

Access to Maternal and Child Health Services during the COVID-19 Pandemic: An Explorative Qualitative Study in Odisha, India

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Abstract

Background: Maternal and child health (MCH) care is one of the essential routine healthcare services, which got affected during the coronavirus disease 2019 (COVID-19) pandemic. Modeled projections had anticipated an 8.3%–38.6% rise in maternal mortality from different countries globally. In view of limited studies pertaining to issues related to accessing MCH services in the event of a pandemic, this study was carried out on pregnant and postnatal mothers in Odisha, India. **Methods:** An explorative qualitative study through 36 in-depth interviews (IDIs) was conducted among 16 (44.4%) antenatal and 20 (55.5%) postnatal mothers in six of thirty districts of Odisha, India, from February to April 2021. The districts and blocks were randomly selected for better representativeness. The IDIs were conducted using a predesigned and pretested guide among mothers who had undergone delivery or availed of antenatal, postnatal, or child health services from October 2020 to April 2021. The IDIs were conducted till data saturation. The data were analyzed using MAXQDA software. **Results:** The average age of mothers was 27.6 (+/- 2.2) years. Among the participants, 16 (44.4%) were antenatal and 20 (55.6%) were postnatal mothers; 19 (52.8%) were primipara and 17 (47.2%) were multipara. The majority explained that they received enormous support including door-to-door services from the community health workers (CHWs) even during the difficult times of the pandemic. Reduced transportation facility and fear of contracting the infection were reasons behind the unwillingness to visit health facilities and preference for home delivery. Furthermore, the pandemic had physical, mental, social, and financial impacts among pregnant and postnatal women. **Conclusion:** The unprecedented COVID-19 pandemic has affected access to MCH services by antenatal and postnatal mothers. Health system preparedness and appropriate strategies including better community engagement and participation could avert such challenges in the future.

Keywords: Antenatal, COVID-19, healthcare access, MCH care, Odisha, postnatal

INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic created several barriers in provisioning and accessing various healthcare services, leading to substantial morbidity, mortality, and loss of economy across the globe.^[1-4] The health system got challenged with priority for managing the pandemic, leading to the diversion of resources including healthcare providers from routine health care toward COVID-19-related activities. Routine healthcare services including maternal and child health (MCH) care got affected in most of the regions globally due to the pandemic.^[5]

Many modeled projections anticipated an 8.3%–38.6% increase in maternal mortality from different countries during

the COVID-19 pandemic.^[6] The quality and timely maternal healthcare services were beyond the reach of millions of women in the world even before the surge of COVID-19.^[7] So, with the pandemic having a foothold, the access and utilization of routine MCH care got significantly compromised. According to a systematic review, 55.5% of expectant mothers missed their antenatal care (ANC) checkup (more among mothers in the

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1st and 3rd trimesters), a drop of 38.3% and 59.6% in Tetanus Toxoid (TT) 1st and 2nd doses, respectively, drop in institutional delivery between 9 and 20%, and a drop of 13 and 22% in postnatal visits during the COVID-19 pandemic.^[8]

Various underlying factors such as mobility restrictions, fear of contracting COVID-19 infection, unavailability of health staff, fear of getting tested for COVID-19 and getting isolated if positive, and preference for private health facilities have been reported for the lapses.^[8-10]

Such a situation during the pandemic has not only affected the physical health of the MCH care seekers but also affected their mental health and social well-being. The study found that anxiety and obsessive-compulsive symptoms were increased among pregnant women.^[11] The disruptions in the provision of MCH services had impacted women's health undesirably.^[12]

Till now, COVID-19-related obstetric research has primarily focused on the clinical dimensions, and there is scanty information available on the challenges encountered by pregnant women and postnatal mothers in seeking MCH care during the pandemic. This study intended to explore the challenges faced by pregnant women and postnatal mothers in seeking MCH care during the pandemic.

METHODS

Study design, setting, and participants

This study adopted an explorative qualitative study design, which was conducted in the state of Odisha from February to April 2021. The districts, blocks, and participants for the study were selected and enrolled to achieve maximum sampling variance. From each of the three revenue divisions of the state (northern, central, and southern), two districts were randomly selected, and from each district, two blocks were randomly selected for better sample representativeness. The selected study districts and blocks are detailed in Table 1 and Figure 1. From each of the study blocks, one community health center (CHC), one primary health center (PHC), and one subcenter (SC) were selected to identify and recruit the study participants. Both antenatal and postnatal mothers were purposively selected to participate in the study.

Data collection and analysis

For data collection, the participants were interviewed in Odia (the vernacular language of Odisha), using predesigned and pretested in-depth interview (IDI) guides. A total of 36 IDIs were conducted among the study participants, maintaining all necessary prescribed measures to prevent the transmission of



Figure 1: Distribution of the study districts and the study blocks

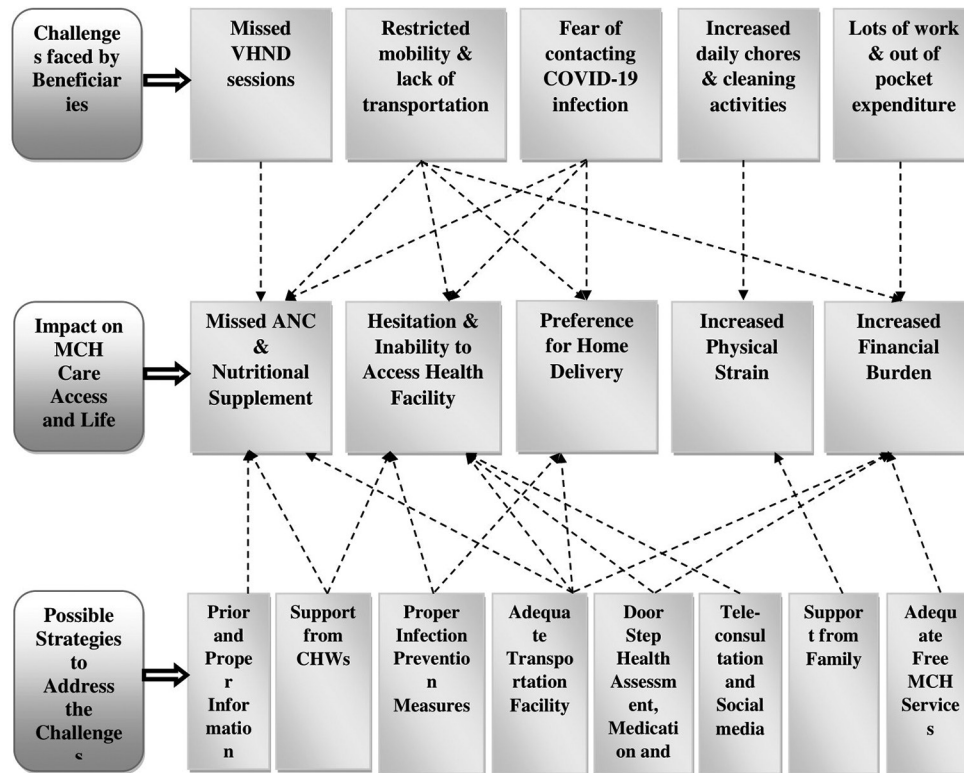


Figure 2: Impact on MCH care access during the COVID-19 pandemic and possible strategies to address the underlying challenges

COVID-19. With prior informed consent from the participants, the interviews were conducted using a predesigned and pretested guide and were audio recorded. The confidentiality and anonymity of the participants were maintained.

The researchers transcribed the audio recordings in the local language and then translated them into English. MAXQDA software was used for analyzing the transcripts and generating the codes. Three researchers reviewed the code tree and came up with the themes and categories in consensus. Categories were organized, and themes and subthemes were generated. The study findings were summarized and narrated accordingly.

Ethical consideration

Ethical approval for this study was obtained from the Institutional Ethics Committee of Indian Council of Medical Research (ICMR)—Regional Medical Research Centre, Bhubaneswar (ICMR-RMRCB/IHEC-2020/043/28.11.2020), and the State Research and Ethics Committee, Department of Health and Family Welfare, Government of Odisha (13260/MS, Bhubaneswar/18.06.2020). Before all interviews, informed consent from the participants was obtained after explaining the objectives and substance of the study to them.

RESULTS

Among 36 total study participants, their average age was 27.6 (+/- 2.2) years. While 16 (44.4%) were antenatal and 20 (55.6%) were postnatal mothers, 19 (52.8%) were primipara and 17 (47.2%) were multipara. The qualitative analysis of

the data brought out two main themes: 1. access to MCH care services during the pandemic and 2. impact of the pandemic on the life of MCH care recipients [Figure 2].

Theme 1: Access to MCH care services during the pandemic

Support from community health workers

Participants revealed that they received enormous support from community health workers (CHWs) during the pandemic. Services such as health assessment, medications, and nutritional supplements were provided at their doorstep by CHWs. In case of any problem or issue with seeking MCH care, the participants shared their problems with CHWs.

“Yes, I was given iron and calcium supplements, and some common medicines. They gave me one packet of a mixture of cereals and pulses, 12 eggs and some other things per month. The quality was also very good.” (Postnatal care recipient)

Most of the participants mentioned that they had received the take-home ration and items such as rice and dal at their doorstep from the CHWs during the pandemic.

“Yes, I have availed all the services given by government, like ration card services.” (Antenatal care recipient)

A few participants had experienced challenges in accessing MCH services at the community level. They could receive the nutritional supplements neither at Anganwadi centers nor at their doorstep.

Table 1: Details of the study sites and no. of interviews done

Revenue division	Name of the study district	Name of the study block	Data collection method—no. of interviews done
Northern	Sundargarh	Bargaon	IDI-4
		Balisankara	IDI-2
	Angul	Angul	IDI-3
Central	Khordha	Talcher	IDI-3
		Khordha Sadar	IDI-3
	Balasore	Chilika	IDI-3
		Remuna	IDI-2
Southern	Ganjam	Simulia	IDI-4
		Hinjilicut	IDI-3
	Rayagada	Purusottampur	IDI-3
		Kalyansingpur	IDI-3
		Kashipur	IDI-3

Access to MCH services at community and facility levels

Some MCH care recipients could not avail routine antenatal checkups and nutritional supplements either at the community level or at the facility level. Participants ascribed the lack of information regarding community-based healthcare services such as village health and nutrition day (VHND) as a cause for non-availing the MCH services.

“I didn’t know when and where those sessions were held. No one informed me about them.” (Antenatal care recipient)

Some pregnant women preferred not to visit health facilities for their routine antenatal checkups and remained at home in the fear of contracting COVID-19 infection at health facilities

“No, I did not go to any hospital because I was afraid of the infection. During the lockdown, I remained at home.” (Antenatal care recipient)

Restricted mobility and transportation issues

According to participants, though they had problems visiting to health facilities because of transportation restrictions, they were supported by the police and system upon showing them the medical records.

“We always wore a mask while going out. Hence the police never prevented us from going to the hospital. Oh yes, they would stop us, and check our papers and medical reports though.” (Antenatal care recipient)

However, as public transportation was not operational during the lockdown, many had to hire private vehicles causing additional financial burden.

“The auto rickshaw demanded extra fare, which we were unable to afford. Hence, we didn’t go for check-up.” (Postnatal care recipient)

COVID-19-related barriers

Participants had to wait long for their turn at health facilities.

“Even though prior appointment was taken, we had to wait in queue for long. It took us 1-2 hours.” (Postnatal care recipient)

Preference for home delivery

Some pregnant mothers did not visit health facilities for their delivery because of the fear of contracting COVID-19 infection, inaccessibility to health facilities, and unavailability of transportation services. They preferred to have their delivery at home.

“Everyone was in fear. Everyone advised me not to go to the hospital. By God’s grace, my delivery was done smoothly at home.” (Postnatal care recipient)

Theme 2: Impact of the pandemic on the life of MCH care recipients

Increased physical strain

Most of the participants expressed an increased household workload as all family members were staying at home all the time. Further, in fear of COVID-19 infection, the cleaning activities increased a lot.

“Yes, I had to cook for everyone. There would be a lot of dishes to wash too. My mother-in-law and sister-in-law also helped me though.” (Postnatal care recipient)

Fear of the infection

MCH care recipients were stressed in fear of contracting COVID-19 infection during pregnancy and childbirth. The fear was mostly regarding the safety of their newborn at hospitals because of the higher risk of infection.

“Many people were there in the hospital and anyone of them might be carrying the infection. I was bothered what if my child contracted the infection during our stay in the hospital.” (Postnatal care recipient)

Social life

The COVID-19 pandemic had a negative impact on the socialization and social relationships of the participants.

“Yes, my family members always go out and mingle with others. I had to be very cautious with them. I was a little afraid of mingling with them.” (Antenatal care recipient)

Financial burden

During the pandemic, families were hit hard by the economic crisis due to the dual burden of the inability to go for work and increased expenses. Some respondents incurred additional out-of-pocket expenditure while seeking MCH services, due to expenses such as hiring of transportation, cost of medicines, and diagnostic tests needed during pregnancy.

“At that time, we could not go to work and hence did not earn money. And the pregnancy related expense was an additional burden for me.” (Antenatal care recipient)

DISCUSSION

The recent COVID-19 pandemic has impacted health care including access to MCH care in many ways. Several Low-

and Middle-Income Countries (LMIC) experienced restricted access to Reproductive, Maternal, New-born, Child, and Adolescent Health (RMNCH) services during this pandemic.^[6] The antenatal and postnatal mothers were affected physically, mentally, and financially. Some of them could not avail the antenatal care and nutritional services mostly due to a lack of proper prior information such as where to visit and when to visit. Dissemination of prior information through proper planning among the care seekers could have averted this.

Most of the participants were in anxiety, stress, and fear about how to undergo delivery, their own health, and that of their babies and family members. Other studies have also similarly found that stress, fear, and anxiety were common among antenatal mothers during situations of a health emergency.^[13-15] In the event of a pandemic, such mental health issues among MCH care seekers need to be addressed as an integral part of antenatal and postnatal care.

Factors such as limited transportation services, movement restrictions, and fear of contracting the infection played a critical role in the decision of undergoing home delivery and avoiding antenatal and postnatal checkups. According to a research study, 69.3% of pregnant women failed to avail of antenatal service and 24.2% received inadequate antenatal services during the COVID-19 pandemic.^[16] Similar shortfalls with respect to antenatal and postnatal care were reported from almost all corners of the world during the pandemic. Preparedness with proper planning for adequate measures by the system during a pandemic would establish trust and confidence among care seekers to visit and avail of the desired services including routine care.

Another study in India by Kumar *et al.*^[3] reported that the nutritional and immunization services were reduced during this pandemic. Similar to this, we also observed the nutritional services to be somehow compromised. However, in contrast to their finding, we found that the immunization services were ensured by the health workers and the immunization coverage was maintained throughout the pandemic. This achievement was possible because of the system's priority for immunization program and alternative strategies adopted at the district and local levels to ensure immunization coverage.

The CHWs visited the home of antenatal and postnatal mothers to provide necessary MCH services such as weight measurement, counseling services, provision of medications, and nutritional supplements. Similar to this, other studies have also stressed introducing home-based care for high-risk pregnancies,^[17,18] forming social media groups among faculty members, midwives, and pregnant women to provide proper guidance,^[19] and ensuring tele-consultations for MCH care seekers.^[20] Moreover, our study participants suggested actions such as provision of uninterrupted quality health care, adequate transportation facilities, and additional nutritional food that would help them better during an emergency situation.

Implication for policy and practices

It is of utmost importance to plan and develop a context-specific evidence-based policy for ensuring MCH care services during any future pandemic or health emergency. While mitigating an emergency event like the COVID-19 pandemic has a paramount priority, at the same time the importance of sustaining routine health services such as MCH care cannot be compromised. Strategies communicating with care seekers, building their trust and faith on the health system, promoting infection prevention measures, ensuring transportation services, having clear pandemic management guidelines, and leveraging technology support for tele-consultation are some of the possible solutions.

Strengths and limitations

The scope of the study is limited to MCH services based on the qualitative findings. The study findings are restricted to the event of the COVID-19 pandemic and hence need to be interpreted accordingly. As the study participants were from different places and mostly from rural areas, the results in urban settings may vary.

Because the wide geographic variability in selecting and recruiting the study participants was done, this study provides a deeper insight into the challenges encountered among antenatal and postnatal mothers. The findings would be more or less similar in other similar settings. This will provide an opportunity for developing appropriate strategies to ensure quality MCH care services even in the event of any similar future health emergencies.

CONCLUSION

In the event of the COVID-19 pandemic, factors such as mobility restriction, limited transportation facility, fear of contracting infection, and lack of information, posed a challenge for accessing MCH care services among the seekers. This resulted in avoiding a visit to health facilities for ANC, PNC, and even for delivery in some cases. The MCH care seekers not only encountered physical problem but also faced mental stress, anxiety, and fear. During a pandemic or health emergency, while mitigation strategies for the pandemic are of utmost importance, the system also needs to be prepared for ensuring the provision of routine healthcare services such as MCH care. While our findings attempted to find out the root causes for the MCH care-related lapses, more research is needed to develop appropriate strategies to ensure quality MCH care during any future pandemic or health emergency.

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Conflicts of interest

There are no conflicts of interest.

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