Alqalam Journal of Medical and Applied Sciences. 2026;9(11):3853-3859
https://doi.org/10.54361/ajmas.261143

Original article

Knowledge and Practices of Postpartum Women Regarding Newborn Care in Tripoli, Libya

Sana Masoud*, Ibrahim Al-Sanousi, Rihab Aldabeeb, Eman Elhabishi

Department of Public Health, Faculty of Medical Technology, University of Tripoli, Tripoli, Libya
Email. *s.masud@uot.edu.ly*

Abstract
Every year, about 2.4 to 2.8 million neonates die globally in the first month of life. Approximately half of these deaths occur within the first week of life. World Health Organization enhanced the Essential Newborn Care concept and stated essential interventions for neonatal care to promote the health of neonates and to reduce mortality and morbidity. Health care professionals and mothers can use these cost-effective interventions. This study aimed to evaluate postpartum mothers' knowledge and practices regarding essential neonatal care in Tripoli, Libya. A descriptive cross-sectional study was conducted among 100 mothers during the postpartum period. The questionnaire contained 48 questions. The data were analyzed by (SPSS version 27). The study was conducted in 4 municipalities in Tripoli (Souq Al Jumaa, Ain Zara, Tajoura, and central Tripoli). The findings indicated that more than half of the participants had a high level of knowledge (58%), while the majority of mothers demonstrated a high level of practice regarding newborn care (64%). Furthermore, the relationship between mothers' knowledge and practice in the domain of newborn care is presented; a moderate positive correlation ($r = 0.438$) was found between knowledge and practice, which was statistically significant at the 0.01 level ($P < 0.05$). In conclusion, it should be highlighted that antenatal and postnatal women, as well as health care providers, should be trained and educated to disseminate information to mothers to decrease preventable health risks and improve neonatal care outcomes.
Keywords. Newborn Care, Postpartum Mothers, Maternal Knowledge, Maternal Practices.

Introduction

The practices of mothers in the postpartum period have a significant effect on the morbidity and mortality of neonates [1,2]. The main contributing factor is poor knowledge about danger signs, which leads to a delay in medical care [3]. In fact, between the moment of birth and the end of the first month of a child's life, approximately 6700 neonates die every day; the first week is the most dangerous week, during which the death rate is very high, reaching 47% of the total child deaths [1,2]. According to the World Health Organization (WHO) (2019), 2.4 to 2.8 million children died globally in the first month of life [1,2,4,5]. Furthermore, in 2021, the infant death rate was 38 mortalities per 1,000 live births globally, with a significant proportion due to birth complications. Around 300,000 neonates die every year in the early moments post-delivery because of insufficient care for mothers and neonates in Africa [6]. Economic factors play a major role, as most of these deaths occur in low- and middle-income countries [7,8,9,10,11]. Despite remarkable efforts to enhance the health of infants, death rates have remained elevated in newborns globally [12]. In line with the Sustainable Development Goals (SDGs), countries seek to reduce neonatal mortality, as Goal 3 targets lowering the mortality rate to at least 12 deaths per 1000 live births by 2030 [8,10,11,13]. The World Health Organization Guidelines for Basic Neonatal Care provide evidence-based interventions that can be leveraged to achieve Sustainable Development Goal 3 (SDG 3). These guidelines include practices such as breastfeeding, umbilical cord care, eye care, body temperature regulation, dealing with cases of choking, recognizing danger signs, and vaccination [8].

Their recommendations include interventions before conception, during pregnancy, immediately after delivery, and in the postpartum period; they comprise regulating the temperature, recognizing the danger signs, cord care, eye care, breastfeeding, immunization, care of the preterm/low birth weight infant, and managing the neonatal disorders [1,6,10,12,13]. Recommended interventions should be implemented to improve the health of mothers and infants, in order to reduce deaths and morbidity [1]. Limited maternal knowledge during the postnatal period is linked to various socio-demographic factors, including lower education, income, and rural residence, in addition to inadequate counseling, limited healthcare access, and dependence on family elders, leading to delays in timely medical care [3,13].

The first 28 days of a newborn’s life are a crucial phase [12,14], particularly the first few minutes and hours immediately after birth [1], as the ideal growth of the neonate depends on the health and development of the growing process [14]. To decrease the morbidity and mortality rates of neonates, the mothers must be educated about essential neonatal care procedures [1,7].

Postnatal care (PNC) involves sustained care for mothers and neonate immediately after delivery and it continues for several weeks of life, this period is critical because most maternal and neonatal deaths occur during it; therefore, comprehensive health services must be provided for both the mother and the child, with a focus on essential newborn care further involves promoting early and exclusive breastfeeding, maintaining the infant’s warmth, ensuring proper hand hygiene, providing safe umbilical cord and skin care, recognizing signs that require further medical attention, and counseling families on when to seek healthcare services [1,6,12,14].

Copyright *Author (s) 2026. Distributed under Creative Commons CC BY 4.0*
Received*: 17-09-2026 -* ***Accepted****: 15-11-2026 -* ***Published****: 23-11-2026*

Local awareness and practices relating to the neonatal period should be understood because that is essential to effective behavior change strategies related to neonatal care [15]. The results of this study can significantly improve the health outcomes of newborns in Tripoli by developing targeted programs and policies to improve practices of neonatal care [16]. Although the importance of maternal knowledge and practices in improving newborn health is well recognized, there is a clear lack of scientific evidence on this topic in the Libyan context, highlighting the need for a study to address this gap. To the best of our knowledge, there is no studies evaluated the maternal knowledge and practices toward essential neonatal care in Libya. Therefore, the present study aimed to fill knowledge gaps by undertaking a cross-sectional study to assess the knowledge and practices of mothers regarding neonatal care in Tripoli, Libya.

Methodology

A descriptive cross-sectional study was conducted among 100 mothers during the postpartum period to evaluate the knowledge and practices. Convenience sampling was used and data were collected through face-to-face interviews using a pretested, structured interview questionnaire that was designed based on information from World Health Organization guidelines (2013) and relevant previous studies. The questionnaire contained 48 questions divided into 4 parts:

Part 1: Socio-demographic characteristics, which include 9 items: facility name, maternal age, educational level, order of birth, marital status, occupation, income, type of delivery, type of feeding, and number of previous births.

Part 2: Mothers' knowledge (involving 17 questions regarding essential neonatal care, including breastfeeding, cord care, cleanliness, thermoregulation, eye care, immunization, and neonatal danger signs).

Part 3: The reported practice involved 17 questions regarding essential neonatal care, including the same categories as in mothers' knowledge.

Part 4: The open questions were included to provide us with information about difficulties and suggestions to improve the quality of maternal and newborn care in the postpartum period in Libyan health facilities.

The study was conducted in four municipalities out of the total municipalities in Tripoli, namely Souq Al Jumaa, Ain Zara, Tajoura, and Central Tripoli. Moreover, five primary health care centers were selected randomly; these are Maternal and Child Health Care Unit, Wasaaya Bdeiri, Wreema, Raya Al-Istiqlal, and Shuhada Al-Manshiya. These centers were chosen to represent different municipal areas of the city and to provide a comprehensive overview of maternal practices. Moreover, these facilities were visited at the times of immunization of neonates every day according to the allowed, the managers of health facilities and supervisors of vaccinations were interviewed to take the permission to start data collection. The target population of this study was healthy postnatal mothers without any complications or physical or psychological diseases, postnatal mothers who have term babies (gestational age 38-42 weeks) without any complications, congenital anomalies or disabilities, or respiratory problems, or any disease that would prevent them from attending the immunization and willing to participate in the study. The study was carried out between May 2025 and January 2026. Researchers recite the questions obviously then the answers had been properly written down after being verified by the mothers. A pilot study was conducted involving 10 mothers, representing 10% of the study population. In addition, data were collected, then entered and examined using the statistical program for the social sciences (SPSS version 27).

Each response was assessed by three scores: A score (2) was allocated for a correct answer, (1) for an incomplete answer, and (0) for an incorrect response; the overall score range was from 0 to 100. The level of knowledge and practice were categorized as follows: low knowledge or practice (<60%), moderate knowledge or practice (60-80%), and high knowledge or practice (>80). Finally, Ethical approval was obtained from the Ethical Committee of the Department of Public Health, Faculty of Medical Technology, University of Tripoli. A brief explanation of the questionnaire was given to the participants. Moms' responses were kept confidential during the course of the study.

Results

A total of 100 postpartum mothers participated in the study. Most participants were aged 25–31 years (42%), had a university education (67%), were housewives (56%), and reported a middle economic status (89%). The majority had experienced multiple births (77%), and 73% had delivered by cesarean section.

Mothers' Knowledge Regarding Newborn Care

Regarding specific knowledge areas, 86% correctly identified six months as the recommended duration of exclusive breastfeeding, and 95% recognized the protective role of breastfeeding against diseases. Additionally, 68% identified six months as the appropriate time to introduce solid foods, while 89% recognized common warning signs requiring medical attention. Fever was identified as a serious sign by 95% of mothers, whereas 65% recognized rapid breathing and refusal to breastfeed as warning signs. However, gaps remained in recognizing low body temperature and early neonatal jaundice, with 49% and 37% of mothers, respectively, correctly identifying these conditions as abnormal or requiring medical attention.

Copyright *Author (s) 2026. Distributed under Creative Commons CC BY 4.0*
Received*: 17-09-2026 -* ***Accepted****: 15-11-2026 -* ***Published****: 23-11-2026*

Table 1. Level of knowledge of postnatal mothers about newborns' care

Level of knowledge	Range of total score	No.	%
Low	Less than 60%	3	3
Medium	Moderate 60 – 80%	39	39
High	More than 80%	58	58
Total		100	100

Mothers' Practices Regarding Newborn Care

Overall, 64% of mothers demonstrated a high level of newborn care practice, 32% had a moderate level, and 4% had a low level. Regarding newborn care practices, 83% reported using chlorhexidine for umbilical cord care, while 3% used traditional remedies. All mothers (100%) reported that their infants received their first vaccination within the first three days after birth, and 88% adhered to scheduled vaccination dates. Furthermore, 96% reported not giving their newborns drinks other than breast milk during the first month, and 78% reported never using traditional remedies.

Concerning responses to newborn health problems, 94% reported seeking medical care and using fever-reducing measures when their infants developed fever, while 77% would take an infant with rapid breathing to a doctor. Additionally, 84% would seek medical advice if the infant showed reduced feeding and activity, and 88% would take the infant to a doctor in the event of a new infection. For eye care, 85% used cotton soaked in lukewarm water, while 94% rejected the practice of applying kohl to newborns' eyes.

Table 2. Level of practice of postnatal mothers about newborns' care

Level of practice	Range of total score	No.	%
Low	Less than 60%	4	4
Medium	Moderate 60 – 80%	32	32
High	More than 80%	64	64
Total		100	100

Relationship Between Knowledge and Practice

A moderate positive correlation was found between mothers' knowledge and practices regarding newborn care ($r = 0.438$, $P < 0.05$), indicating that higher knowledge scores were associated with better reported practices. Educational level was significantly associated with both knowledge ($P = 0.007$) and practice ($P = 0.005$). Economic status was significantly associated with practice ($P = 0.005$), but not with knowledge ($P = 0.203$). No statistically significant associations were found between maternal age and knowledge ($P = 0.778$) or practice ($P = 0.504$), or between professional status and knowledge ($P = 1.000$) or practice ($P = 0.176$). Similarly, the study found no significant association between receiving information about newborn care and knowledge ($P = 0.225$) or practice ($P = 0.810$).

Sources of Information and Difficulties in Newborn Care

Only 36% of mothers reported receiving advice about newborn care during antenatal or postnatal visits, whereas 64% reported receiving no such advice. The main sources of information were family members and the experiences of others (37%), doctors and healthcare providers (30%), personal experience (24%), traditional practices and folk medicine (5%), and television, radio, or the internet (4%). Regarding difficulties in newborn care, 26% of mothers reported experiencing no difficulties. Sleep-related problems were reported by 20%, while 14% reported difficulties related to newborn illnesses. Breastfeeding difficulties and infant gas or colic were each reported by 6% of mothers.

Regarding suggestions for improving maternal and newborn care, 21% recommended increased advice and awareness programs for mothers, 11% suggested improvements in healthcare services, 10% emphasized psychological and emotional support, and 7% recommended training and educational programs. Meanwhile, 30% provided no suggestions.

Discussion

Age

The current study revealed that most participating mothers were aged 25–31 years (42%). This finding aligns with the study conducted by Burayu et al. (2024) in Ethiopia, which reported that 58.3% of mothers were within the 25–34-year age group. In contrast, only 8% of mothers in the present study were aged 18–24 years, which contradicts the findings of Yogesh et al.

Type of delivery

The present study showed that the majority of mothers delivered by cesarean section (73%) ,this result contrasts with a study done by Yogesh, et al. (2024) in India, which revealed that the proportion of women who delivered by cesarean section was (34.5%). This difference may be attributed to mothers' preferences or the healthcare protocols adopted in different countries [1].

Copyright *Author (s) 2026. Distributed under Creative Commons CC BY 4.0*
Received*: 17-09-2026 -* ***Accepted****: 15-11-2026 -* ***Published****: 23-11-2026*

Professional situation

More than half of the participating women were housewives (56%), while working women constituted 44%, indicating a relatively small difference between the two groups. This result differs from a study conducted by Fadia Jouda (2020) in Palestine, where the majority of participants were housewives at an increased rate of 96.8%, while the percentage of women workers was limited to 3.2%. These discrepancies may reflect variations in socioeconomic conditions and maternal characteristics between the studied populations [14].

Educational level

The present study demonstrated that 67% of the participants had a university education, whereas only 2% had primary education. These results differ from those reported by Workie et al. (2024) in Ethiopia, where 44% of women were unable to read or write, and only 8% had primary education. These disparities may be explained by differences in access to education and women's support systems among countries. Improving maternal education and enhancing knowledge and practices related to essential newborn care are crucial for neonatal survival and for reducing morbidity and mortality [1,2,18].

Marital status

The results of the current study showed that the majority of participating mothers were married, which is consistent with the results of Burayu et, al. (2024) in Ethiopia, which showed that 95.8% of participating women were married; this reflects the social stability of most participants.

Economic status

The current study showed that most of the participating mothers were of moderate economic status (89%), while the percentage of mothers of poor economic status was 2%. These results differ from a study conducted by Choudhary et al. In 2021 in India, the percentage of participants with moderate economic status was 29.3%, and 6.7% with poor economic status.

Knowledge and Practice of Newborn Care

Overall knowledge and practice

The results of this study showed that 58% of the mothers had a high level of knowledge, while the practice was 64%. The level of mothers' knowledge was consistent with several previous studies; the study conducted by Bahattari et al. (2021) found a good knowledge level was (60.7%) and Burayu et al. (2024) found a consistent result of 62.7%, indicating a general pattern that reflects a moderate to good level of knowledge among mothers in different regions. Regarding practice, the results of this study differed from those of Burayu et al. (2024), which stated a decreased practice level of 39.4%, and also differed significantly from the Mall, et.al (2021) where the percentage of mothers with good practices did not exceed 12.9%. This discrepancy indicates the existence of differences in the implementation of knowledge in actual conditions, possibly due to the difference in the availability of primary health services, the level of follow-up, or social and cultural factors that may enhance or limit the application of correct health practices. It is essential to have adequate knowledge to practice adequately because there is a link between knowledge and practice [1].

Bathing practices

The current study demonstrated that 88% of mothers performed the first bath 24 hours after birth. This result was contradicted by a study conducted by Beraki et al. (2020) in Eritrea, where the percentage of mothers who took their first shower after 24 hours was 26.8. Regarding bathing immediately after birth, the results of the current study showed that only 10% of mothers bathed their children immediately after birth. This result is consistent with the findings of the study done by Burayu et al. 2024, in which the percentage was 11.3%. Post-delivery, bathing should be delayed until the first day or for at least six hours if this is not possible due to cultural reasons [19,20].

Clothing and head covering

Burayu et al. (2024) in Ethiopia confirmed the importance of swaddling and covering the newborn, as maternal awareness reached 76.4%. This study is consistent with their study, as combining mothers showed that 55% of them dress the newborn in more than one layer to maintain their temperature. However, 45% of mothers do not cover the head of neonates post-delivery, even though the head is the part through which the newborn loses heat. For ambient temperature, the baby should be wearied 1 to 2 garments of clothes more than adults, in addition to use hats or caps [19,20].

Breastfeeding practices

The results of the current study showed that 54% of mothers breastfed their newborns promptly following delivery, which remained limited when compared to the study of Jamie and Amin (2021) in Ethiopia. Regarding exclusive breastfeeding, the current study indicated that 86% of mothers implemented exclusive breastfeeding for six months, which is a significant percentage and nearly equal to the result reported by Jamie and Amin (2021) in Ethiopia, which was 78.02%. Mothers must be encouraged and provided assistance for exclusive breastfeeding at each postnatal visit [19, 20].

Copyright *Author (s) 2026. Distributed under Creative Commons CC BY 4.0*
Received*: 17-09-2026 -* ***Accepted****: 15-11-2026 -* ***Published****: 23-11-2026*

Regarding breastfeeding on demand, Fadia Jouda's study showed that 33.9% of mothers breastfed on demand, while the percentage in this study was 36%.

Eye care

Regarding newborn eye care, the results of the current study showed that 85% of mothers using a piece of cotton moistened with lukewarm water, which is consistent with the results of the study conducted by Fadia Jouda (2020), which indicated that 88.7% of mothers follow the same practice. For using kohl or any eye products, the study showed that 94% of mothers do not implement it to their newborns, which is similar to study conducted by Fadia Jouda (2020), which found that 82% of mothers do not use kohl for the newborn's eyes.

Diaper care

Regarding changing the newborn's diaper, the results of the current study showed that only 44% of mothers changed the diaper more than 6 times a day, while 47% changed the diaper between 4 and 6 times daily. These results reflect that the majority of mothers adhere to a moderate rate of changing the diaper, which ensures cleanliness and comfort for the newborn, but it is less than what is recommended in some health guidelines. In contrast, a study done by Fadia Jouda, which reported that 95.4% of mothers removed the newborn's diaper immediately after each contamination.

Vaccination

The results of the current study showed that the percentage of mothers committed to giving the newborn the first vaccination during the first three days reached 100%. The study also showed that 88% of mothers adhere to vaccinating their children on the specified dates. These results are consistent with the results of Fadia Jouda, which indicated that 98.8% of mothers are interested in vaccinating their neonates. The study done by Yogesh et al. (2024) in India showed that 81% of mothers are committed to immediate vaccination of the newborn.

Danger signs

Regarding mothers' knowledge of danger signs in newborns, the results of the current study showed that 89% of participants considered fever, breathing problems, congestion, and jaundice to be danger signs that required medical intervention.

Fever

When compared to previous studies, it was found that 95% of mothers in this study consider fever a danger sign, which is a similar percentage to that of Choudhary et al. (2021) (94.7%). It is also consistent with the results of Fadia Jouda, who reported that 95.4% of mothers consider fever a danger sign that requires seeing a doctor, which reflects a high level of awareness that is similar across studies. To support early recognition of neonatal illness and reduce the delay in care-seeking, which is considered one of the factors of newborn mortality, awareness of postpartum women regarding danger risks is essential [5].

Rapid breathing

Regarding rapid breathing, this study showed that 65% of mothers consider it a danger sign, which is a higher percentage than the result done by Choudhary et al. in India (54%), but it is lower than the results of Fadia Jouda, who recorded 95.1%, which indicated the presence of moderate awareness in this study compared to reference studies, with the need to enhance awareness of this aspect. Fast breathing can only be considered a sufficient sign to refer young infants to the hospital immediately [19, 20].

Hypothermia

Regarding the practice of hypothermia < 35°C in the newborn, this study showed that 67% of mothers consider it a danger sign and that medical follow-up is required; this is a lower percentage than the result of Choudhary et al. in India (86.7%) and also lower than the results of Fadia Jouda in Palestine (92.8%), which indicates a relative knowledge gap about the danger of hypothermia in newborns. Neonatal hypothermia is a common problem in newborns and carries a high mortality rate [21].

Diarrhea and vomiting

Regarding diarrhea and vomiting, the results of the current study showed that 98% of mothers consider them signs of danger, which is a much higher percentage compared to the result of Choudhary et al. (2021), which recorded 58%, reflecting high awareness among mothers in this study. The majority of mothers resorted to seeking help from health facilities for diarrhea or vomiting [13].

Cold body

Regarding knowledge of the cold body of newborns, the present study indicated that 49% of mothers consider it a danger sign, which is a higher percentage than in the study of Choudhary et al. (2021) (36.7%); however, it remains below the

Copyright *Author (s) 2026. Distributed under Creative Commons CC BY 4.0*
Received*: 17-09-2026 -* ***Accepted****: 15-11-2026 -* ***Published****: 23-11-2026*

required level. Neonates are vulnerable to a low-temperature environment and have a restricted ability to maintain a thermal level [21].

Jaundice

Regarding jaundice during the first 24 hours of birth, the results of this study showed that 37% of mothers consider it a danger sign that requires medical intervention, which is a higher percentage than the study of Choudhary et al. (2021) (24.7%). Additionally, this percentage is below that reported by Fadia Jouda (2020), who found that 52.5% of mothers considered it abnormal during the first 24 hours; however, it remains relatively low, which confirms the need to intensify awareness of the danger of early jaundice. If there is any jaundice in the first 24 hours of life, or yellow palms and soles at any age, the newborn should be referred for further evaluation [9,17,19,20].

Folk remedies

As for the use of folk remedies in caring for the newborn, the results of the current study showed that a very low percentage of mothers (3%) are still convinced of the use of these treatments and are dealing with them, which reflects a good level of health awareness of the dangers of these non-medical practices. This result contradicts what was stated by Choudhary, et.al in 2021, which reported that 16% of mothers are still convinced of folk remedies and use them. This noticeable decrease in reliance on folk remedies in this study is a positive indicator of the improvement in the level of health education among mothers, especially with previous awareness in which the dangers of these treatments were emphasized, as they may cause serious health complications in newborns [3].

Umbilical cord care

The results of the current study showed that 72% of mothers had knowledge that redness around the navel area is a danger sign, which is a lower percentage than that reported by Fadia Jouda (2020) (96.2%). This study showed that 83% of mothers use a medical disinfectant such as chlorhexidine, which is consistent with the results of Fadia Jouda (2020), which reported that 80% of mothers use a medical disinfectant. Fortunately, the results of the study showed that only 3% resort to using folk remedies to care for the umbilical cord. These results contradict a study done by Fadia Jouda (2020), which indicated that 49.5% of mothers used traditional treatments. During the first week of life, daily application of chlorhexidine to the umbilical cord stump (7.1% chlorhexidine digluconate aqueous solution or gel, delivering 4% chlorhexidine) is recommended [19,20].

Health Care Utilization and Information Sources

Antenatal visits

The results of this study showed that most of the participating women (78%) visited health care facilities at a rate of more than 8 visits, while only a small percentage (6%) had visits that did not exceed four visits or less. These results contradict what was shown in the study by Yogesh et al. (2024), where the percentage of women who made more than ten visits was 29.8%, while the percentage of women who made fewer than four visits was 18.2%. This difference may be attributed to variations in accessibility to healthcare facilities across countries, which could explain the differing number of maternal visits to healthcare centers observed between the current study and other studies. The additional postpartum visits should be at least three for all postnatal women and neonates, on the third day, between one and two weeks after delivery, and six weeks postpartum [19, 20].

Received information from doctors

The results of this study showed that the percentage of participants who received information from doctors was low, as it did not exceed (36%), while (64%) of the mothers did not receive any information during the pre- and post-natal periods. This could suggest insufficient provision of structured health education programs for mothers. This result clearly contradicts the findings of Yogesh et al. (2024), which showed that (91%) of women received information during the prenatal period. The same study also showed that during the postpartum period, (77.4%) of mothers received advice from doctors. Health care providers play a critical and important role in promoting health and preventing illness; they play an essential role in educating mothers, giving advice and information, counselling on newborn care, and avoiding the use of hazardous traditional practices to enhance the health of neonates [1,19].

Sources of information

Regarding sources of information, the results of this study showed that health professionals represented a source of information for only (30%), while (70%) of mothers relied on other sources, most of which were family members and the experiences of others, in addition to small percentages that relied on customs and traditions, the Internet, and other means. This also contradicts the results of Yogesh et al. (2024), which showed that health professionals were the main source of information at a very high rate (96%), while other sources constituted only (4%). This apparent difference indicates a gap in the health education system in the current study setting and highlights the need to strengthen the role of health care providers in guiding mothers and providing them with basic information during the antenatal and postnatal periods [3].

Conclusion

Copyright *Author (s) 2026. Distributed under Creative Commons CC BY 4.0*
Received*: 17-09-2026 -* ***Accepted****: 15-11-2026 -* ***Published****: 23-11-2026*

This study showed that more than half of participants have a high knowledge level regarding neonatal care, while the practice level is relatively higher in most of them; this indicates that mothers perform good practice. Additionally, there is a direct proportional relationship between knowledge and practice of mothers; if the awareness of mothers increases, their practice also increases. Furthermore, there is a relationship between some demographic factors and knowledge and practice, which found that economic condition is associated with their practice and the education of mothers influences their knowledge and practice. Hence, the outcome highlights the importance of educating antenatal and postnatal women and improving the efficiency of health care providers through training and educating them on neonatal care and how to disseminate information to mothers to decrease preventable health risks and improve neonatal care outcomes.

Conflict of interest. Nil

References

1. Mohamed El-Naggar D, Madian AA, Mahrous ESY. Knowledge and practices of postpartum women regarding neonatal care in El-Beheira Governorate. Int Egypt J Nurs Sci Res. 2023;3(2):455-68.
2. Abd Allah RA, Mohamed HA, Kamel HH. Impact of health education program for pregnant women on their selected postpartum and newborn care. Minia Sci Nurs J. 2023;13(1):18-28.
3. Yogesh M, et al. Identifying gaps in maternal knowledge and care-seeking for neonatal health: a mixed methods study in rural pregnant women. J Educ Health Promot. 2024;13(1):201.
4. Beraki GG, Tesfamariam EH, Gebremichael A, Yohannes B, Haile K, Tewelde S, et al. Knowledge on postnatal care among postpartum mothers during discharge in maternity hospitals in Asmara: a cross-sectional study. BMC Pregnancy Childbirth. 2020;20(1):17.
5. Zhou J, Hua W, Zheng Q, Cai Q, Zhang X, Jiang L. Knowledge about neonatal danger signs and associated factors among mothers of children aged 0-12 months in a rural county, Southwest of China: a cross-sectional study. BMC Pregnancy Childbirth. 2022;22(1):346.
6. Burayu ET. Exploring knowledge, attitude and practices of essential newborn care among puerperal mothers who gave birth at public health facilities of southwest Ethiopia: a mixed study. Pan Afr Med J. 2024;49:104.
7. Jamie AH, Amin R. Knowledge, attitude and practice of mothers towards newborn care in Jugal Hospital, Harari Regional State, Ethiopia. J Nepal Paediatr Soc. 2021;41(2):190-6.
8. Amolo L, Irimu G, Njai D. Knowledge of postnatal mothers on essential newborn care practices at the Kenyatta National Hospital: a cross sectional study. Pan Afr Med J. 2017;28:159.
9. Jemberia MM, Berhe ET, Mirkena HB, Gishen DM, Tegegne AE, Reta MA. Low level of knowledge about neonatal danger signs and its associated factors among postnatal mothers attending at Woldia general hospital, Ethiopia. Matern Health Neonatol Perinatol. 2018;4:5.
10. Ayele AD, Tenaw LA, Kassa BG, Mihretie GN, Belay HG, Teffera AG, et al. Knowledge and practice of essential newborn care and associated factors among women in Ethiopia: systematic review and meta-analysis. Reprod Health. 2022;19(1):172.
11. Omotosho A, et al. How effective is antenatal care in preparing mothers for newborn care? An exploratory survey of lactating women in a rural Nigerian district. Heliyon. 2022;8(11):e11746.
12. Bhattarai M, et al. Knowledge and practice on neonatal care among postnatal mothers in a selected teaching hospital, Kaski District, Nepal. Int J Soc Sci Manag. 2021;8(1):279-84.
13. Choudhary ML, et al. Determinants of knowledge and practices of postnatal mothers on essential newborn care in a selected area of rural Haryana. Int J Community Med Public Health. 2021;8(4):1674-9.
14. Jouda FM. Knowledge and practices of postnatal primiparous mothers towards newborns' care at governmental primary health centers in Gaza Strip [master's thesis]. Gaza: Islamic University of Gaza; 2020 [cited 2026 Nov 17]. Available from: https://core.ac.uk/download/pdf/336842188.pdf
15. Sharma H, et al. Community healthcare professional visits are important determinants of knowledge and practices regarding newborn care among mothers. J Nat Sci Biol Med. 2018;9(2):140-4.
16. Workie HM, et al. Assessing maternal adherence to WHO's essential newborn care practices in Libo Kemekem District: a community-based study. Glob Pediatr Health. 2024;11:2333794X241279193.
17. Nigatu SG, Worku AG, Dadi AF. Level of mother's knowledge about neonatal danger signs and associated factors in North West of Ethiopia: a community based study. BMC Res Notes. 2015;8:309.
18. Mall A, Mohanta B, Pareek S. The knowledge and practices toward neonatal care among primipara mothers in Dehradun, Uttarakhand: a correlation study. MRIMS J Health Sci. 2021;9(2):67-71.
19. World Health Organization. WHO recommendations on postnatal care of the mother and newborn [Internet]. Geneva: World Health Organization; 2014 [cited 2026 Nov 17]. Available from: https://iris.who.int/handle/10665/97603
20. World Health Organization. WHO recommendations on newborn health: guidelines approved by the WHO Guidelines Review Committee [Internet]. Geneva: World Health Organization; 2017 [cited 2026 Nov 17]. Available from: https://iris.who.int/handle/10665/259269
21. Wako WG, et al. Assessment of neonatal thermal cares: practices and beliefs among rural women in West Guji Zone, South Ethiopia: a cross-sectional study. PLOS Glob Public Health. 2022;2(6):e0000568.

Copyright *Author (s) 2026. Distributed under Creative Commons CC BY 4.0*
Received*: 17-09-2026 -* ***Accepted****: 15-11-2026 -* ***Published****: 23-11-2026*