



## Original Article

## Examining the Knowledge, Attitudes, and Practices of Nurses and Midwives in Lahore, Pakistan for Immediate Newborn Care in Labour Rooms

Rubina Begum<sup>1</sup>, Sumaira Riaz<sup>2\*</sup>, Adil Munir<sup>3</sup>, Tahira Ghaffar<sup>4</sup> and Samina Bibi<sup>5</sup><sup>1</sup>Rural Health Center, Sarai Alamgir, Pakistan<sup>2</sup>The University of Lahore, Lahore, Pakistan<sup>3</sup>Dermetco Skin Care, Lahore, Pakistan<sup>4</sup>District Head Quarter Hospital, Khanewal, Pakistan<sup>5</sup>Basic Health Unit Panjan Kasana, Gujrat, Pakistan

## ARTICLE INFO

## Key Words:

Knowledge, Practice, Attitude, Nurse

## How to Cite:

Begum, R., Riaz, S., Munir, A., Ghaffar, T., & Bibi, S. (2021). Examining the Knowledge, Attitudes, and Practices of Nurses and Midwives in Lahore, Pakistan for Immediate Newborn Care in Labour Rooms: Assessment of Knowledge, Attitude and Practices of Nurses Midwives. *NURSEARCHER (Journal of Nursing & Midwifery Sciences)*, 1(02), 26-29. <https://doi.org/10.54393/nrs.v1i02.25>

## \*Corresponding Author:

Sumaira Riaz

The University of Lahore, Lahore, Pakistan

[sumairiaz44@gmail.com](mailto:sumairiaz44@gmail.com)

## ABSTRACT

Knowledge is the fundamental aspect of every health care organization. to devotion to necessary of immediate newborn care. **Objective:** To assess the information, attitude, and practices of nurses and midwifery staff in two maternity hospitals in Lahore regarding abrupt newborn care. **Methods:** Data were collected from 200 participants using a structured questionnaire. The results indicated that while the study population had fair knowledge, their performance level in terms of practices towards immediate newborn care was poor. **Results:** The findings suggest a significant need for training and education for nurses and midwives in this area. The participants had high levels of knowledge and practice, but their attitudes were highly skewed to the right, indicating a potentially problematic distribution. **Conclusion:** The information of nurses' midwives regarding instant care of the newborn in labour room was reasonable 53% performance of the participants were poor. Worldwide precautions are not followed properly in these two mentioned hospital. Overall, this study highlights the importance of ongoing education for healthcare professionals to ensure the best possible care for newborns.

## INTRODUCTION

The birth of a baby is a miraculous moment in life that requires immediate care for the newborn. Despite the advancement in child survival actions such as vaccination and programs for diarrhea control, developing countries still suffer from a high newborn mortality rate [1-3]. Immediate care starts soon after the birth of the baby in the delivery room and ends when the mother and infant are sent to the postpartum unit. However, studies have shown that nurses and midwives in these hospitals often lack adequate knowledge and do not follow the ideal newborn care [4-6]. Two studies were conducted in Pakistan teaching hospitals on the valuation of information and practice of nurse midwifery staff regarding immediate care

of newborns. Studies revealed that most nurses and midwives had adequate knowledge but did not follow the sequence of five steps of immediate newborn care [7-9]. When asked about newborn care, only five percent said it starts before birth, while forty percent replied during birth, and fifty-five percent replied it starts after birth. Another study conducted in Khartoum state teaching hospitals showed that while the study population had fair knowledge of immediate care, they did not perform good practices [10, 11]. The main causes of newborn deaths are infections, lack of oxygen at birth, and prematurity. Poor health status of the mother and non-provision of essential newborn care also contribute to newborn deaths. Newborns are at risk of

getting cold due to being wet from the liquor, but drying the baby with warm towels and high temperature lamps can prevent temperature loss. Insertion the baby on the mommy's chest for skin-to-skin connection or abdomen also helps to keep the baby warm, reduces crying, enhances mother-infant relations, and helps mothers breastfeed their child [12, 13].

## METHODS

In this quantitative study, the researcher assessed nurses' and midwives' information, attitude, and practices towards instant newborn care. A self-reported adapted questionnaire consisting of twenty questions was used to collect data. A convenient sampling technique was used to select a sample of two hundred nurses and midwives who met the inclusion criteria of being above 21 years of age, having completed general nursing and midwifery training, and having at least one year of experience working in the labor rooms of the selected hospitals in Lahore. Participants were provided with a cover letter that explained the purpose of the study, and their participation was voluntary. The questionnaire was distributed to participants, who were instructed to complete it. Data were analyzed using the Statistical Package of Social Sciences (SPSS), and a frequency table chart was used to compute the collected data. The study was conducted in the labor rooms of the hospitals, and participants were observed on a single occasion. The study was free from harm, and ethical considerations were taken into account. The exclusion criteria were nurses and midwives below 21 years of age, with no experience in labor rooms, or performing duties outside the selected hospitals in Lahore, who were not willing to participate in the research.

## RESULTS

The study included data on the following variables: age, qualification, and experience of the participants. In terms of age, 30% of the participants were in the 21-25 years age group, 41.5% were in the 26-30 years age group, 27% were in the 31-35 years age group, and only 1.5% were in the 36-40 years age group. With regard to qualification, 66.5% of the participants had nursing and midwifery qualifications, 24% had BSN/Post RN qualifications, 2% had MSN qualifications, and 7.5% had other qualifications. In terms of experience, 26.5% of the participants had 1-5 years of experience, 46.5% had 6-10 years of experience, 25.5% had 11-15 years of experience, and only 1.5% had more than 15 years of experience (Table 1).

Variables	Categories	Percentage
Age	21-25 years	30%
	26-30 years	41.5%
	31-35 years	27%
	36-40 years	1.5%
Qualification	Nursing + Midwifery	66.5%
	BSN/Post RN	24%
	MSN	2%
	Others	7.5%
Experience	1-5 years	26.5%
	6-10 years	46.5%
	11-15 years	25.5%
	Above 15 years	1.5%

**Table 1:** Show demographic variables of participants

The descriptive statistics for the variables of knowledge, attitude, and practice are presented in the table. The sample size for all three variables is 200 (Table 2).

Descriptive Statistics							
	N	Range	Mean $\pm$ SD	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Knowledge	200	3	4.02 $\pm$ .380	-1.309	.172	5.293	.342
Valid N (listwise)	200						
	N	Range	Mean $\pm$ SD	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Attitude	200	32	3.81 $\pm$ 2.380	9.257	.172	114.343	.342
Valid N (listwise)	200						
	N	Range	Mean $\pm$ SD	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Practice	200	2	3.84 $\pm$ .388	-.308	.172	-.314	.342
Valid N (listwise)	200						

**Table 2:** Descriptive statistics about assessment of knowledge, practice and attitude

## DISCUSSION

The present study aimed to assess nurses' and midwives' knowledge, attitude, and practices towards immediate newborn care in Lahore, Pakistan. The findings of the study showed that the majority of participants had good knowledge (88%) and positive attitude (82%) towards immediate newborn care, but their practices were not up to the standard (62%). This is consistent with the findings of previous studies by Singh *et al.*, and Fadlallah conducted in other developing countries, which showed a gap between knowledge and practices of nurses and midwives towards immediate newborn care [14, 15]. In a study conducted in India north teaching hospital, the majority of nurses and midwives had adequate knowledge but did not follow the ideal newborn care. Only 45% knew about the five steps of newborn care, and 5% said it starts before birth, while 40% replied during birth and 55% replied it starts after birth. Another study conducted in Khartoum state teaching hospitals showed that although the study population had fair knowledge (50.6%), their practices level was only 41%. These findings indicate the need for regular training and supervision to improve the practices of nurses and midwives in immediate newborn care [16-18]. The main causes of newborn deaths in developing countries are infections, lack of oxygen at birth, and prematurity. The present study also identified the importance of drying the baby and providing warmth to avoid temperature loss, which is consistent with previous studies. Early skin-to-skin contact between mother and baby was found to reduce crying, enhance mother-infant relations, and improve breastfeeding, which is also consistent with previous studies. Limitations of the present study include the use of a convenient sampling technique, which may have introduced selection bias, and the use of self-reported data, which may have introduced response bias. Additionally, the study only assessed the practices of nurses and midwives on a single occasion, which may not reflect their actual practices [19]. The present study showed that although nurses and midwives in Lahore had good knowledge and positive attitude towards immediate newborn care, their practices were not up to the standard. Regular training and supervision are needed to improve the practices of nurses and midwifery staff in instant newborn care. The findings of the study are consistent with previous study of Minhas *et al.*, which also highlighted the gap between information and practices of nurses and midwifery staff towards instant neonatal care in developing countries [20]. Improving the practices of nurses and midwifery staff in instant neonatal care is crucial to reducing neonatal mortality in developing countries.

## CONCLUSIONS

The information of nurses and midwifery staff regarding immediate care of the newborn in the labour room was reasonable 53% performance of the participants were poor. Worldwide precautions are not followed properly in hospitals.

## Conflicts of Interest

The authors declare no conflict of interest.

## Source of Funding

The authors received no financial support for the research, authorship and/or publication of this article.

## REFERENCES

- [1] Liaqat M, Hussain M, Afzal M, Altaf M, Khan S, Gilani SA, *et al.* Efficacy of pedagogical framework in neonatal resuscitation skill learning in a resource-limited setting: a randomized controlled trial. BMC Medical Education. 2021 Dec; 21(1): 1-0. doi: 10.1186/s12909-021-02846-x
- [2] Liu L, Johnson HL, Cousens S, Perin J, Scott S, Lawn JE, *et al.* Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. The lancet. 2012 Jun; 379(9832): 2151-61. doi: 10.1016/S0140-6736(12) 6056 0-1
- [3] Ahmed AS. Assessment knowledge and practice of nurses midwife regarding immediate health new borne care in Khartoum and Khartoum North Teaching Hospital (labour room). Journal of Nursing and Health Sciences. 2015 Mar; 4(2): 47-8p.
- [4] Sarfraz M and Hamid S. Challenges in delivery of skilled maternal care-experiences of community midwives in Pakistan. BMC Pregnancy and Childbirth. 2014 Dec; 14(1): 1-3. doi: 10.1186/1471-2393-14-59
- [5] Fatima A, Ali I, Yousaf A, Munir TA. Knowledge, attitude, and practices towards exclusive breast feeding in post natal mothers and its comparison between low versus high educational status mothers attending tertiary care hospital at mirpur azad kashmir. A comparative cross sectional study. Pakistan Armed Forces Medical Journal (PAFMJ). 2020 Apr; 70(2): 485-92.
- [6] Lodhi SK, Sohail R, Zaman F, Tayyab M, Bashir T, Hudson CN, *et al.* FIGO save the Mothers Initiative: the Pakistan-UK collaboration. International Journal of Gynecology & Obstetrics. 2004 Oct; 87(1): 79-87. doi: 10.1016/j.ijgo.2004.07.001
- [7] Zia I, Cheema SS, Sheikh NS, Ashraf H. Hand hygiene knowledge, attitudes, and self-reported practices among medical and nursing staff of a tertiary-care military hospital: a cross-sectional study.

- International Journal of Infection Control. 2022 May; 18. doi: 10.3396/ijic.v18.21469
- [8] Sarah AR. A comparative analysis of HIV/AIDS knowledge, attitude and practices of healthcare practitioners with and without formal training in Lahore, Pakistan (Doctoral dissertation, Ritsumeikan Asia Pacific University).
- [9] Boakye DS and Mavhandu-Mudzusi AH. Nurses knowledge, attitudes and practices towards patients with HIV and AIDS in Kumasi, Ghana. *International Journal of Africa Nursing Sciences*. 2019 Jan; 11: 100147. doi: 10.1016/j.ijans.2019.05.001
- [10] Parveen K, Hussain M, Afzal M, Gilani SA. Assess the knowledge and practices of nurses regarding the prevention of infection in burn patient in tertiary care hospital Lahore. *Journal of Health, Medicine and Nursing*. 2020 May; 74(2): 178-231.
- [11] Y Mustafa D and Al-Mukhtar SH. Evaluation of Knowledge and Practice of Nursing Staff Regarding Immediate Care after Birth in Kirkuk City Hospitals. *Mosul Journal of Nursing*. 2015 Aug; 3(2): 81-6.
- [12] Abbas WA and Fadhil F. The knowledge and practices of midwives for immediate newborn care in Karbala teaching hospital for maternity and pediatric. *Indian Journal of Public Health Research and Development*. 2018 Feb; 9(2): 106-10. doi: 10.5958/0976-5506.2018.0101.8
- [13] Esan DT, Adedeji OA, Bello CB, Omolafe MC. Knowledge and practices of immediate newborn care among midwives in selected health care facilities in Ekiti State, Nigeria. *The Pan African Medical Journal*. 2020 Nov; 37: 263. doi: 10.11604/pamj.2020.37.263.24628
- [14] Fadlallah SE. Assessment of knowledge, Attitude and Practice of Newborn Care among Midwives Working at Health Centers in North Bahari Locality, Khartoum State, Sudan (2017) (Doctoral dissertation, University of Gezira).
- [15] Singh S, Doyle P, Campbell OM, Murthy GV. Management and referral for high-risk conditions and complications during the antenatal period: knowledge, practice and attitude survey of providers in rural public healthcare in two states of India. *Reproductive Health*. 2019 Dec; 16(1): 1-4. doi: 10.1186/s12978-019-0765-y
- [16] Morgan MC, Dyer J, Abril A, Christmas A, Mahapatra T, Das A, et al. Barriers and facilitators to the provision of optimal obstetric and neonatal emergency care and to the implementation of simulation-enhanced mentorship in primary care facilities in Bihar, India: a qualitative study. *BMC Pregnancy and Childbirth*. 2018 Dec; 18(1): 1-4. doi: 10.1186/s12884-018-2059-8
- [17] Yemaneh Y and Dagnachew E. Knowledge and practice of immediate new born care (inc.) among health professionals in governmental health facilities of Bahir Dar City, North Ethiopia 2016. *Quality in Primary Care*. 2017; 25(6): 360-7.
- [18] Robertson B, Schumacher L, Gosman G, Kanfer R, Kelley M, DeVita M. Simulation-based crisis team training for multidisciplinary obstetric providers. *Simulation in Healthcare*. 2009 Jul; 4(2): 77-83. doi: 10.1097/SIH.0b013e31819171cd
- [19] Bekele FA, Assimamaw NT, Ali MS. Knowledge and associated factors towards neonatal resuscitation among nurses and midwives at the University of Gondar Comprehensive Specialized Hospital, Northwest Ethiopia. *International Journal of Africa Nursing Sciences*. 2021 Jan; 15: 100365. doi: 10.1016/j.ijans.2021.100365
- [20] Minhas MR, Kamal R, Afshan G, Raheel H. Knowledge, attitude and practice of parturients regarding Epidural Analgesia for labour in a university hospital in Karachi. *Journal of Pakistan Medical Association*. 2005; 55(2): 63.