Maternal and Child Health Problems, Prevention and Services

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Abstract

This study examines how a varied population in Delhi, India, views prevention, services, and challenges linked to maternal and child health (MCH). A cross-sectional research design was employed to capture the current state of MCH knowledge and attitudes. Convenience sampling was used to select 100 participants, including pregnant women, lactating women, mothers, and caregivers of children under five, ensuring demographic diversity. The findings reveal that a majority of participants recognize the vulnerability of pregnant and lactating women and children to malnutrition. Concerns about anaemia, infections, and unregulated fertility vary among the population. Proper nutrition, safe abortion, and controlled blood pressure are widely acknowledged as crucial for MCH prevention. Knowledge about weaning receives substantial support, while immunization perceptions vary. Diagnostic services, doctor consultations, and antenatal check-ups are highly valued, emphasizing their importance in maternal and child well-being. However, labor room/intra-natal services exhibit mixed opinions. Hospital stays are seen as essential for post-natal care. These findings inform MCH interventions, highlighting the need for targeted health education, improved awareness, and equitable access to healthcare services.

Introduction

Maternal and child health (MCH) is a crucial issue of public health that has attracted attention and concern on a global scale for many years. The welfare of mothers and children is a sign of a country's commitment to social fairness and human growth as well as its general state of health. The importance of MCH extends beyond individual health outcomes, impacting societal progress and sustainability. Historically, MCH concerns have been a focus of healthcare systems, researchers, and policymakers due to the significant impact of maternal and child mortality on communities and nations. High maternal and child mortality rates have been, and in many regions still are, stark indicators of health system deficiencies, socioeconomic disparities, and unequal access to healthcare [1].

These global goals underline the necessity and value of addressing MCH concerns in order to realize more comprehensive development goals. Given that the main causes of maternal deaths are universally acknowledged as avoidable and curable, maternal mortality serves as an important health indicator [2]. Severe postpartum hemorrhage, postpartum infections, pregnancy-related high blood pressure (pre-eclampsia and eclampsia), delivery problems, and unsafe abortions are the main complications that account for roughly two-thirds of mother mortality. According to the most recent report from the national Sample Registration System (SRS), from 2016 to 2018, India's Maternal Mortality Ratio (MMR) decreased by 17 points, from 130/100,000 live births in 2014–16 to 113/100,000 live births [3]. As a result of this development, an estimated 2,500 maternal lives were saved in 2018 as opposed to 2016, and the overall number of maternal deaths per year fell from 33,800 to 26,437 over this time [4].

With a high prevalence of childhood malnutrition and dangerously high rates of infant and child death, India has a disconcerting healthcare record. The infant mortality rate in the country is 63 deaths for every 1,000 live births, with 47% of these newborn deaths happening in the first week following delivery [5]. The issue extends to food-based programs, which are characterized by systemic discrimination that causes women and children from Scheduled Castes and

Scheduled Tribes to perish from starvation. Research studies also reveal high rates of stunting among Muslim children and a substantial prevalence of underweight children [6]. Children with impairments or HIV/AIDS have limited access to healthcare, and mental health programmes are few. With three in four children anaemic, India has the highest TB prevalence in the world. The fight against polio has stalled [7].

In the end, this research aims to offer understandings that can guide evidence-based policies and actions, supporting equal access to high-quality maternity and child health care and enhancing mothers' and children's health and wellbeing internationally. The wellbeing of mothers and their children is a key determinant of a society's general health, making maternal and child health an essential component of public health. Ensuring the optimal health of both mothers and children is not only a matter of individual well-being but also an essential component of global health and development agendas. Maternal and child health encompasses a wide spectrum of issues, including maternal mortality, infant mortality, nutrition, access to healthcare services, and the prevention of diseases. This multifaceted field not only addresses the medical aspects of pregnancy, childbirth, and child health but also delves into the socioeconomic, cultural, and systemic factors that influence outcomes. To enhance maternal and child health outcomes in this situation, it is crucial to recognize the issues, pinpoint the issues, and put effective prevention and treatment measures in place. The complexity of mother and child health issues is investigated in this study, together with the effectiveness of prevention measures and the delivery of healthcare services. We hope to contribute to the continuing global efforts to improve the health and well-being of mothers and children by looking at these interconnected components. The study determines the research population's degree of knowledge about, and views of, issues linked to mother and child health, as well as prevention methods, with a focus on identifying demographic characteristics that might affect these perceptions.

Methods

This study employed a cross-sectional research design. It is suitable for assessing maternal and child health problems, prevention, and services at a specific point in time. The study was conducted in Delhi, India, which represents a diverse urban and rural area with varying socioeconomic characteristics.

Sample Selection

- Convenience sampling was used to select study participants. Pregnant women, lactating women, mothers, and caregivers of children under the age of 5 were approached at healthcare facilities, community centers, and households.
- A sample size of 100 individuals was targeted, ensuring representation from different demographics.

Data Collection Instruments

- Structured questionnaires were developed based on the study objectives and previous research in mother and children health .
- The questionnaire consists of three sections, corresponding to the three variables: MCH Problems, Prevention, and Services.
- Before the actual data collection, the questionnaire was pre-tested on a small group of participants (approximately 10 individuals) to assess its clarity and identify any potential issues.

Data Collection Procedure

The data collection process involved the following steps:

a. Informed Consent: - Trained research assistants explain the purpose of the study to potential participants and seek their informed consent. Participation was voluntary, and anonymity will be assured.

b. Survey Administration: - Research assistants conducted face-to-face interviews with the participants. The interviews were held in a private and comfortable setting to encourage open responses.

c. Data Entry: - Collected data were entered into a computerized database for analysis. Data entry were double-checked for accuracy.

Data Analysis

Responses to the questionnaires were compiled using descriptive statistics, such as frequencies and percentages.

Results

The study's results underscore the participants' awareness of maternal and child health-related issues, preventive measures, and healthcare services.

Table 1: Demographic characteristics of the study respondents

Characteristics	Frequency (n=100)
Age 18-25 yr 26-30yr 31-35 yr	20 67 13
Location Urban Rural	33 67
Education Primary Secondary Not educated	57 34 9
Income Middle Class Lower Class Higher Class	44 45 9
Knowledge about Maternal and Child Health Yes No	35 65

The demographic data of the study population, as presented in Table 1, provides valuable insights into the composition of the participants. In terms of age, the majority fell within the 26-30-year-old bracket (67%), with smaller proportions in the 18-25-year-old (20%) and 31-35-year-old (13%) groups. The location of the participants was relatively evenly split between urban (33%) and rural (67%) areas. Regarding education, a substantial portion had primary education (57%), followed by secondary education (34%), while a smaller group had no formal education (9%). In terms of income,

the study population featured a relatively balanced distribution across middle-class (44%), lower-class (45%), and higher-class (9%) individuals. Notably, a significant portion of the participants possessed knowledge about maternal and child health (35%), while a considerable percentage did not (65%). These demographic findings lay the foundation for exploring associations with the study's key variables related to maternal and child health problems, prevention, and services.

Table 2: Maternal and Child Health related Problems

Variables (n=100)	Agree	Strongly Agree	Disagree	Strongly disagree
Pregnant and nursing women, and children face a heightened risk of malnutrition.	12%	81%	5%	2%
Anemia	30%	50%	10%	10%
Infection	25%	66%	5%	4%
Unregulated Fertility	23%	44%	20%	13%

The major findings regarding maternal and child health-related problems include a high level of agreement (81%) that pregnant and lactating women and children

are particularly vulnerable to malnutrition. Anemia is recognized as a significant concern, with 30% in agreement. Infections, especially after childbirth, are of

substantial concern, with 66% strongly agreeing. Concerns regarding unregulated fertility are mixed, with 44% agreeing and 20% disagreeing, while 13% strongly disagree. These findings highlight varying levels of awareness and consensus among the study population regarding maternal and child health problems, emphasizing the need for targeted interventions and education campaigns.

Table 3: Maternal and Child Health related Prevention

Variables (n=100)	Agree	Strongly Agree	Disagree	Strongly disagree
Controlled Blood Pressure	22%	71%	2%	5%
Safe abortion	22%	45%	15%	18%
Proper Nutrition	25%	67%	4%	4%
Knowledge about weaning	20%	55%	15%	16%
Immunization	21%	50%	20%	9%

Table 3 highlights the importance of maternal and child health prevention. Participants widely recognized the significance of controlled blood pressure (71% strongly agree) and proper nutrition (67% strongly agree). Safe abortion was deemed essential by 45%, with 22% in agreement. Knowledge about weaning received support from 55% strongly agreeing. Immunization garnered importance, with 50% strongly agreeing, but 20% disagreed, indicating varying awareness levels and complexity in perceptions within the study population.

Table 4: Maternal and Child health Services

MCH Variables (n=100)	Agree	Strongly Agree	Disagree	Strongly disagree
Diagnostic services	20%	65%	10%	5%
Doctor consultation	31%	45%	14%	10%
Antenatal Check ups	26%	60%	10%	6%
Labor room/intra-natal	20%	55%	15%	16%
Hospital Stay	27%	51%	20%	2%

Table 4 reveals that participants recognize the importance of maternal and child health services. The majority strongly agree on the significance of diagnostic services (65%) and doctor consultation (45%). Antenatal check-ups are considered crucial, with 60% strongly agreeing. Labor room/intra-natal services also receive strong support (55% strongly agree). Hospital stays are valued by 51%, while 20% disagree and 2% strongly disagree, indicating varied opinions among participants but an overall emphasis on the importance of these services.

Discussion

The findings of this study provide valuable insights into the awareness and perceptions of maternal and child health (MCH)-related issues, prevention measures, and healthcare services among the study population. These findings shed light on the multifaceted landscape of MCH concerns and the varying degrees of awareness and consensus within the community.

The demographic data of the study population revealed a diverse representation of age groups, with the majority falling within the 26- to 30-year-old. Similar study findings (Rasmussen et al.,2020) [8] suggest that demographic distribution reflects the inclusion of participants from different life stages, potentially offering distinct perspectives on MCH issues. The roughly equal split between urban and rural locations underscores the importance of considering the urban-rural divide in addressing MCH challenges. Additionally, the prevalence of primary education among participants is notable, highlighting the need for tailored health education efforts. The balanced distribution of income levels across middle, lower, and

higher classes provides a comprehensive view of socioeconomic factors influencing MCH perceptions. Moreover, the significant portion of participants possessing knowledge about MCH emphasizes the importance of community health education and awareness campaigns.

The findings concerning MCH-related problems revealed varying degrees of concern among participants. It is heartening to note that a substantial majority recognized the vulnerability of pregnant and lactating women and children to malnutrition, with 81% strongly agreeing. While anemia garnered significant recognition, with 30% in agreement and 50% strongly agreeing, other issues like infections and unregulated fertility displayed more diverse opinions. The significant consensus on this issue indicates a strong awareness of the nutritional needs of these vulnerable groups. However, in a study conducted by (Kallem & Sharma ,2020)[9] showed concerns related to anemia, infections, and unregulated fertility exhibited more mixed responses These findings underscore the need for targeted health interventions and education campaigns to address these specific concerns effectively.

Other finding in Table 3 highlighted the perceptions of the study population regarding prevention measures related to MCH. In a study by (Girum & Wasle,2017)[5] both blood pressure and safe abortion were acknowledged as important aspects of MCH prevention by a considerable portion for maternal and child health supporting the finding of the study. Nutrition and knowledge about weaning enjoyed widespread recognition and strong consensus, indicating that participants understand the significance of nutrition in maternal and child health (Sobhy et al.,2019)[1] . However, in the study immunization elicited mixed responses, with a notable proportion disagreeing or strongly disagreeing with its importance. This variance suggests the need for comprehensive education on the benefits and necessity of immunization to improve acceptance rates.

The findings concerning MCH services underscore the importance placed on healthcare services for maternal and child well-being. Diagnostic services and doctor consultations received substantial endorsement, with a significant percentage strongly agreeing on their importance. Antenatal check-ups were widely considered essential, emphasizing their role in ensuring safe pregnancies. Interestingly, labor room/intra-natal services exhibited mixed opinions, with a considerable portion of participants disagreeing or strongly disagreeing. This finding highlights the need for improved awareness and accessibility of these critical services. Hospital stays received considerable support, reflecting the recognition of their importance in post-natal care. In summary of the study's findings reveal a community with varying levels of awareness and consensus on MCH-related issues, prevention measures, and healthcare services. These findings lay the groundwork for specialized interventions, health awareness campaigns, and policy upgrades aimed at improving maternal and child health outcomes within the study group and, potentially, in surrounding regions.

Conclusion:

In conclusion, this study sheds light on the awareness and perceptions of MCH-related aspects among the study population in Delhi. The findings underscore the importance of considering diverse demographics and socioeconomic factors in MCH interventions. While there is a commendable awareness of malnutrition vulnerability, concerns related to anemia, infections, and unregulated fertility require focused attention. Comprehensive education is needed to enhance acceptance of immunization. Additionally, equitable access to MCH services, particularly labor room/intra-natal care, should be ensured.

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