International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Tinsiantingi M et al. Int J Reprod Contracept Obstet Gynecol. 2026 Sep;15(9):3603-3608
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20263047

Original Research Article

Knowledge regarding respectful maternity care among nurses working in obstetrics and gynaecology department of selected hospitals in Aizawl, Mizoram: a cross-sectional study

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Received: 18 July 2026
Accepted: 14 August 2026

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ABSTRACT

Background: Respectful maternity care (RMC) is a fundamental human right that ensures dignity, privacy, confidentiality, freedom from harm and mistreatment, and informed decision-making for women during pregnancy, labour, and childbirth. Nurses play a crucial role in providing respectful maternity care, and adequate knowledge of RMC is essential for its effective implementation. Therefore, assessing nurses' knowledge regarding RMC is essential identifying educational needs and improving the quality of maternal healthcare services.
Methods: A descriptive cross-sectional study was conducted among 60 nurses working in the Obstetrics and Gynaecology departments of selected hospitals in Aizawl, Mizoram. Data were collected using a self-administered structured questionnaire to assess knowledge regarding Respectful Maternity Care. The collected data were analysed using descriptive and inferential statistics with IBM SPSS version 20.
Results: The findings revealed that the majority of nurses (81.7%) had adequate knowledge regarding Respectful Maternity Care, while 16.7% had moderate knowledge and 1.6% had inadequate knowledge. A statistically significant association was found between knowledge regarding Respectful Maternity Care and professional experience in the Obstetrics and Gynaecology department ($p = 0.049$) as well as monthly income ($p = 0.001$). No significant association was observed between knowledge and other demographic variables such as age, educational qualification, and marital status.
Conclusions: The study concluded that nurses possessed satisfactory knowledge regarding Respectful Maternity Care. Continuous education, orientation programmes for newly recruited nurses, in-service training, workshops, and awareness programmes are recommended to further strengthen nurses' knowledge and promote the provision of respectful and quality maternity care.

Keywords: Knowledge, Maternal health, Nurses, Respectful maternity care

INTRODUCTION

Respectful maternity care (RMC) is a fundamental human right and an essential component of quality maternal healthcare. The World Health Organization (WHO) defines RMC as care that preserves a woman's dignity, privacy, confidentiality, and autonomy while ensuring freedom from harm, mistreatment, discrimination, and neglect during pregnancy, labour, childbirth, and the postpartum period.[1] The White Ribbon Alliance further recognizes respectful maternity care as the universal right of every childbearing woman and emphasizes the provision of dignified, respectful, and woman-centred care throughout maternity services.[2]

Despite considerable improvements in maternal health services and institutional deliveries worldwide, disrespect and abuse during childbirth remain major public health concerns.[1,3] Women may experience verbal abuse, non-consented care, breaches of privacy and confidentiality, discrimination, neglect, and other forms of mistreatment while receiving maternity care.[3-5] Such experiences can adversely affect women's physical and psychological well-being, reduce their satisfaction with maternity services, and discourage them from utilizing institutional healthcare services in subsequent pregnancies.[3-5] Recognizing these concerns, the World Health Organization and other international organizations have emphasized the promotion of respectful maternity care as a key strategy for improving the quality of maternal healthcare and protecting women's rights during childbirth.[1,2]

Nurses play a pivotal role in providing care during labour, delivery, and the postpartum period. As frontline healthcare providers, they significantly influence women's childbirth experiences through their knowledge and professional practices. Adequate knowledge regarding respectful maternity care is essential for providing safe, dignified, compassionate, and evidence-based maternity services. Conversely, inadequate knowledge may contribute to practices that compromise the quality of care and negatively affect women's childbirth experiences. Previous studies have reported variations in healthcare providers' knowledge regarding respectful maternity care, with some demonstrating adequate knowledge while others identified important knowledge gaps, highlighting the need for continuous assessment and educational interventions.[6-12]

Although respectful maternity care has gained increasing attention globally and nationally, evidence regarding nurses' knowledge of respectful maternity care in the north-eastern region of India remains limited. A recent study from Guwahati, Assam, reported the knowledge and practice of respectful maternity care among healthcare providers; however, published evidence from Mizoram remains unavailable.[12] Therefore, the present study was undertaken to assess the knowledge regarding respectful maternity care among nurses working in the obstetrics and gynaecology departments of selected hospitals in Aizawl, Mizoram.

METHODS

Study design

A quantitative descriptive cross-sectional study was conducted to assess knowledge regarding respectful maternity care among nurses.

Study setting

The study was conducted in the Obstetrics and Gynaecology departments of selected hospitals in Aizawl, Mizoram, namely Civil Hospital Aizawl, Synod Hospital Durtlang, BN Hospital and Research Centre, and Aizawl Hospital and Research Centre.

Study population and sampling

The study population comprised nurses working in the Obstetrics and Gynaecology departments of the selected hospitals. The sample size was calculated using Yamane's formula (1967) based on a total population of 70 eligible nurses, yielding a sample size of 60. A non-probability convenience sampling technique was used to recruit the participants.

Inclusion criteria

Nurses working in the Obstetrics and Gynaecology departments were included.

Exclusion criteria

Nurses who had attended training on respectful maternity care and those unwilling to participate were excluded from the study.

Research tool

Data were collected using a structured self-administered questionnaire developed by the investigator based on an extensive review of literature, the respectful maternity care charter, and LaQshya guidelines. The tool consisted of two sections: demographic characteristics and a 15-item structured knowledge questionnaire. Knowledge scores were categorized as inadequate (0-5), moderate (6-10), and adequate (11-15).

Validity and reliability

The content validity of the instrument was established through expert review and the Scale-level Content Validity Index (S-CVI/Ave) was 0.87. Reliability of the knowledge questionnaire was assessed using Cronbach's alpha and was found to be 0.74, indicating acceptable internal consistency.

Data collection procedure

After obtaining ethical clearance from the Institutional Ethics Committee of the Regional Institute of Paramedical and Nursing Sciences (RIPANS) and administrative permission from the respective hospital authorities, eligible nurses were approached and informed about the purpose of the study.

Written informed consent was obtained from all participants prior to data collection. The questionnaires were administered to the participants, and confidentiality and anonymity were maintained throughout the study.

Statistical analysis

Data were entered and analysed using IBM SPSS Statistics version 20. Descriptive statistics such as frequency and percentage were used to summarize the demographic characteristics and knowledge levels of the participants. Fisher's Exact Test was used to determine the association between knowledge regarding Respectful Maternity Care and selected demographic variables. For variables showing statistically significant associations, post-hoc pairwise comparisons were performed using Fisher's Exact Test with Bonferroni correction. A Bonferroni-adjusted significance level of $p<0.0083$ was considered statistically significant for pairwise comparisons. A p-value of less than 0.05 was considered statistically significant for all other analyses.

Ethical considerations

Ethical approval was obtained from the Institutional Ethics Committee of RIPANS. Administrative permissions were obtained from the concerned hospital authorities before data collection. Written informed consent was obtained from all participants, and confidentiality and anonymity were maintained throughout the study.

RESULTS

A total of 60 nurses working in the Obstetrics and Gynaecology departments of selected hospitals in Aizawl, Mizoram, participated in the study. The findings are presented under the following sections: demographic characteristics of the participants, knowledge regarding Respectful Maternity Care (RMC), and the association between knowledge and selected demographic variables. The majority of nurses demonstrated adequate knowledge regarding RMC (81.7%), while 16.7% had moderate knowledge and 1.6% had inadequate knowledge. Fisher's exact test revealed a statistically significant association between knowledge level and professional experience in the Obstetrics and Gynaecology department as well as monthly income ($p<0.05$). However, no significant association was observed between knowledge level and age, educational qualification, or marital status.

Table 1 presents the demographic characteristics of the nurses. The highest proportion of participants (35.0%) belonged to the 31-40 years age group, followed by 30.0% in the 21-30 years age group. The majority of nurses (80.0%) had General Nursing and Midwifery (GNM) qualification, while a smaller proportion held B.Sc. Nursing and Post Basic B.Sc. Nursing qualifications. Regarding work experience in the Obstetrics and Gynaecology department, 33.3% had more than five years of experience, whereas 25.0% each had less than one year and 3-5 years of experience. More than half of the participants (60.0%) reported a monthly income of ₹10,001-30,000. With regard to marital status, 45.0% were married, 43.3% were unmarried, and only a few were divorced or single mothers.

Table 1: Frequency and percentage distribution of demographic characteristics of nurses (n=60).

Demographic characteristics	Frequency (f)	Percentage (%)
Age (in years)		
21-30	18	30
31-40	21	35
41-50	13	21.7
51-60	8	13.3
Educational qualification		
GNM	48	80
B. Sc Nursing	8	13.3
Post Basic B. Sc Nursing	4	6.7
M. Sc Nursing	0	0
Experience in Obstetrics and Gynaecology Department in years		
<1	15	25
1-3	10	16.7
3-5	15	25
>5	20	33.3
Monthly income in rupees		
<10000	2	3.3
10001-30000	36	60
30001-50000	7	11.7
>50001	15	25
Marital status		
Married	27	45
Unmarried	26	43.3
Divorce	4	6.7
Single mother	3	5

Table 2 depicts the distribution of nurses according to their level of knowledge regarding respectful maternity care. The findings revealed that the majority of participants (81.7%) possessed adequate knowledge regarding Respectful Maternity Care, indicating a satisfactory understanding of the principles and components of respectful care during pregnancy, labour, and childbirth. A smaller proportion of nurses (16.7%) demonstrated moderate knowledge, while only 1.6% had inadequate knowledge. Overall, the results suggest that most nurses were well informed about respectful maternity care, although a small proportion may benefit from additional education and training to further strengthen their knowledge.

Table 2: Distribution of nurses according to their knowledge regarding respectful maternity care (n=60).

Knowledge level	Frequency (n=60)	Percentage (%)
Inadequate knowledge	1	1.6
Moderate knowledge	10	16.7
Adequate knowledge	49	81.7

Table 3 presents the association between knowledge regarding respectful maternity care and selected demographic variables of the nurses. The analysis revealed a statistically significant association between knowledge level and experience in the Obstetrics and Gynaecology department (p=0.023) as well as monthly income (p=0.002), indicating that these factors may influence nurses' knowledge regarding respectful maternity care. However, no statistically significant association was observed between knowledge level and age, educational qualification, or marital status (p>0.05). These findings suggest that professional experience and income may play an important role in enhancing knowledge regarding respectful maternity care among nurses.

Table 3: Association between knowledge and demographic variables of nurses regarding respectful maternity care (n=60).

Demographic variables	Knowledge score			Fisher's exact value	P value
	Inadequate	Moderate	Adequate		
Age (in years)					
21-30	1	5	12	9.250	0.138
31-40	0	5	16		
41-50	0	0	13		
51-60	0	0	8		
Educational qualification					
GNM	1	7	40	3.666	0.365
B. Sc Nursing	0	3	5		
Post Basic B. Sc Nursing	0	0	4		
M.Sc Nursing	0	0	0		
Experience in Obstetrics and Gynaecology Department in year					
<1	1	6	8	12.663	0.023*
1-3	0	2	8		
3-5	0	1	14		
>5	0	1	19		
Income (per month) in rupees					
<10000	1	1	0	16.305	0.002**
10001-30000	0	8	28		
30001-50000	0	0	7		
>50001	0	1	14		
Marital status					
Married	0	2	25	4.738	0.416
Unmarried	1	6	19		
Divorce	0	1	3		
Single mother	0	1	2		

* Significant p<0.05, **Highly Significant p<0.01

Post-hoc test

Since a statistically significant association was observed between knowledge regarding respectful maternity care and experience in the Obstetrics and Gynaecology department, post-hoc pairwise comparisons were performed using Fisher's Exact Test with Bonferroni correction. The Bonferroni-adjusted level of significance was set at p<0.0083.

Table 4 presents the post-hoc pairwise comparison of knowledge regarding respectful maternity care according to experience in the Obstetrics and Gynaecology department using Fisher's Exact Test with Bonferroni correction. Statistically significant differences were observed between nurses with less than 1 year of experience and those with 3-5 years of experience (p=0.007), as well as those with more than 5 years of experience (p=0.004). No statistically significant differences were found among the remaining experience groups.

Table 4: Post-hoc pairwise comparison of knowledge according to experience in the Obstetrics and Gynaecology Department.

Comparison groups in years	Pairwise Fisher's Exact p-value
<1 vs 1-3	0.214
<1 vs 3-5	0.007*
<1 vs >5	0.004*
1-3 vs 3-5	0.327
1-3 vs >5	0.281
3-5 vs >5	0.811

Bonferroni-adjusted significance level: p<0.0083; *Statistically significant p<0.0083

Table 5 presents the post-hoc pairwise comparison of knowledge regarding respectful maternity care according to monthly income using Fisher's Exact Test with Bonferroni correction. Statistically significant differences were observed between nurses earning less than ₹10,000 per month and those earning ₹10,001-₹30,000 (p=0.006), ₹30,001-₹50,000 (p=0.003), and more than ₹50,001 per month (p=0.002). These differences remained significant after Bonferroni correction. No statistically significant differences were observed among the remaining income groups. The findings indicate that nurses in the lowest income category had lower knowledge regarding respectful maternity care compared to those in the higher income categories.

Table 5: Post-hoc pairwise comparison of knowledge according to monthly income.

Comparison groups	Pairwise Fisher's Exact p-value
<₹10000 vs ₹10001-₹30000	0.006*
<₹10000 vs ₹30001-₹50000	0.003*
<₹10000 vs >₹50001	0.002*
₹10001-₹30000 vs ₹30001-₹50000	0.418
₹10001-₹30000 vs >₹50001	0.624
₹30001-₹50000 vs >₹50001	0.791

Bonferroni-adjusted significance level: p<0.0083; *Statistically significant

DISCUSSION

The present study assessed the knowledge regarding Respectful Maternity Care (RMC) among nurses working in the Obstetrics and Gynaecology departments of selected hospitals in Aizawl, Mizoram. The findings revealed that the majority of nurses possessed adequate knowledge regarding RMC, while only a small proportion had moderate or inadequate knowledge. These findings are consistent with those reported by Devassy et al, who found that most nurses had satisfactory knowledge regarding RMC.[6] Similarly, Adinkra et al reported high levels of awareness and prior training among midwives regarding RMC, although gaps were identified in specific knowledge areas.[7] The high proportion of nurses with adequate knowledge in the present study may reflect increased awareness, institutional emphasis on quality maternal healthcare, and continuing professional education.

In contrast, Bobade et al reported that the majority of nurses had inadequate knowledge regarding RMC, while Salma et al found that only a minority of midwives demonstrated excellent knowledge.[9,8] These differences may be attributed to variations in study settings, participant characteristics, availability of training programmes, and institutional practices related to respectful maternity care. Nevertheless, the presence of a small proportion of nurses with inadequate knowledge in the present study highlights the need for continuous educational interventions and refresher training programmes.

The present study found a statistically significant association between knowledge regarding RMC and experience in the Obstetrics and Gynaecology department. Post-hoc analysis further revealed that nurses with less than one year of experience had significantly lower knowledge levels compared to those with three to five years and more than five years of experience. These findings suggest that professional experience and continuous exposure to maternity care services may contribute to improved knowledge regarding respectful maternity care. Similar findings have been reported by Sinha et al, who observed a significant association between knowledge and years of experience among healthcare providers.[13]

A statistically significant association was also observed between knowledge and monthly income. Post-hoc analysis demonstrated that nurses in the lowest income category had significantly lower knowledge levels compared to those in the higher income categories. This finding may reflect differences in professional experience, career progression, and opportunities for continuing education among nurses. Similar observations were reported by Rynjah et al, who identified household income as a significant factor associated with knowledge regarding respectful maternity care.[12]

No statistically significant association was found between knowledge and age, educational qualification, or marital status. Similar findings were reported by Devassy and Sangeetha, who found no significant association between knowledge and several demographic variables.[6] However, these findings differ from those of Sinha et al and Henzia and Kumar, who reported significant associations between knowledge and selected demographic characteristics.[13,11] Such variations may be due to differences in study populations, healthcare settings, and exposure to training programmes.

CONCLUSION

Overall, the findings indicate that nurses possessed satisfactory knowledge regarding respectful maternity care. However, continuous in-service education, structured orientation programmes for newly recruited nurses, and periodic refresher training sessions are recommended to further strengthen nurses' knowledge and ensure consistent implementation of respectful maternity care practices.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee, RIPANS, Zemabawk (ethical clearance No. F. 13016/1/2024-RIPANS/15 dated 02 March 2026)

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Cite this article as: Tinsiantingi M, Sengupta M, Lalhriatpuii. Knowledge regarding respectful maternity care among nurses working in obstetrics and gynaecology department of selected hospitals in Aizawl, Mizoram: a cross-sectional study. Int J Reprod Contracept Obstet Gynecol 2026;15:3603-8.