

# Neonatal Jaundice Management: Improving Clinical Knowledge of Jaundice for Improved Attitudes and Practices to Enhance Neonatal Care

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## Abstract

Neonatal jaundice is a common medical condition that affects neonates in the early days of life. Nurses and midwives play important role in the identification and management of neonatal jaundice and the promotion of good neonatal health and education. Their clinical knowledge of neonatal jaundice may influence their attitude and practices toward the identification and management of neonatal jaundice. The study results showed that the level of good knowledge, attitudes, and practices toward neonatal jaundice management was 69.30% (140/202), 64.90% (131/202), and 62.90% (127/202), respectively. The inferential statistics showed a positive association between good knowledge and attitudes toward neonatal jaundice and good practices of neonatal jaundice management. Suggestively, nurses and midwives who have and demonstrate better clinical knowledge and exhibit positive attitudes are more likely to implement appropriate practices for the management of neonatal jaundice. Healthcare providers should therefore invest in life-long learning activities for staff, especially in the study setting.

## Keywords

neonatal jaundice, clinical knowledge, attitudes, practices, neonatal care

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## Introduction

Neonatal jaundice is a common pediatric condition that refers to the yellowish coloration of the skin, sclera of the eye, and other organs of the body caused by the accumulation of bilirubin (American Academy of Pediatrics et al., 2004; Huang et al., 2022). It affects nearly 50% to 60% of full-term babies and 80% of premature babies develop jaundice within the first week postdelivery (American Academy of Pediatrics et al., 2004; Huang et al., 2022). Neonatal jaundice can be a life-threatening condition without the appropriate treatment and management, and has been associated with high rates of disability and mortality (Amegan-Aho et al., 2019; Khan et al., 2015). Early detection, timely treatment, and management of neonatal jaundice are important measures to prevent associated complications. As one of the main caregivers, nurses and midwives provide essential care to newborns before discharge from the hospital (Donkor et al., 2023). Nurses and midwives may be the first to observe early signs of jaundice, therefore, having

improved knowledge, attitude, and good clinical practices toward neonatal jaundice is central to achieving favorable outcomes for the management of neonatal jaundice. We therefore write a commentary on a recently published paper “Neonatal Jaundice Management: Knowledge, Attitude,

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and Practice Among Nurses and Midwives in the Northern Region, Ghana” (Donkor et al., 2023), highlighting the study’s findings for improved outcomes for the management of neonatal jaundice.

## Brief Review

Neonatal jaundice seems to be a common medical condition among newborns in Ghana with an increasing trend. Previous reports from 2015 to 2019 highlight the year-on-year increase. Absolute figures of neonatal jaundice from the year 2015 to 2019 were reported to be 3,031, 4,251, 5,338, 7,175 and 9,273, respectively (Ghana Health Service, 2019; Salia et al., 2021). The epidemiological distribution of neonatal jaundice varies in-country, ranging between 9.7% and 66.7% in the Northern and Central Regions, respectively (Abdul-Mmumin et al., 2021; Adoba et al., 2018). Severe form of neonatal jaundice has been reported in some parts of the country (Adei-Atiemo et al., 2015). Neonatal jaundice has been associated with postdelivery hospital readmission (Seneadza et al., 2022). The health threats of neonatal jaundice include kernicterus, hearing loss, cerebral palsy, and death (Mwaniki et al., 2012; Seneadza et al., 2022). The health threats of neonatal jaundice highlight the need to address poor clinical knowledge and skills to diagnose and manage the condition effectively.

## Current Insights and Interpretations

The study reported a substantial level of good knowledge of 69.30% (140/202) of neonatal jaundice. However, the proportion of participants with poor knowledge 30.70% (62/202) of neonatal jaundice is significant. In the clinical setting, poor knowledge of a condition can lead to misdiagnosis, mistreatment, and poor health outcomes. Participants with poor level of knowledge of neonatal jaundice are placed on duty as those with good knowledge. They are expected to provide the best care to patients. It is therefore important to improve the identified clinical knowledge gap through continuous professional capacity building. The continuous professional capacity building could assume the form of in-service training, expert lecture series, and clinical peer-review sessions. The nurses could equally consult open-source journals and resources to improve their clinical knowledge of neonatal jaundice. Specialization through professional education and training is equally recommended.

Overall, the study reported good attitude and practice of neonatal jaundice to be 64.90% (131/202) and 62.90% (127/202), respectively. The findings are in the regions of 60% with the reported level of knowledge of neonatal jaundice 69.30% (140/202). This observation may highlight the link between clinical knowledge, and attitudes and practices of neonatal jaundice. The inferential statistics of the study emphasized the significant positive association between good knowledge and attitudes toward neonatal jaundice

and good practices of neonatal jaundice management. This may be an indication that nurses and midwives who have and demonstrate better clinical knowledge and exhibit positive attitudes are more likely to implement appropriate practices for the management of neonatal jaundice.

## Conclusions

Overall, the study showed a substantial level of knowledge, attitudes, and practices of nurses and midwives toward neonatal jaundice management. However, there exist important gaps in the level of knowledge, attitude, and practices toward neonatal jaundice management among participants.

## Importance to Nursing Profession

The study stresses the need for continued neonatal jaundice education, training, and support to enhance the nurses’ and midwives’ knowledge and practices that will ultimately benefit neonatal health outcomes. Improving the clinical knowledge of nurses and midwives would have a cascading positive effect on their attitudes and practices toward neonatal jaundice management. Equally extending the study to other settings and multiple health facilities would be valuable to develop national programs on neonatal jaundice. Future studies should focus on clinical assessment and a better appreciation of the burden and epidemiology of neonatal jaundice.

To maximize the importance of the study (Donkor et al., 2023), it is recommended that authors disseminate findings with health facilities in the study area. It is equally important for authors to collaborate with health facilities to develop context-based in-service training manuals on neonatal jaundice for healthcare providers such as nurses and midwives to maximize neonatal health.


## Declaration of Conflicting Interests

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