and metrics and evidence. In: *Health Situation in the Americas: Core Indicators*. Washington, D.C.: PAHO/WHO. 2018.
- Rahman AE, et al. Knowledge and involvement of husbands in maternal and newborn health in rural Bangladesh. *BMC Pregnancy Childbirth* 2018;18:1–12.
- Ahmed T, et al. eHealth and mHealth initiatives in Bangladesh: A scoping study. *BMC Health Serv Res.* 2014;14(1):260.
- WHO. Improving Maternal, newborn and child health in the Southeast Asia Region. New Delhi: Regional Office for South-East Asia, World Health House. 2005: p. 85.
- Kabir M, Salam MA. The effects of various interventions on the welfare of the elderly: evidence from micro-study. Dhaka: Centre for Policy Dialogue 2001.
- WHO. Women's health. 2023.
- Atkins L, et al. A guide to using the theoretical domains framework of behaviour change to investigate implementation problems. *Implement Sci* 2017;12(77):1–18.
- Alexander KE, Brijnath B, Mazza D. Barriers and enablers to delivery of the healthy kids check: an analysis informed by the theoretical domains framework and COM-B model. *Acta Veterinaria Scandinavica.* 2014;9(1):60.
- Barnes-Josiah D, Myntti C, Augustin A. The “three delays” as a framework for examining maternal mortality in Haiti. *Soc Sci Med.* 1998;46(8):981–93.
- Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implement Sci.* 2012;7(1):37.
- Richardson M, et al. Using the theoretical domains framework and the behavioural change wheel in an overarching synthesis of systematic reviews. *BMJ Open* 2019;9(6):1–16.
- Phillips CJ, et al. Experiences of using the Theoretical Domains Framework across diverse clinical environments: a qualitative study. *J Multidiscip Health-care.* 2015;8:139–46.
- Chowdhury RI, et al. Delivery complications and healthcare-seeking behaviour: the Bangladesh Demographic Health Survey, 1999–2000. *Health Soc Care Commun.* 2007;15(3):254–64.
- Haque MA, Dash SK, Chowdhury MA. Maternal health care seeking behavior: the case of Haor (wetland) in Bangladesh. *BMC Public Health.* 2016;16:592.
- NIPORT, Mitra and Associates, and ICF International. Bangladesh Demographic and Health Survey 2014. Dhaka and Rockville: NIPORT, Mitra and Associates, and ICF International 2016.
- The correspondent of Khulna. Nine Khulna upazila health complexes in poor health. In *The Daily Star* 2015.
- Patton M. Qualitative evaluation and research methods. 3rd ed. Thousand Oaks: Sage 2002.
- Hennink M, Hutter I, Bailey A. Qualitative research methods. London: Sage 2020.
- Brislin RW. Back-translation for cross-cultural research. *J Cross-Cultur Psychol.* 1970;1(3):185–216.
- Ritchie J, et al. eds. Qualitative Research Practice: A Guide for Social Science Students & Researchers. 2nd ed. Thousand Oaks: SAGE Publications 2013.
- Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77–101.
- Nowell LS, et al. Thematic analysis: striving to meet the trustworthiness criteria. 2017;16(1):1–13.
- QSR International. NVivo 12 Qualitative Data Analysis Software. [12] 2018. Available from: <https://qsrinternational.com/nvivo/nvivo-products/>.
- Parkinson S, et al. Framework analysis: a worked example of a study exploring young people's experiences of depression. *Qual Res Psychol.* 2016;13(2):109–29.
- Upadhyay P, et al. Influence of family members on utilization of maternal health care services among teen and adult pregnant women in Kathmandu, Nepal: a cross sectional study. *Reprod Health.* 2014;11(1):92.
- Dalal S, et al. Referral care for high-risk pregnant women in rural Rajasthan, India: a qualitative analysis of barriers and facilitators. *BMC Pregnancy Childbirth* 2022;22(1):1–15.
- Shah R, et al. Barriers and facilitators to institutional delivery in rural areas of Chitwan district, Nepal: a qualitative study. *Reprod Health* 2018;15(1):1–13.
- Bohren MA, et al. Facilitators and barriers to facility-based delivery in low- and middle-income countries: a qualitative evidence synthesis. *Reprod Health* 2014;11:1–17.
- Moyer CA, et al. “It’s up to the Woman’s People”: how social factors influence facility-based delivery in rural Northern Ghana. *Matern Child Health J.* 2014;18:109–19.
- Banik BK. Barriers to access in maternal healthcare services in the Northern Bangladesh. *South East Asia J Publ Health.* 2017;6(2):23–36.
- Nisha MK, et al. Modifiable socio-cultural beliefs and practices influencing early and adequate utilisation of antenatal care in rural Bangladesh: a qualitative study. *Midwifery.* 2021;93:102881.
- Walton LM, Schbely B. Cultural barriers to maternal health care in rural Bangladesh. *J Health Ethics* 2012;9(1):1–12.
- Omer S, et al. The influence of social and cultural practices on maternal mortality: a qualitative study from South Punjab, Pakistan. *Reprod Health* 2021;18(article no. 97):1–12.
- Khan S, Haider SI, Bakhsh R. Socio-economic and cultural determinants of maternal and neonatal mortality in Pakistan. *Glob Region Rev.* 2020;5(1):1–7.
- Sripad P, et al. Assessing the role of women's autonomy and acceptability of intimate-partner violence in maternal health-care utilization in 63 low- and middle-income countries. *Int J Epidemiol.* 2019;48(5):1580–92.
- Hossen MA, Westhues A. Rural women's access to health care in Bangladesh: swimming against the tide? *Soc Work Public Health.* 2011;26(3):278–93.
- Rozario S. Dai and midwives: the renegotiation of the status of birth attendants in contemporary Bangladesh. In: *The female client and the health-care provider*. J.H. Roberts and C. Vlassoff, Editors. Ottawa: International Development Research Centre. 1995
- Mohammadi F, et al. The Stigma of Reproductive Health Services Utilization by Unmarried Women. *Iranian Red Cresc Med J.* 2016;18(3):e24231.
- Raman S, et al. How natural is the supernatural? Synthesis of the qualitative literature from low and middle income countries on cultural practices and traditional beliefs influencing the perinatal period. *Midwifery.* 2016;39:87–97.
- Roberts J, et al. The role of cultural beliefs in accessing antenatal care in Malawi: a qualitative study. *Publ Health Nurs.* 2016;34(1):42–9.

49. Story WT, et al. Husbands' involvement in delivery care utilization in rural Bangladesh: a qualitative study. *BMC Pregnancy Childbirth*. 2012;12(1):28.
50. Jacobs C, Michelo C, Hyder A. Understanding maternal choices and experiences of care by skilled providers: Voices of mothers who delivered at home in selected communities of Lusaka city, Zambia. *Front Glob Womens Health* 2023;3:1–10.
51. Islam MM, Masud MS. Health care seeking behaviour during pregnancy, delivery and the postnatal period in Bangladesh: assessing the compliance with WHO recommendations. *Midwifery*. 2018;63:8–16.
52. Arokiasamy P, Pradhan J. Maternal health care in India: access and demand determinants. *Prim Health Care Res Dev*. 2013;14(4):373–93.
53. Sserwanja Q, et al. Factors associated with health facility utilization during childbirth among 15 to 49-year-old women in Uganda: evidence from the Uganda demographic health survey 2016. *BMC Health Serv Res*. 2021;21(1):1160.
54. WHO. The role of digital health technologies in women's health, empowerment, and gender equality: project report. Copenhagen: WHO Regional Office for Europe. 2024.
55. Bishwajit G, et al. Factors associated with male involvement in reproductive care in Bangladesh. *BMC Public Health* 2017;17. <https://doi.org/10.1186/s12889-016-3915-y>.
56. Polit DF, Beck CT. Generalization in quantitative and qualitative research: myths and strategies. *Int J Nurs Stud*. 2010;47(11):1451–8.
57. Firestone WA. Alternative arguments for generalizing from data as applied to qualitative research. *Educ Res*. 1993;22(4):16–23.
58. Opdenakker R. Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qual Soc Res* 2006;7(4):1–14.
59. Sturges JE, Hanrahan KJ. Comparing telephone and face-to-face qualitative interviewing: a research note. *Qual Res*. 2004;4(1):107–18.

Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.