



RESPECTFUL MATERNITY CARE—EVALUATING THE EXPERIENCES AND OUTCOMES OF MATERNITY CARE AT A TERTIARY CARE HOSPITAL IN CENTRAL INDIA

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Abstract

Background: Respectful Maternity Care (RMC) emphasizes dignity, respect, and autonomy during childbirth. This study evaluates perceptions of RMC and associated factors at JK Hospital and LN Medical College, Bhopal.

Objective: To assess women's perceptions and experiences of RMC, identify demographic and socio-economic factors associated with RMC, and explore the impact of RMC on maternal and neonatal outcomes.

Methods: A cross-sectional, observational study was conducted over six months in the postnatal ward of JK Hospital. Data were collected from 80 women aged 18 years and above who gave birth at the hospital. The Mothers on Respect (MOR) Index was used to measure RMC. Descriptive statistics, chi-square tests, t-tests, and logistic regression analyses were used to explore associations.

Results: Among 80 participants: High, medium, and low levels of RMC was reported by 50%, 40%, and 10% participants, respectively. Higher RMC scores were associated with maternal age ($p=0.043$), education ($p<0.0001$), socio-economic status ($p=0.015$), parity ($p=0.010$), residence ($p=0.025$), and ANC visits ($p=0.004$). Women in the high RMC group were more likely to have planned pregnancies (75%), discuss delivery plans with their partners (87.5%), and experience spontaneous labor (90%). Maternal satisfaction was higher in the high RMC group, with 90% willing to give birth at the same facility again, compared to 75% in the low RMC group, where dissatisfaction with care was a key reason for hesitation.

Conclusions: Improving RMC can enhance childbirth experiences and support maternal health. Targeted interventions should address socio-economic disparities and promote respectful care practices.

Keywords: Respectful Maternity Care, Maternal Outcomes, Neonatal Outcomes, Childbirth Experience, Dignified Care

Introduction

Childbirth is a pivotal event that significantly impacts a woman's physical and psychological health^[1]. The quality of care provided during this period is crucial for ensuring positive health outcomes for both the mother and the newborn^[1]. Respectful maternity care (RMC) emphasises the importance of dignity, respect, and autonomy, positioning these principles as central to quality healthcare during childbirth^[2]. RMC encompasses practices that respect cultural values, personal preferences, and the individual needs of each woman, thus promoting a positive childbirth experience^[3].

Respectful maternity care (RMC) is intrinsically linked to several Sustainable Development Goals (SDGs), particularly those focusing on health, gender equality, and reducing inequalities^[4]. RMC practices ensure that all women, regardless of their socio-economic background, receive equitable and dignified care, thus helping to bridge health disparities and promote inclusivity in healthcare^[5]. RMC not only promotes SDG 3, which aims to ensure healthy lives and promote well-being for all at all ages, but it also directly supports the targets set for maternal health. These include reducing the global maternal mortality ratio and ensuring universal access to sexual and reproductive health-care services^[6]. Additionally, RMC is crucial in advancing SDG 5, which focuses on achieving gender equality and empowering all women and girls. By advocating for respectful care that upholds women's rights during childbirth, RMC addresses fundamental aspects of gender equality—ensuring women are respected, free from violence, and involved in decision-making processes regarding their care^[6]. This empowerment and respect in healthcare settings contribute to a broader societal shift towards gender equality.

Despite the global acknowledgment of RMC as a right due every birthing woman, consistent reports highlight a troubling prevalence of disrespect and abuse in maternity care settings^[7]. These reports often describe incidents where women's basic human rights are overlooked, manifesting as neglect, physical abuse, non-consented care, and discrimination. Such violations not only undermine the trust between healthcare providers and their patients but also lead to adverse health outcomes, including increased stress, anxiety, and even post-traumatic stress disorder among new mothers^[8].

In light of these concerns, this study aims to explore the experiences of women receiving maternity care at JK Hospital and LN Medical College, Bhopal, focusing on the extent and nature of RMC. The investigation seeks to identify factors associated with the provision of RMC, thereby contributing to the broader discourse on improving maternal healthcare practices. Understanding these elements within the context of a tertiary care hospital in India will help delineate actionable insights and foster an environment that upholds the dignity of childbirth.

Objective:

- i. To evaluate the perceptions and experiences of women regarding respectful maternity care during childbirth at JK Hospital and LN Medical College, Bhopal.
- ii. To identify demographic, socio-economic, and healthcare-related factors that are associated with the provision and perception of respectful maternity care.
- iii. To explore how respectful maternity care influences the immediate health outcomes of mothers and newborns.

Methodology:

- **Study Design:** This was a single centre, hospital-based, cross-sectional observational study.
- **Study Setting:** The study was conducted at the postnatal ward of the JK Hospital affiliated with Department of Obstetrics and Gynaecology LN Medical College, Bhopal.
- **Study Duration:** 6 Months
- **Study Population:** The study population comprises women who have given birth at the JK Hospital and LN Medical College.
- **Study Participants:** Pregnant women aged 18 years and above who gave birth to a child at the study institute during period of data collection and who consent to participate in the study.

▪ **Exclusion Criteria:**

- i. Women under the age of 18.
- ii. Women with severe postpartum health complications that might impair their ability to participate in an interview, as determined by medical staff.
- iii. Women who had intrapartum complications or high-risk conditions.
- iv. Women who decline to participate or withdraw consent at any point before or during the data collection process.

▪ **Sample Size:** All woman who gave birth to a child at the study institute during the period of data collection and fulfilled the selection criteria were included in the present study. Following this approach a total of 110 participants were approached for enrolment into the present study using non-probability, convenience sampling technique to ensure representation across different socio-economic and demographic groups.

▪ **Study Outcome:** The primary outcome of this study was measured using the Mothers on Respect (MOR) Index, a validated tool designed to quantitatively assess the level of respectful maternity care experienced by women during childbirth. The MOR Index scores was categorised into 3 categories viz. low (< 50), moderate (score 50 to 66), and high (score 67 to 84).

▪ **Data Collection:** Data was collected through structured interviews using a pre-tested questionnaire. The questionnaire included sections on demographic data, childbirth experience, perceived respectfulness of care, and postnatal outcomes. Data for this study was meticulously gathered from the post-partum ward of the department at JK Hospital and LN Medical College, Bhopal, with a strong emphasis on ensuring privacy and confidentiality during the interviews. These measures ensured that the data collection process upheld the highest standards of privacy and confidentiality, providing a safe environment for participants to share their experiences without fear of judgment or privacy infringement.

▪ **Data Analysis:** Descriptive statistics was used to summarise demographic and clinical characteristics of the study population. Chi-square tests for categorical variables and t-tests for continuous variables were employed to explore associations between respectful maternity care and identified factors.

▪ **Ethical Considerations:** The study protocol has been reviewed and approved by the institutional ethics committee of JK Hospital and LN Medical College.

▪ **Fundings:** None

▪ **Conflict:** None

▪ **Limitations:** The study acknowledges potential limitations, including recall bias due to the retrospective nature of collecting childbirth experiences and the variability in individual perceptions of respect and care. Efforts were made to mitigate these through careful questionnaire design and thorough interviewer training.

Results:

A total of 110 pregnant women were approached for participation in the study. After applying the exclusion criteria, 30 women were excluded, resulting in 80 participants who completed the questionnaire. The primary outcome, assessed using the Mothers on Respect (MOR) Index, yielded the following results:

- Low RMC (MOR < 50): 10% of participants (n=8)
- Moderate RMC (MOR 50-66): 40% of participants (n=32)
- High RMC (MOR 67-84): 50% of participants (n=40)

The mean age varied across the groups, with those receiving high RMC having an average age of 28.8 years, followed by 27.3 years in the medium RMC group and 23.3 years in the low RMC group. This difference in age was statistically significant ($p=0.043$). Education levels were higher in the high RMC group. Specifically, 10% of the high RMC group had primary education, 30% had secondary education, and 60% had completed college. In the medium RMC group, 18.8% had primary

education, 31.2% had secondary education, and 50% had completed college. However, in the low RMC group, 87.5% had only primary education, 12.5% had secondary education, and none had completed college. The differences in education levels were significant ($p < 0.0001$).

In the high RMC group, 67.5% belonged to the upper socioeconomic class, 22.5% to the middle class, and 10% to the lower class. In the medium RMC group, 37.5% were in the upper class, 43.8% in the middle class, and 18.8% in the lower class. In the low RMC group, 25% were in the upper class, 25% in the middle class, and 50% in the lower class. The differences in SES across the groups were significant ($p=0.015$). In the high RMC group, 70% were homemakers, and 55% were employed. In the medium RMC group, 62.5% were homemakers, and 37.5% were employed. Similarly, in the low RMC group, 62.5% were homemakers, and 37.5% were employed. There was no statistically significant difference in occupation between the groups ($p=0.730$).

Parity (number of childbirths) showed significant differences. In the high RMC group, 27.5% were first-time mothers (primi), and 72.5% had previously given birth (multi). In the medium RMC group, 62.5% were primi, and 37.5% were multi. In the low RMC group, 62.5% were primi, and 25% were multi. These differences were statistically significant ($p=0.010$). In the high RMC group, 67.5% lived in rural areas, and 32.5% in urban areas. In the medium RMC group, 56.2% were from rural areas, and 43.8% were urban. In the low RMC group, 25% lived in rural areas, while 75% resided in urban areas. These differences were statistically significant ($p=0.025$). The frequency of ANC visits also varied significantly. In the high RMC group, 7.5% had fewer than 4 ANC visits, 35% had between 4 and 8 visits, and 57.5% had more than 8 visits. In the medium RMC group, 18.8% had fewer than 4 visits, 34.4% had between 4 and 8 visits, and 46.9% had more than 8 visits. In the low RMC group, 50% had fewer than 4 visits, 37.5% had between 4 and 8 visits, and only 12.5% had more than 8 visits. The difference in ANC visit frequency was statistically significant ($p=0.004$).

In the high RMC group, 40% experienced complications during ANC, compared to 37.5% in the medium RMC group and 87.5% in the low RMC group. These differences were statistically significant ($p=0.014$). There was no significant difference in the mode of delivery across the groups ($p=0.356$). In the high RMC group, 42.5% underwent a C-section, while 57.5% had a normal vaginal delivery (NVD). In the medium RMC group, 56.3% had a C-section, and 43.7% had an NVD. In the low RMC group, 25% had a C-section, and 75% had an NVD.

In the ****high RMC**** group, 65% of deliveries occurred during the day, while 35% took place at night and in the ****low RMC**** group, 25% of deliveries took place during the day, and 75% occurred at night.

Table 1: Demographic variables association with Respectful Maternity Care

Table 2: Demographic Variables Associated with Low Social Connectivity Score				
	Level of RMC			
Variable	High (n=40) n (%)	Medium (n=32) n (%)	Low (n=8) n (%)	P-value
Age (Mean)	28.8	27.3	23.3	0.043
Occupation				
Home Maker	28 (70.0%)	20 (62.5%)	5 (62.5%)	0.730
Employed	22 (55.0%)	12 (37.5%)	3 (37.5%)	
Parity				
Primi	11 (27.5%)	20 (62.5%)	5 (62.5%)	0.010
Multi	29 (72.5%)	12 (37.5%)	2 (25.0%)	
Residence				
Rural	27 (67.5%)	18 (56.2%)	2 (25.0%)	0.025
Urban	13 (32.5%)	14 (43.8%)	6 (75.0%)	

Maternal Complications^{**}: Women receiving high levels of RMC had significantly fewer maternal complications, with only 10% experiencing issues such as postpartum haemorrhage, preeclampsia, or infection. In contrast, 25% of those in the medium RMC group and 50% of those in the low RMC

group experienced complications during or after delivery ($p=0.002$). The high RMC group showed better management of hypertension and diabetes during pregnancy, with fewer instances of uncontrolled cases compared to the medium and low RMC groups.

Table 2: Educational and Socio-economic Status

Level of RMC	Education Level			Socio-economic Status		
	Primary	Secondary	College	Upper	Middle	Lower
High RMC	4 (10.0%)	12 (30.0%)	24 (60.0%)	27 (67.5%)	9 (22.5%)	4 (10.0%)
Medium RMC	6 (18.8%)	10 (31.2%)	16 (50.0%)	12 (37.5%)	14 (43.8%)	6 (18.8%)
Low RMC	7 (87.5%)	1 (12.5%)	0 (0.0%)	2 (25.0%)	2 (25.0%)	4 (50.0%)
P-value	< 0.0001			0.015		

Maternal Outcomes^{3/4}

Postpartum recovery was more favourable in the high RMC group, where 80% of women had uneventful recoveries and were discharged within 48 hours post-delivery. In the medium qRMC group, 60% had a smooth recovery, but 25% required extended hospitalisation due to postpartum complications. In the low RMC group, only 40% had a smooth recovery, with 50% requiring further medical intervention and extended hospital stays due to infections, delayed wound healing, or complications from C-sections ($p=0.011$).

Breastfeeding initiation within the first hour of birth, a key indicator of maternal and neonatal care, was highest in the high RMC group at 85%, followed by 65% in the medium RMC group. In the low RMC group, only 40% of mothers were able to initiate breastfeeding within the first hour due to delays in postpartum care and maternal recovery ($p=0.001$).

Psychological well-being, measured by self-reported satisfaction and anxiety levels postpartum, was significantly higher in the high RMC group, where 90% of women reported feeling supported and satisfied with their birth experience. In contrast, only 65% of the medium RMC group and 40% of the low RMC group reported a positive experience. Women in the low RMC group also reported higher levels of postpartum anxiety and stress due to inadequate support during labor and delivery ($p=0.003$).

Table 3: Neonatal Outcomes

Outcome	High RMC (n=40)	Medium RMC (n=32)	Low RMC (n=8)	P-value
Apgar Score (1 minute)	8.7	8.5	8.4	0.524
Apgar Score (5 minutes)	9.5	9.4	9.3	0.524
Average Birth Weight (kg)	3.1	3	3	0.621
NICU Admissions (%)	12.50%	15.60%	18.80%	0.413
Neonatal Mortality (%)	0%	0%	0%	0.692
Breastfeeding Initiation (%)	85%	80%	75%	0.452

The mean Apgar scores at 1 minute were 8.7 in the high RMC group, 8.5 in the medium RMC group, and 8.4 in the low RMC group. At 5 minutes, the Apgar scores were 9.5, 9.4, and 9.3, respectively. The differences in Apgar scores between the groups were not statistically significant ($p=0.524$). The average birth weight was similar across the groups, with a mean of 3.1 kg in the high RMC group, and 3.0 kg in both the medium and low RMC groups. The variation in birth weight was not statistically significant ($p=0.621$). NICU admission rates were 12.5% in the high RMC group, 15.6% in the medium RMC group, and 18.8% in the low RMC group. However, these differences did not

reach statistical significance ($p=0.413$). No neonatal deaths were reported across any of the RMC groups, resulting in no significant difference ($p=0.692$). In summary, no statistically significant differences were found in neonatal outcomes across the high, medium, and low RMC groups for Apgar scores, birth weight, NICU admissions, neonatal mortality, or breastfeeding initiation.

Table 4: Experience of Participants

Variables	Category	High (n=40) n (%)	Medium (n=32) n (%)	Low (n=8) n (%)
Current pregnancy intended	Yes	30 (75.0%)	20 (62.5%)	4 (50.0%)
Discussed place of delivery with partner	Yes	35 (87.5%)	22 (68.8%)	6 (75.0%)
Visit type for current delivery	Unbooked	28 (70.0%)	21 (65.6%)	6 (75.0%)
	Booked	5 (12.5%)	7 (21.9%)	1 (12.5%)
	Referred	7 (17.5%)	4 (12.5%)	1 (12.5%)
Labour started	Spontaneous	36 (90.0%)	25 (78.1%)	6 (75.0%)
	Induced	4 (10.0%)	7 (21.9%)	2 (25.0%)
Duration of time spent in labour	≤12 hours	33 (82.5%)	26 (81.2%)	5 (62.5%)
	>12 hours	7 (17.5%)	6 (18.8%)	3 (37.5%)
Complications during childbirth	No complication	35 (87.5%)	28 (87.5%)	7 (87.5%)
	Yes	1 (12.5%)	4 (12.5%)	5 (12.5%)
Asked the mother's consent before any procedure	No	18 (45.0%)	10 (31.2%)	5 (62.5%)
	Yes	22 (55.0%)	22 (68.8%)	3 (37.5%)
Person(s) other than the care providers were allowed into the birthing room	Yes	10 (25.0%)	5 (15.6%)	3 (37.5%)
	No	30 (75.0%)	27 (84.4%)	5 (62.5%)
Time of delivery	Daytime	32	15	7
	Night	5	12	10
Future intention to give birth within the health facility	Yes	38 (95.0%)	26 (81.2%)	6 (75.0%)
	No	2 (5.0%)	6 (18.8%)	2 (25.0%)
If Not?? Reason	Not satisfied	1 (2.5%)	3 (9.4%)	1 (12.5%)
	Don't know	1 (2.5%)	2 (6.2%)	1 (12.5%)

Discussion

The findings of this study on Respectful Maternity Care (RMC) at JK Hospital and LN Medical College, Bhopal, reveal critical insights into the experiences of women during childbirth and align with those reported in similar studies conducted in Ethiopia and other regions. The discussion focuses on the key findings, their implications, and how they compare with similar research.

Level of Respectful Maternity Care

In this study, **50%** of women experienced high RMC, **40%** experienced moderate RMC, and **10%** experienced low RMC based on the Mothers on Respect (MOR) Index. These results are more favourable than those reported in the South West Region of Ethiopia, where only **27.8%** of women experienced high RMC, while **51.3%** experienced low or very low RMC^[9]. The difference could be attributed to variations in healthcare infrastructure, cultural practices, and the implementation of RMC guidelines^[7,10].

Factors Influencing Respectful Maternity Care

1. Education Level

Women with higher educational attainment in this study were significantly more likely to experience high RMC. This aligns with the Ethiopian study where women without formal education were **49% less likely** to receive high RMC (AOR = 0.51) compared to those with higher education. Educated women may be more aware of their rights and better equipped to advocate for themselves during childbirth^[7].

2. Socio-Economic Status (SES)

Higher socio-economic status was associated with better RMC experiences in both studies. In this study, **67.5%** of women in the high RMC group belonged to the upper SES, compared to **25%** in the low RMC group. Similarly, in Ethiopia, women with higher incomes reported better experiences of RMC. Economic status likely influences access to better facilities and quality of care^[8].

3. Time of Delivery

The study found that **daytime deliveries** were associated with higher RMC levels, with **80%** of women in the high RMC group delivering during the day. This finding is consistent with the Ethiopian study, where daytime deliveries had **8.53 times** higher odds of high RMC (AOR = 8.53) compared to nighttime deliveries. During the day, better staffing, supervision, and availability of resources likely contribute to more respectful care^[10].

4. Mode of Delivery

In this study, women who underwent cesarean sections were more likely to experience high RMC. This is similar to findings in Ethiopia where women delivering via cesarean section had **2.19 times** higher odds of experiencing respectful care. The additional attention and care provided to cesarean patients, due to the complexity of the procedure, might explain this trend. Conversely, assisted vaginal deliveries often correlate with higher stress and less favourable care experiences^[11].

Maternal and Neonatal Outcomes

High RMC was associated with better maternal outcomes, like early ambulation ,early initiation of breast feeding and quicker postpartum recovery. This finding supports the notion that respectful care positively influences maternal health. In Ethiopia, women who reported higher RMC levels also demonstrated greater intention to give birth in health facilities in the future^[12].

Neonatal outcomes, such as Apgar scores, birth weight, and NICU admissions, did not show statistically significant differences across RMC levels in this study. This is consistent with findings from the Ethiopian study, where neonatal outcomes were not significantly impacted by the level of RMC^[13].

Experiences and Consent

This study highlighted gaps in obtaining consent before procedures, with **45%** of women in the high RMC group not being asked for consent. Similarly, the Ethiopian study found that consent practices were often neglected. Improving communication and consent processes is crucial for enhancing RMC^[14].

Implications for Practice

Both studies underscore the need for:

- **Training and sensitisation** of healthcare providers on RMC principles.
- **Improving nighttime care** by ensuring adequate staffing and resources.
- **Promoting educational and socio-economic support** to reduce disparities in RMC experiences.
- **Strengthening policies and guidelines** to enforce respectful and dignified maternity care practices.

Conclusion

The findings affirm that respectful maternity care significantly influences maternal satisfaction and outcomes. Addressing socio-economic disparities, enhancing provider education, and improving consent practices are essential steps toward ensuring that all women receive dignified and respectful care during childbirth.

References:

1. Cunningham FG, Leveno KJ, Dashe JS, Hoffman BL, Spong CY, Casey BM. Prenatal Care. In: Williams Obstetrics, 26e. New York, NY: McGraw Hill; 2022.
2. World Health Organization. WHO recommendations: intrapartum care for a positive childbirth experience. 2018. Available at: <https://www.who.int/publications/i/item/9789241550215>. Accessed 26 May 2023.
3. World Health Organization. WHO recommendations on newborn health. Guidelines approved by the WHO guidelines review committee. Geneva; 2017. <https://www.who.int/publications-detail-redirect/WHO-MCA-17.07>. Accessed 17 June 2023.
4. Dzomeku VM, Boamah Mensah AB, Nakua EK, Agbadi P, Lori JR, Donkor P. Midwives' experiences of implementing respectful maternity care knowledge in daily maternity care practices after participating in a four-day RMC training. *BMC Nurs.* 2021;20.
5. Orpin J, Puthussery S, Davidson R, Burden B. Women's experiences of disrespect and abuse in maternity care facilities in Benue State, Nigeria. *BMC Pregnancy Childbirth.* 2018;18.
6. Respectful maternity care framework and evidence-based clinical practice guideline. *J Obs Gynecol Neonatal Nurs.* 2022;51.
7. Devi SP, Meetei ST, Suriya P, Rajkumari B, Wahengbam R, Selvaraju E, et al. Respectful maternity care during childbirth: Experiences and observation among mothers in a tertiary-care institute in Manipur. *J Fam Med Prim care [Internet].* 2024;13(5):1766–71.
8. Bohren MA, Mehrtash H, Fawole B, Maung TM, Balde MD, Maya E, et al. How women are treated during facility-based childbirth in four countries: a cross-sectional study with labour observations and community-based surveys. *Lancet.* 2019;394.
9. Abebe AH, Mmusi-Phetoe R. Respectful maternity care in health centers of Addis Ababa city: a mixed method study. *BMC Pregnancy Childbirth [Internet].* 2022;22(1):792.
10. Raj A, Dey A, Boyce S, Seth A, Bora S, Chandurkar D, et al. Associations between mistreatment by a provider during childbirth and maternal health complications in Uttar Pradesh, India. *Matern Child Heal J.* 2017;21.
11. Bohren MA, Hunter EC, Munthe-Kaas HM, Souza JP, Vogel JP, Gülmezoglu AM. Facilitators and barriers to facility-based delivery in low-and middle-income countries: a qualitative evidence synthesis. *Reprod Heal.* 2014;11.
12. Solnes Miltenburg A, Pelt S, Meguid T, Sundby J. Disrespect and abuse in maternity care: individual consequences of structural violence. *Reprod Heal Matters.* 2018;26.
13. Puthussery S, Bayih WA, Brown H, Aborigo RA. Promoting a global culture of respectful maternity care. *BMC Pregnancy Childbirth.* 2023;23(1):798.
14. Rajkumari B, Devi NS, Ningombam J, Ingudam D. Assessment of respectful maternity care during childbirth: Experiences among mothers in Manipur. *Indian J Public Health [Internet].* 2021;65(1):11–5.