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Perception of respectful maternity care among mothers attending a tertiary healthcare facility in Eastern India: a cross-sectional study

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Abstract

Background

Respectful maternity care (RMC) is an essential component of quality maternal healthcare and encompasses care that preserves women's dignity, privacy, autonomy, confidentiality and freedom from mistreatment. Despite advances in institutional maternity services, disrespectful and non-consented care, inadequate privacy, verbal abuse and other forms of mistreatment remain concerns in maternity settings. Understanding women's perceptions of maternity care is important for improving the quality and woman-centredness of services. This study assessed the perception of RMC among mothers attending a tertiary healthcare facility in Eastern India.

Methods

A quantitative cross-sectional descriptive study was conducted among 196 mothers attending the obstetrics and gynaecology outpatient department and postnatal inpatient ward of All India Institute of Medical Sciences Kalyani, West Bengal. Participants were selected using purposive sampling. Data were collected through an interviewer-administered sociodemographic proforma and a structured Likert-scale RMC tool based on the Ministry of Health and Family Welfare, Government of India, facilitator's guide for relationship-based and transformative midwifery care. The tool assessed seven domains: respect, consented care, confidential care, dignified care, impartial care, empathy during and after delivery, and treatment facilities. Descriptive statistics and tests of association were used for analysis. Linear regression was also performed to examine predictors of the RMC perception score.

Results

Among 196 participants, 171 (87.2%) had an excellent perception of RMC and 25 (12.8%) had a good perception. The mean age of participants was approximately 27.1 years. Most participants were Hindu (87.2%), lived in urban areas (68.4%), and belonged to joint families (56.1%). In individual RMC items, 72.4% reported an excellent perception regarding explanation before procedures, 65.8% regarding maintenance of privacy, 77.0% regarding avoidance of verbal abuse, and 73.5% regarding absence of monetary demands at childbirth. Significant associations were observed between RMC perception and religion ($p=0.009$), locality ($p=0.06$), number of living children ($p=0.044$), and type of family ($p=0.009$) based on the reported contingency tables. In linear regression, age was positively associated with RMC perception score ($\beta=0.470$, 95% CI 0.045–0.895; $p=0.030$), while religion was also associated with the score.

Conclusions

Most mothers attending this tertiary healthcare facility reported an excellent perception of respectful maternity care. Nevertheless, selected domains—including birth companionship, freedom regarding position during labour, and aspects of supportive care—showed scope for improvement. Continuous monitoring of women's experiences,

strengthening communication and informed consent, preserving privacy and autonomy, and promoting supportive, woman-centred maternity care may further improve the quality of maternity services.

Keywords: respectful maternity care; maternity care; childbirth; maternal health; women's experience

Background

Respectful maternity care (RMC) is an important component of high-quality, woman-centred maternity services. It emphasizes the preservation of women's dignity, privacy, autonomy and rights throughout pregnancy, childbirth and the postnatal period. The concept is closely linked with women's experiences of care and their trust in health services.[1]

Although skilled birth attendance and institutional delivery have contributed substantially to improvements in maternal and neonatal outcomes, the quality of interpersonal care received by women remains an important concern. Women may experience inadequate privacy, verbal or physical mistreatment, discrimination, lack of information, procedures without adequate consent, neglect or insufficient emotional support during maternity care. Such experiences may negatively influence women's childbirth experiences and confidence in health services.[2]

The study protocol and background material identified respectful care as encompassing dignity, privacy, freedom from harmful behaviour and mistreatment, continuous support, information sharing and women's participation in decision-making.[3]

Evidence from India and other settings has demonstrated variability in the provision of respectful maternity care. Previous studies have reported concerns related to communication, autonomy, informed consent, privacy, supportive care and discrimination. The dissertation review also identified Indian evidence from Gujarat, Northern India, Odisha, Kolkata and other settings demonstrating that although many women report positive experiences, specific domains of RMC remain deficient.[4]

In Eastern India, evidence on women's perception of respectful maternity care remains comparatively limited. Studies conducted in Odisha and Kolkata have reported both positive experiences and important forms of disrespect and abuse. The present study therefore aimed to assess women's perceptions of RMC in a tertiary healthcare facility in Eastern India and to examine their association with selected sociodemographic and obstetric characteristics.[5]

Objectives

The primary objective was to assess the perception of respectful maternity care among mothers attending a tertiary healthcare facility in Eastern India.

The secondary objective was to determine the association between perception of RMC and selected sociodemographic and obstetric variables.

Methods

Study design and setting

A quantitative, cross-sectional descriptive study was conducted at the Department of Obstetrics and Gynaecology of All India Institute of Medical Sciences Kalyani, West Bengal, India. Participants were recruited from the obstetrics and gynaecology outpatient department and the postnatal inpatient ward. The study methodology in the original project specified a cross-sectional descriptive design and purposive sampling.

Participants

The study population consisted of antenatal and postnatal mothers attending the study setting.

Inclusion criteria

Participants were eligible if they:

1. were primigravida mothers attending from the second antenatal visit;

2. were multigravida mothers attending their first antenatal visit;

3. were postnatal mothers admitted to the designated postnatal ward; and

4. understood Bengali or Hindi.

Exclusion criteria

Women were excluded if they:

1. had chronic mental illness;

2. were unwilling to participate;

3. were healthcare professionals;

4. had an unwed pregnancy.

Sample size and sampling

The sample size was calculated using the single-proportion formula:

$n = Z^2pq/e^2$

Using an estimated prevalence of 15%, 95% confidence level and 5% margin of error, the calculated sample size was 195.92 and was rounded to 196.

A total of 196 mothers were included using purposive sampling.

Data collection instruments

Data were collected using two instruments.

Sociodemographic and obstetric proforma

The proforma collected information on age, religion, educational qualification, occupation, husband's occupation, locality, duration of marriage, parity, number of deliveries, mode of delivery, history of infertility, type of family and number of family members.

Respectful maternity care tool

Perception of RMC was assessed using a structured Likert-scale tool derived from the Ministry of Health and Family Welfare, Government of India, facilitator's guide for preparing midwives for relationship-based and transformative midwifery care.

The tool covered seven domains:

1. Respect
2. Consented care
3. Confidential care
4. Dignified care

5. Impartial care
6. Sharing empathy during and after delivery
7. Treatment facility

The tool demonstrated a Cronbach's alpha reliability coefficient of 0.832. The content validity index was reported as 0.91 for the demographic proforma and 0.79 for the RMC scale after expert review.

Data collection procedure

Prior permission was obtained from the relevant institutional authorities. Data were collected during the month from July to November. Eligible participants were approached, the purpose of the study was explained, and written informed consent was obtained before interview. Confidentiality and anonymity were maintained. A pilot study involving 40 participants was undertaken to assess feasibility and the practical aspects of data collection.

Outcome measures

The primary outcome was the overall level of perceived RMC, categorized according to the scoring system of the study tool as good or excellent perception.

Secondary outcomes included responses to individual RMC domains and associations between RMC perception and sociodemographic and obstetric characteristics.

Statistical analysis

Data were analysed using descriptive and inferential statistics. Frequencies and percentages were used to summarize categorical variables. Associations between categorical variables were examined using chi-square tests. Linear regression was used to identify variables associated with the overall RMC perception score. Statistical significance was considered at $p<0.05$.

Because the original dissertation contains discrepancies between its narrative summary and some of its statistical tables, the present manuscript reports the values available from the detailed tables and regression output.

Ethical considerations

Human Ethics and Consent to Participate declarations: Consent was taken before recruiting every case in accordance with the Declaration of Helsinki. Institutional research committee (IRC of All India Institute of Medical Sciences AIIMS Kalyani) approved the study and ethical clearance committee of AIIMS Kalyani given the Ethical clearance (IEC/AIIMS/KALYANI/CERTIFICATE/2025/326) and institutional permission was also obtained. Written informed consent was obtained from each participant, and confidentiality and anonymity were maintained.

Results

Participant characteristics

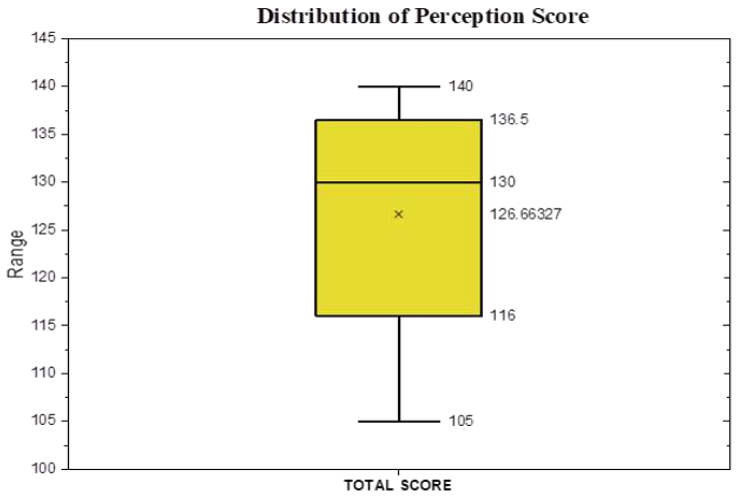
A total of 196 mothers participated in the study, with a reported response rate of 95%. The mean age of the participants was approximately 27.1 years. Most participants were Hindu (87.2%), followed by Muslim women (10.7%) and women from other religions (2.0%).

Overall, 68.4% of participants lived in urban areas and 31.6% in rural areas. Joint families accounted for 56.1% of participants and nuclear families for 43.9%. Approximately 70.9% of participants were parity one, while 18.9% were parity two. Regarding mode of delivery, 52.0% had undergone caesarean delivery and 46.9% had normal vaginal delivery. A history of infertility was reported by 8.2% of participants.

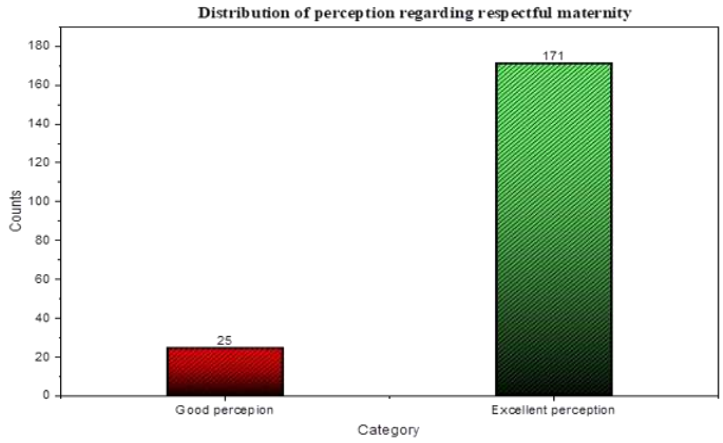
Overall perception of respectful maternity care of the 196 mothers, 171 (87.2%) had an excellent perception of RMC, while 25 (12.8%) had a good perception. No participant was categorized as having poor or fair overall perception in the final overall classification.

Domain-specific perceptions

Positive perceptions were observed across several RMC domains.



Boxplot is showing Distribution of Perception



Bar diagram is showing the Frequency &percentage distribution of Perception regarding Respectful Maternity Care

Regarding consented care, 142 participants (72.4%) reported an excellent perception that procedures were explained before being performed. Only two participants reported poor or fair perception for this item. Regarding birth companionship, however, only 37 (18.9%) reported an excellent perception, while 127 (64.8%) reported a good perception and 31 (15.8%) reported a fair perception.

For maintenance of privacy, 129 mothers (65.8%) reported an excellent perception. Regarding confidentiality of personal information, 121 (61.7%) reported an excellent perception. Similarly, 114

(58.2%) reported an excellent perception that information related to their health condition should not be disclosed inappropriately.

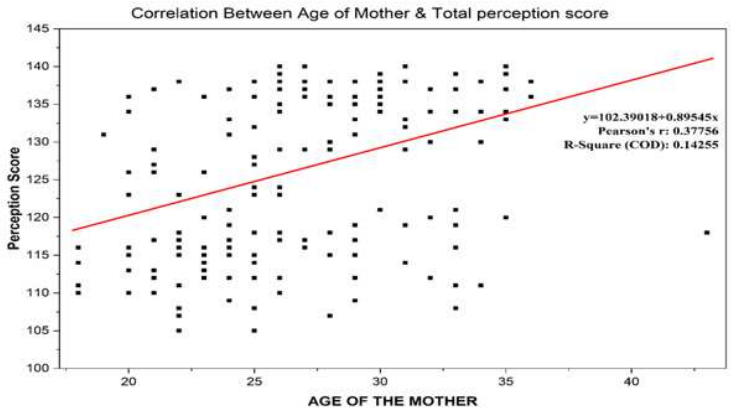
In the dignity domain, 151 mothers (77.0%) reported an excellent perception regarding avoidance of verbal abuse. In the respect domain, 118 (60.2%) reported an excellent perception that episiotomy should be performed under anaesthesia, while 114 (58.2%) reported an excellent perception regarding avoidance of pulling the baby during birth. A further 119 (60.7%) reported an excellent perception regarding avoidance of inappropriate touching.

In relation to supportive care, 59 mothers (30.1%) reported an excellent perception of having someone accompany them during delivery, while 106 (54.1%) reported an excellent perception that mothers should not be required to clean their own bed after delivery. A total of 127 (64.8%) reported an excellent perception that calls for help should receive a prompt response.

Regarding treatment facilities, 144 mothers (73.5%) reported an excellent perception concerning the absence of monetary demands at childbirth.

Factors associated with RMC perception

Scattered diagram showing correlation between age and perception regarding RMC



Religion was significantly associated with overall RMC perception (χ^2=9.34, df=2, p=0.009). Among mothers with an excellent perception, 89.5% were Hindu, 8.2% Muslim and 2.3% Christian.

Educational qualification was not significantly associated with RMC perception (χ^2=6.51, df=3, p=0.089).

Maternal occupation was not associated with RMC perception (χ^2=0.732, df=3, p=0.866), nor was husband's occupation (χ^2=2.04, df=3, p=0.563).

Locality was reported in the contingency table as not statistically significant (χ^2=3.55, df=1, p=0.06), although the dissertation's narrative summary describes locality as significant. Therefore, the table value is retained here.

Parity was not significantly associated with perception (χ^2=1.50, df=3, p=0.681).

Number of living children was significantly associated with RMC perception (χ^2=8.12, df=3, p=0.044).

Mode of delivery was not significantly associated with perception (χ^2=4.68, df=3, p=0.197).

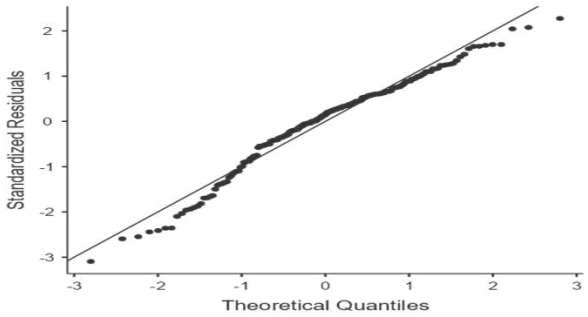
History of infertility was not associated with RMC perception (χ^2=0.00102, df=1, p=0.975).

Type of family was significantly associated with perception (χ^2=6.77, df=1, p=0.009). Among mothers with good perception, 68.0% belonged to nuclear families, compared with 40.4% among those with excellent perception.

Number of family members was not significantly associated with perception (χ^2=6.97, df=4, p=0.138).

Linear regression

Linear regression demonstrated a positive association between maternal age and the overall RMC perception score. For each one-year increase in maternal age, the perception score increased by approximately 0.47 points (β=0.4702, SE=0.215, 95% CI 0.0452–0.8953; p=0.030). Religion also contributed significantly to the regression model, with the reported coefficient for Muslim versus Hindu participants being −4.932 (95% CI −8.8754 to −0.9885; p=0.015).



Discussion

This study found that most mothers attending the tertiary healthcare facility reported an excellent perception of respectful maternity care, with 87.2% classified as having excellent perception and 12.8% as having good perception. This finding suggests an overall favourable perception of maternity care in the study setting.[6]

The high proportion of positive perceptions is broadly consistent with findings from other Indian studies reporting substantial levels of respectful care. For example, the study reviewed in the dissertation from Northern India reported that 88.7% of women experienced RMC, although communication and autonomy and supportive care remained comparatively weaker domains.[7]

However, the overall positive finding should not obscure domain-specific deficiencies. In the present study, birth companionship and choice of position during childbirth were less frequently rated as excellent than several other domains. This is clinically important because respectful maternity care is not limited to the absence of abuse; it also includes communication, autonomy, emotional support, informed choice and participation in decision-making.[8]

The finding that 72.4% of women reported an excellent perception of explanation before procedures suggests relatively strong communication around procedures. Similarly, the high proportion reporting excellent perceptions regarding privacy and confidentiality indicates favourable performance in these areas. [9] However, the lower proportion reporting excellent perceptions concerning birth companionship suggests an opportunity to strengthen supportive care.[10]

The present study also identified an association between religion and RMC perception. This should be interpreted cautiously because the distribution of religious groups was highly uneven, with most participants being Hindu.[11] Consequently, statistical significance may partly reflect differences in

group size and should not be interpreted as evidence that religion itself causes differences in the quality of care.

Type of family was also associated with RMC perception. Women from joint and nuclear families differed in their distribution of good and excellent perception. Family structure may influence expectations, social support and women's interpretation of maternity experiences, although causal conclusions cannot be drawn from this cross-sectional design.

Age showed a statistically significant positive association with the RMC score in linear regression. Older mothers may have greater previous exposure to healthcare systems or childbirth-related experiences, potentially influencing how they evaluate maternity care. However, the cross-sectional nature of the study prevents determination of causality.[12]

The findings are also relevant in the context of evidence from Eastern India. The dissertation review identified studies reporting disrespect, verbal abuse, neglect, lack of privacy and non-consented care among women receiving facility-based maternity services in Kolkata and other parts of Eastern India. Thus, even where overall perceptions are positive, continuous quality improvement is necessary to ensure that respectful care is consistently provided to every woman.

The results support the broader principle that respectful maternity care should be integrated into routine quality-of-care monitoring rather than treated as a separate or optional component of maternity services.

Strengths and limitations

Strengths

The study addressed an important and relatively under-explored dimension of maternal healthcare quality in Eastern India. The study prepared and used a structured RMC instrument covering multiple domains, including respect, consent, confidentiality, dignity, impartiality, empathy and treatment facilities. The instrument demonstrated acceptable internal consistency, with a Cronbach's alpha of 0.832. Both antenatal and postnatal mothers were included, allowing perceptions from different stages of maternity care to be captured.

Limitations

The study was conducted at a single tertiary healthcare facility, limiting generalizability to other healthcare settings. Purposive sampling may have introduced selection bias. The cross-sectional design does not permit causal inference. RMC was assessed through self-reported perception, which may be influenced by recall and social desirability bias. In addition, the study included mothers attending ANC as well as postnatal mothers, and their exposure to maternity services may have differed.

The study also excluded healthcare professionals and women with unwed pregnancies according to the original protocol, which may limit applicability to these populations.

Conclusions

Most mothers attending the tertiary healthcare facility reported an excellent perception of respectful maternity care. Positive perceptions were particularly evident in areas such as explanation before procedures, privacy, confidentiality, dignity and avoidance of verbal abuse.

Nevertheless, some aspects of supportive and autonomy-related care, particularly birth companionship and choice-related components, showed scope for improvement. Age was positively associated with the

overall RMC score, while religion, number of living children and type of family showed associations with RMC perception in the reported analyses.

Routine assessment of women's experiences should form part of maternity-care quality improvement. Healthcare providers should continue to strengthen communication, informed consent, privacy, autonomy, emotional support and non-discriminatory care. Larger multicentre studies using probability sampling and, where feasible, direct observation alongside women's reports are needed to establish the extent and determinants of respectful maternity care across Eastern India.

Implications for practice

1. RMC should be incorporated into routine maternity-care quality indicators.

2. Healthcare providers should consistently explain procedures and obtain informed consent.

3. Privacy and confidentiality should be maintained throughout examinations and childbirth.

4. Women should be encouraged to participate in decisions concerning their care.

5. Birth companionship should be facilitated wherever clinically and institutionally feasible.

6. Women's preferences regarding position and supportive care should be respected whenever medically appropriate.

7. Regular staff sensitization and training on respectful, woman-centred maternity care should be undertaken.

8. Periodic patient-feedback systems may help identify gaps in RMC and guide quality improvement.

Availability of data and materials

The datasets generated and/or analysed during the current study are not publicly available because they contain participant-level information, but may be made available from the corresponding author on reasonable request, subject to institutional and ethical restrictions.

Competing interests

The authors declare that they have no competing interests.

Funding

No specific external funding was reported for this study.

Authors' contributions

TB planned and prepared the actual research proposal and then TB & RB supervised the study. The student investigators contributed to study implementation, data collection and/or data management.

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The other members contributed in data collection and data management. Each of them collected data from the Out patient department during their clinical duties.

DECLARATIONS

Abbreviations:

RMC: Respectful Maternity Care
AIIMS: All India Institute of Medical Sciences
IRC: Institutional Research Committee
IEC: Institutional Ethics Committee
CI: Confidence Interval
SE: Standard Error
Df: Degrees of Freedom
WHO: World Health Organization

Ethical approval and consent to participate:
The Institutional Ethics Committee of the All India Institute of Medical Sciences, Kalyani, reviewed and approved this study (IEC/AIIMS/Kalyani/Certificate/2025/326). All techniques used in this study closely followed the relevant guidelines provided by the Declaration of Helsinki (DoH-Oct2008). Written informed consent was obtained from all the eligible participants.

Consent for publication: Not applicable

Availability of data and materials: The data supporting the findings of this study are available upon reasonable request from the corresponding author. The data are not publicly available because of privacy and ethical restrictions.

Competing interest: Not Applicable

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Authors contributions:

Study conception and design: TB, RB

Data collection: TB, RB, ST,SB,SP,SA,SK,SS,SK

Data analysis: TB, RB,ST,SB,SP,SA,SK,SS,SK

Manuscript drafting: TB, RB

Manuscript review: All authors have read and approved the final manuscript.

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Declaration

Consent for Publication: Not Applicable

This manuscript does not contain any identifiable images or personal or clinical details of individual participants that could compromise their anonymity.