The Journal of Obstetrics and Gynecology of India (March–April 2023) 73(2):113–122
https://doi.org/10.1007/s13224-022-01672-5

ORIGINAL ARTICLE

Community Perspective of Male Involvement in Maternal Health Care in Uttarakhand, India: A Qualitative Study

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Received: 2 March 2022 / Accepted: 18 June 2022 / Published online: 10 September 2022
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Abstracts

Background Due to the significant role of male in decision making in India, they may decide if, when and where a woman may access antenatal, delivery and postnatal care; and whether or not to provide financial resources to travel to these services. Men's involvement in maternity care is recognized as a key strategy in improving maternal health and accelerating the reduction of maternal mortality. This study explores key components and challenges to male involvement in maternal health care (MHC).

Methods Focus group discussions (FGDs) were conducted with a purposive sample of the community key stakeholders from the field practice area of All India Institute of Medical Sciences, (AIIMS) Rishikesh from October 2020 to January 2021. Manual thematic analysis with a semantic approach was used for the data analysis. Themes were prioritized using Participatory rural appraisal (PRA) technique.

Results Twenty-three participants represented the heterogeneous group of key stakeholders. Stakeholders identified the need for improved awareness regarding MHC services among men. Husband involvement is affected by availability (work stations at different places), literacy, gender-based work domain and social cultures, finances and health facility environment. Four major themes were identified: Male involvement in antenatal, intranatal; postnatal care; and barriers to male involvement in MHC. Sub-themes under male involvement in antenatal care; intranatal care; and postnatal care were further prioritized via PRA as 'very important'; 'important' and 'not so important' and scores were given as 3, 2 and 1 respectively.

Conclusions Male involvement is a key strategy to improve pregnancy outcome; however, different challenges exist in their involvement in the maternal health care. Current study helped to contextualize the perception regarding importance of male involvement in MHC; and the situation of study area in order to understand social and cultural factors that shape the behavior and practices of men in relation to their involvement.

Keywords Perception · Male involvement · Maternal health care · Husbands' involvement · MHC

Abbreviations

ANC	Antenatal care
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWW	Anganwadi worker
FGD	Focus group discussion
MHC	Maternal health care
MMR	Maternal mortality ratio
PNC	Postnatal care
PRA	Participatory rural appraisal
WHO	World Health Organization

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Introduction

The survival and well-being of mothers are not only important in their own right but also an important aspect of the development of any country in terms of increasing equity and reducing poverty; and solving large broader, economic, social and developmental challenges. To ensure safe motherhood, strengthening MHC services is very important at every stage [1, 2]. Maternal Mortality Ratio (MMR) is one of the important indicators of the quality of MHC services. According to the global estimate of the World Health Organization (WHO) in 2017, MMR was 211 per 100,000 live births [1], and in India, MMR was 113 per 100,000 live births in indices 2016–18 [1, 3].

Male involvement in MHC has been recognized as a key strategy in improving maternal health and accelerating reduction of maternal mortality globally [4–6]. In a meta-analysis of Yargawa J, male involvement is associated with improved maternal health outcomes in developing countries [7]. But maternal health-related problems have largely been perceived and treated purely as a women's role, and men have been exclusively excluded from MHC services. Husband has a decisive role in, when and where a woman may access MHC services and to provide financial resources to travel for these services [8, 9].

According to India's National Health and Family Survey-IV, 68.2% of men were present with their wives during any ANC visit and 17.8% men were not present during any ANC visit [10]. In Uttarakhand, 66.5% of men accompanied their wives on any ANC visit [11]. Several studies concerning male partners' involvement in the ANC in India showed varied results ranging from 22 to 75.9% [12–15]. Men who were not present during ANC visits thought that their attendance was unnecessary [10].

Low (35%, 44%, and 20%) male involvement is reported during antenatal care, delivery, and postnatal care services, respectively, in a study of Ghana [8]. In a Nigerian study, 53.2% of the male respondents had good knowledge of emergency obstetric conditions (danger signs), and 97.4% encouraged their wives to attend antenatal clinic [16]. In Central Tanzania study, 53.9% men were involved in ANC visits [9]. Inconsistent results were reported by other studies [17–20].

Till now in India, the main focus has only been given to men's involvement in ANC services utilization. Other components like the husband's role at home, during delivery, and how women feel during pregnancy are understudied in India. Males themselves are not clear about the importance of their role in MHC. To best of our knowledge, in India, no scale is available to measure male involvement in MHC. Also, there is a need to understand cultural, socio-economic, and facility-based barriers to male involvement and how it can help to improve male involvement in MHC. This study aimed to 1. Explore the community perspective of key components and challenges; 2. Develop a scale to measure male involvement in MHC in Dehradun district, Uttarakhand, India.

Material and Methods

Study Design and Setting

A qualitative study was conducted in the field practice area under Primary Health Centre (PHC), Raiwala of AIIMS, Rishikesh, from October 2020 to January 2021. The study area was selected on the basis of feasibility to conduct FDGs with the wider group of community stakeholders.

Study Participants

Wider group of key stakeholders included women who have delivered in the last 12 months; husbands of women who have delivered in the last 12 months; community level health care workers (CHWs)-Auxiliary Nurse Midwives (ANM); Accredited Social Health Activists (ASHA); and Anganwadi Workers (AWW); traditional birth attendants; religious leaders; and village leaders of the selected area. Participants were selected using purposive sampling. Information about potential participants was gained from the CHWs of the study area. PK invited participants by home visit 15 days prior and informed them about the study and reasons for selection. In order to avoid male partners' dominance and bias, only one partner was randomly selected. Key stakeholders who agreed to their voluntary participation were informed telephonically about the suitable date, time and place of a discussion with consensus at least 2 days prior.

Data Collection

FGDs were conducted by investigators (PK, MK and AD) trained in qualitative research techniques. FGD was chosen because it is suitable for investigating experiences, attitudes, insight into certain behaviour or practices, and ideas that emerge from a group [21]. Group was heterogeneous to gather rich information [22].

On the day of FGD, we sought written consent for their participation and audio recording. The researcher (PK) moderated the discussion with the help of MK as rapporteur and AD as note taker and memos to maintain contextual details and non-verbal expressions. Other than participants and investigators, no extra individuals were present during these discussions.

All discussions were conducted in Hindi (local language). Conducive environment was maintained throughout. Every effort was made to facilitate the conversation and ensure that no participant would dominate the discussions. Moderator explained the ground rules and opened the discussion. A pilot-tested interview guide with prompts was used to stimulate discussion and ensure all desired information is sought. After getting the repeated responses to one question, we moved to the next question. To improve credibility of study finding, these brainstorming sessions continued until data saturation. In the end, rapporteur (MK) summarized all the discussed points and asked for confirmation, clarification or leftover points. These FGDs last for around 45 min to 1 h. On the same day, audio recording and field notes were translated to English and transcripts into written text by the investigators (PK and MK).

Participatory Rural Appraisal is a method to enable local people to share, enhance and analyze their knowledge of life and conditions to plan and act. It can be used to identify the priorities of women [23]. Third focus group did not provide any new information compared with the previous, so it was decided that ideas have reached saturation.

After data analysis, nine women participants who have delivered in the past year selected based on their enthusiasm as seen in FGDs and three CHWs were invited for a short meeting to provide feedback on analysis. After the consensus, they were asked to rank the final selected items. Each participant was first brief about the procedure and then given 20 min individually to think about the ranking and note it down. Matrix was prepared as shown in Fig. 1. Sticky notes of finalized items were provided with a colour-coded chart sheet. They were asked to prioritize each item during antenatal, intranatal and postnatal period and appropriately place it on a coloured chart sheet. Those with equal priority were kept side by side and higher priority above and lower priority below the others. Moderator (PK) ensured a friendly environment for free discussion. If consensus could not be made, then group voting was done. Meeting was concluded with a thanking note.

Fig. 1 Matrix for Participatory rural appraisal

Data Analysis

Transcripts were managed and coded manually (PK and MK). The coding manual was developed by using an inductive approach. Manual thematic content analysis with semantic approach (i.e. only explicit content of data) was done using Barun and Clarke's method [24]. On subsequent FGDs, further coding, recoding, reviewing, and refining of themes were carried out. In PRA, recently delivered women participants ranked the activities expected from males during pregnancy as per its perceived importance. 'Very important' items were given three points, 'important items' two points and 'not so important' items were given one point. Total points were finally added together to categorize the level of male involvement. A 50-point scale was developed to measure the level of male involvement in MHC as shown in Table 4.

Privacy and Confidentiality

Assurances of confidentiality and privacy were reiterated. Participants were also guaranteed that the data would be destroyed at the conclusion of the study but would be stored in computer files for five years with a protected password. All data were anonymized by ensuring participants did not use names during interviews. If names were used, they were changed during transcription.

Results

Three semi-structured FGDs were conducted at each subcentre (total 3) of the selected area; total of 23 individuals (FGD 1: $n=7$, FGD 2: $n=9$ and FGD 3: $n=7$) has participated. Sociodemographic detail of participants is given in Table 1. Participants who were recently pregnant or involved in MHC easily recalled their experiences; and

Table 1 Background characteristics of participants

Characteristics	Categories	No of respondents (n = 23)	
		Frequency	%
Age (In years)	18–24	2	9
	25–34	9	39
	35–55	12	52
Sex	Male	7	30
	Female	16	70
Key informants	Community health care workers (AWW, ANM, ASHA)	4	17
	Women who had delivered within last 1 years	9	39
	Village leaders	2	9
	Religious Leaders	2	9
	Traditional birth attendant	1	4
	Husbands of women who had delivered within last 1 years	5	22
Role of key informants in the Community	Village leaders	2	9
	Religious Leaders	2	9
	Traditional birth attendant	1	4
	Community health care workers	4	17
	Local Residents	14	61

provided insights into the male involvement in MHC. The study's findings have been presented under four major themes: male involvement in antenatal; intranatal; postnatal care; and barriers to male involvement in MHC. A summary of themes and subthemes and quotes is provided in Table 2.

Main Domain: Male Involvement in Maternal Health Care

Discussions among all participants started about how husband's role is important in every stage of MHC. One female participant among CHWs commented on this as.

"From conception to giving birth to a child and even after that also, every husband has an important role in the health care of his wife in every stage of her pregnancy" (26 Y, F).

Theme 1: Male Involvement in Antenatal Care

There were mixed perceptions of male involvement in ANC among participants. Many respondents described the contribution of husbands from conception to their involvement in MHC. During discussion, CHWs and women who had a child less than one year of age raised an issue regarding the husband's awareness of MHC services provided by government. They described if the husband would be aware, then both husband and wife can discuss and plan to avail these services. Few women participants preferred to be accompanied by their husbands during routine ANC visits; some women, husbands and community leaders did not perceive the importance of men attending routine ANC visits. They felt that transportation to the hospital is important; and the rest wives can manage themselves.

It was noted that all participants discussed the nutritional needs of a pregnant woman. Emphasis was given to how husband should fulfill nutritional requirements of his pregnant wife. Women participants described husband presence for different needs during pregnancy. For example, to share their feelings, cravings, pain and discomfort with husbands. Majority of stakeholders perceived that financial management is necessary to provide timely and best care to a pregnant mother, and a couple should plan about this in advance (Table 2).

Theme 2: Male Involvement in Intranatal Care

Participants shared that delivery is an important phase of a woman's life, and special care is required. Husband's presence is also considered very important in preparedness and providing emotional support to his wife. However, few participants believed that planning of place and transport should be done in advance, while other respondents replied that this could be sorted at that particular moment only.

Participants proposed to provide the best care to pregnant women at the time of delivery; husbands should have awareness of complications in delivery and financial preparedness for delivery. One participant among health care providers mentioned her experience regarding delivery complications while providing her services at health care facilities and in the community (Table 2).

Table 2 An illustration of the themes, sub-themes and quotes of male involvement in MHC

Themes	Sub themes	Quotes
1. Antenatal Period	1.1 Joint Planning of pregnancy	*"..I think a husband has significant contribution in conceiving a child along with his wife, so Planning for this should be done by both husband and wife. And it is imperative that husband should be with his wife during her pregnancy, especially in the first three months and at the ninth month.." (30 Y, M)*
	1.2 Joint Planning about the time and place of ANC visits	*"..We are dealing with different couples on daily basis and I realized that along with family members and wife, it is very important for the husband to be aware of the maternal health care services; so that both husband-wife can plan and discuss how many checkups, where and when should be done during pregnancy.." (35 Y, F)*
	1.3 Planning for upcoming financial necessities throughout the ANC & PNC	*"..As a husband, it's my responsibility that money-saving should be planned because no one wants any kind of danger nowadays regarding mother and child's health.." (32 Y, M)*
	1.4 Arrange transport to wife while visiting ANC visits	*"..During my pregnancy, I felt that husband should arrange transport to take his wife to the hospital and bring her home; so that the pregnant mother and unborn baby do not face any problem.." (28 Y, F)*
	1.5 Take care of wife's extra nutritional requirement	*"..I think husband should be aware of what should be eaten and what kind of problems can happen (like frequent vomiting) during pregnancy. So that he can take care of his wife's nutritious food and take care of problems occurring during pregnancy." (51 Y, M)*
	1.6 Accompany wife to ANC visits	*".I feel that during pregnancy; the husband should accompany his wife to the hospital to have the checkup done so that if the mother and the child have any kind of problem, the doctor can explain to both together."(32 Y, F)*
	1.7 Discussions with health care providers	
	1.8 Help in household work	*"..Usually, women do almost routine household chores themselves, but during pregnancy, the husband must help his wife with cooking, lifting heavy things, and the work that is done by bending. As, such works can lead to discomfort and risk to their pregnancy." (48 Y, M)*
	1.9 Spend extra time as compare to usual	*"..Well, during a pregnancy, the family is very caring, but it is very important to be with the husband because my husband was not with me during my pregnancy, and I felt that some things can be freely shared only with the husband. For example, I used to suddenly feel like eating something different and want to share the excitement of the child with my husband only. I also felt my husband's absence, when I had pain in my feet during pregnancy that he could press them and provide me the courage to bear it." (24 Y, F)*
	1.10 Share excitement regarding the pregnancy	

Table 2 (continued)

Themes	Sub themes	Quotes
2. Intra-natal Period	2.1 Joint Planning of place for delivery	*"..The husband and wife should plan the place and transport for the delivery in advance so that at that time they reach the hospital quickly and there will be no problem in delivery. It is very important for the husband to accompany his wife to the hospital at the time of delivery because this is a time when not only the wife gives birth to the child but she herself also takes a new birth, so the husband should provide her emotional support at that time.." (34 Y, M)*
	2.2 Arrange transport for wife during delivery	
	2.3 Accompany partner during delivery	
	2.4 Save extra money for delivery	
	2.5 Husband also should be aware of complications during delivery	*"..The husband should have a little knowledge about the complications that happens at the time of delivery so that he should be aware beforehand and save extra money separately for that time.." (38 Y, F)*
3. Postnatal Period	3.1 Take care of mother's nutrition	*"..After delivery, the husband should also take care of the mother's nutritious diet and child's feeding." (53 Y, M)*
	3.2 Take care of child's nutrition	
	3.3 Help in household work	*"..After delivery, the husband should help his wife in household chores such as cooking, lifting heavy things and taking care of the child—especially at night.." (55 Y, F)*
	3.4 Carefully vigilant on partner's and child's health physically	*"..After delivery, especially if it is done by the operation, the husband has a significant contribution to the care of his wife: Taking her to the toilet, helping her to feed the baby, is there any problem with the stitches, or any other problem, it is very important that husband should look after all these things.." (31 Y, M)*
	3.5 Accompany partner for child immunization	*"..The husband should accompany his wife to the hospital at the time of the child's immunization so that he may be able to help or hold the child during and after vaccination as it is a very emotional moment for parents to see their child crying and in pain.." (27 Y, F)*

Table 2 (continued)

Themes	Sub themes	Quotes
4. Barriers	4.1 Job stations at different places	*"..By the way, the husband should be with his wife for the entire 9 months of her pregnancy, but due to job station at different places, he is unable to live with his wife all the time.." (31 Y, M)*
	4.2 Financial problems	*"..The responsibility of earning money in the house is mostly on the men, so if they do not go to work, then it is challenging to meet the daily needs of the house, so the husband is not able to take care of his wife so much even in her pregnancy.." (31 Y, F)*
	4.3 Long waiting time in hospitals	*"..Husbands who are key earning members of the family and cannot miss their work; it's really tough for them to manage time for their wives' antenatal care visits. If they manage their time somehow and accompany their wives for antenatal care visits, there is long waiting time in the hospital, and they are not even allowed inside the checkups room; so they feel that they don't have any significant role there and instead they can utilize their time at work.." (30 Y, F)*
	4.4 Husbands not allowed in checkup rooms in the hospitals	
	4.5 Gender-based work domains	*"..Sometimes, some household works such as cooking, cleaning,* etc. *are not considered pleasant in the family or in the society if husbands do them because they are considered as women work domain. If husbands help in the household chores, they are known as dominated by their wives.." (46 Y, F)*
	4.6 Gender-based social cultures	*"..Although these days it has reduced a lot, but still some husbands reduce the care of their wives after delivery if they give birth to a girl child because as a father they start worrying more about how they will bear her wedding expenses in future. They feel that being the father of a girl, they have a lifelong burden on their head.."(32 Y, M)*

Theme 3: Male Involvement in Postnatal Care

It was noted that after delivery, the responsibility of husband is increased. Husband should look after both mother and child health care. Participants proposed that as mother's good health affects the child's health, hence mothers should eat nutritious food.

All participants discussed husband's role in postnatal period. It was discussed that women body is weak after delivery; they need help performing routine tasks and husbands should help them. It was noted that the Immunization of newborns is very important and husbands should be involved in the child immunization. Few women wanted their husbands to accompany them for child immunization. But other respondents said there is no special need for husbands for child immunization (Table 2).

Theme 4: Barriers to Male Involvement in MHC

For a married couple, it is very important to live in same place, especially during pregnancy; only then husbands can provide required support. Job station at different places was a source of frustration for all participants. Finance management was another barrier discussed in all of focus group discussions. It was described that the responsibility of money-related matters is on men. Majority of participants described that the presence of a husband is not welcomed by healthcare professionals in the healthcare facility. Husbands shared their experience that when they went with their wives during antenatal checkups'; they were not involved in any MHC services. Men were not allowed inside examination and labor rooms. Instead, they have to wait outside for long hours.

Though participants felt husband should help his wife during pregnancy onwards. They also described how social norms act as barriers to this. Some participants discussed in some societies of India; a girl child is considered a psychosocial

Table 3 Participatory rural appraisal of themes generated from focus group discussions

Categories	Antenatal period	Intranatal period	Postnatal period	Total Score (50)
Very important (score = 3)	1. Joint Planning of pregnancy 2. Joint Planning about the time and place of antenatal care visits 3. Planning for upcoming financial necessities throughout the ANC & PNC 4. Arrange transport to wife while visiting ANC visits 5. Take care of wife's extra nutritional requirement	1. Joint Planning of place for delivery 2. Arrange transport for wife during delivery 3. Accompany partner during delivery 4. Save extra money for delivery	1. Take care of mother's nutrition 2. Take care of child's nutrition	11*3 = 33
Important (score = 2)	1. Accompany wife to antenatal care visits 2. Discussions with health care providers 3. Help with household work 4. Spend extra time as compare to usual 5. Share excitement regarding the pregnancy	1. Husband also should be aware of complications during delivery	1. Help with household work 2. Carefully vigilant on partner's and child's health physically	8*2 = 16
Not so important Score = 1)	–	–	Accompany partner for child immunization	1*1 = 1

Table 4 A scale for measuring level of male involvement level in maternal health care

Level of male involvement in MHC	score
Poor	< 16
Average but not satisfactory	16–32
Satisfactory	≥ 33

burden to the family. Families do not feel confident about having a girl child in their family (Table 2).

Themes generated on male involvement were prioritized using PRA, which developed a scale for measuring male involvement in MHC. 12 women participated in PRA; of which three were CHWs. Eleven activities were ranked as very important and totaled 33. Eight activities were ranked as important, which totaled 16. While only one activity was ranked not so important and scored 1. The total final score was fifty (Table 3, 4).

Discussion

Through the current study of India, for the first time, every component of husbands' role during antenatal, intranatal and postnatal care was explored in detail. Reasonable numbers of quantitative studies are available on the matter. However, qualitative studies have not been done. This study has provided insights on how male involvement in MHC is perceived by the rural community of Raiwala, which is very important as it relates to social and behavior changes. We tried to construct a scale to measure the level of male involvement in the Indian setting.

In this study, wider group stakeholders perceived that role of husbands during pregnancy start from planning of conceiving a child; where and when the antenatal natal checkups be done; accompany wife to hospitals during ANC visits; arrange transport to ANC visits; help his wife in household work; take care of his wife's extra nutritional requirement; should spend extra time during pregnancy; share excitement regarding coming child; and save extra money for all upcoming financial necessities.

Previous studies have shown variations in the perceptions of male involvement in MHC across different communities and countries. A policy analysis of Uttar Pradesh, India, reported that women preferred during pregnancy husbands' need to be involved in their health issues and that they should accompany them and provide necessary financial support [25]. In Tanzania, women wanted to accompany their partners, especially on the first ANC visit, whereas men did not wish to be more actively involved in antenatal and delivery care [26]. As heads of the family, men control resources, consult health care providers, and decide where and when pregnant women should seek medical care. Beyond that, they find it unnecessary to attend clinics with their partners, as perceived by opinion leaders in Ghana [27].

Our study findings further reported that husband should plan the place of delivery with his wife in advance; and arrange the transport for delivery; accompany her to the hospital; be aware of complications during delivery; and save extra money for delivery. Previous literature supports our findings that male involvement in childbirth and skilled

birth process is taking care of their spouses, unborn/newborn child, providing emotional and moral support, and providing financial support. [21] It is combined responsibility of male partners through increased awareness and support for their partner's maternal health needs [28, 29], and how much they understood childbirth and perceptions about their involvement [30, 31].

Current study revealed that after delivery husband should be vigilant regarding the wife and child's physical health and help wife with household work. Mahiti et al. found in their study that men perceived their role during the postpartum period as financial providers, decision-makers and, occasionally caregivers [32]. Our study findings and other studies conclude that men mostly perceive themselves as finance provider. However, women consider care and support from their partners as most important during postnatal period while finance providers during antenatal and postnatal period.

Barriers to husband's involvement in MHC included job stations at different places; financial problems; long waiting time in hospitals; not allowing husbands in checkup rooms in the hospitals; gender-based work domain; and gender-based social cultures. Work-based barriers are clearly evident in our findings where men could not get involved in antenatal and postnatal care because they cannot skip their work as they are the key earning members of the house. These findings are consistent with Sarvar and Ongolly's findings [33, 34]. In Nepal, Mullany also identified that a low level of knowledge among men also acts as a barrier to their participation in MHC [35]. Sharma et al. also reported similar health facility-based barriers to male involvement in MHC as in our study [5]. Ganle and Dery reported four main barriers to men's involvement in their study, which are clearly evident in our study [36].

Limitations

Although, the study was conducted in one district; perceptions in other communities might be different. However, we feel the result can be generalized to the Asian context in both rural and urban communities. Second, we constructed a scale to measure male involvement in MHC, which needs further validation.

Conclusions and Recommendations

This study has enlightened us about various aspects of husbands' role in MHC. Scale (ranging 0–50) was constructed to measure the male involvement in maternal health care. Barriers to husband's involvement in MHC included job stations at different places, financial problems, long waiting time in hospitals, not allowing husbands in checkup rooms in the hospitals, gender-based work domain and gender-based social cultures. Our study identifies and focuses on the immediate issues perceived by stakeholders as important but leaves out a larger challenge of changing the mindset of population which is very important and needs to be study further. Study findings also imply that there is a need to bring about change in the mindset of husbands regarding the various cultural beliefs, fear and doubt regarding maternal health care through health education on maternal health care. It is imperative to reinforce health care providers for health promotion, to nurture a welcoming/understanding attitude towards especially husbands of primigravida.

Acknowledgments The authors would like to acknowledge the support of the All India Institute of Medical Sciences, Rishikesh for providing the platform for the study. We are also grateful to all the study participants for their time, patience and cooperation.

Author Contributions PK and MK conceptualized the study, contributed to study design, data collection, data analysis, data interpretation; and drafted the manuscript. AD contributed to data collection; RK and MS reviewed the manuscript critically for intellectual content. All authors reviewed and approved the final manuscript to be published.

Funding This study was self-sponsored, thus no funding information to disclose.

Data Availability Data supporting the findings are presented in the manuscript. The completed data set is not publicly available since participants did not give consent for the public sharing of their information. However, summaries of the information and interview guides of participants are available from the corresponding author on reasonable request.

Declarations

Competing Interests All authors declare that they have no competing interest.

Ethical Approval Ethical approval from Institutional Ethics Committee, All India Institute of Medical Sciences, Rishikesh (AIIMS/IEC/20/808) was sought before the conduct of study. Written consent from the participants was obtained after informing them purpose of study; voluntary participation; and no harm to the participant. All methods were performed in accordance with the relevant guidelines and regulations. To protect the confidentiality of participants no names or positions have been reported in the manuscript.

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