Tawakkal Specialist Hospital

From Assessment to Action: Leveraging Nurses' Knowledge and confidence level to Improve Newborn Safety

Aqilah Abd Rahim, Bahagia Zakaria, Nur Wajihah Othman

ABSTRACT

This cross-sectional study assessed knowledge and confidence on newborn safety protocols among 31 nurses in Kuala Lumpur. Results showed 86% average knowledge (safe sleep highest at 96%), with 4.2/5.0 confidence. Strong correlation between knowledge and confidence (r=0.71) was observed, with specialized training significantly improving both measures. Findings support targeted educational interventions for medication safety (82%) and clinical deterioration (83%).

CONTACT

'Aqilah Abd Rahim
Tawakkal Specialist Hospital
aqilah@kpjtawakkal.com
kpjhealth.com.my/tawakkal/

INTRODUCTION

Newborn safety in healthcare settings depends critically on nursing knowledge and confidence. Despite established protocols, preventable adverse events continue to occur due to knowledge gaps and implementation challenges. This study assesses nurses' knowledge and confidence regarding newborn safety protocols to identify areas for improvement and inform targeted educational initiatives that enhance newborn care outcomes.

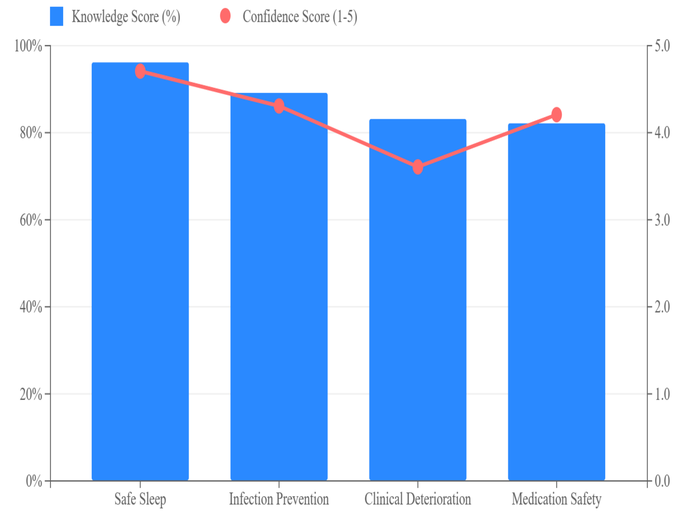
METHODS AND MATERIALS

This cross-sectional study assessed 31 nurses from three units at a private acute-care hospital. Data collection utilized an anonymous electronic questionnaire with demographics, 10-item knowledge assessment, and 10-item confidence chart scale. Analysis included descriptive statistics and correlation coefficients to examine relationships between knowledge and confidence variables. Governance sampling was employed, and hospital ethics committee approval was obtained prior to data collection. Statistical significance set at $p<0.05$. Knowledge questions covered safe dose practice, medication safety, clinical deterioration recognition, and infection prevention. Participants completed required during regular staff meetings to maximize response rates.

RESULTS

Knowledge assessment revealed an overall average score of 86% (range: 68-98%) with highest proficiency in safe sleep practices (96%) followed by infection prevention (89%), clinical deterioration recognition (83%), and medication safety (82%). Confidence averaged 4.2/5.0, highest in patient identification (4.7/5.0) and lowest in responding to deterioration (3.6/5.0). Analysis demonstrated a strong positive correlation between knowledge and confidence ($r=0.71$, $p<0.01$), more pronounced among nurses with specialized training ($r=0.82$) than without ($r=0.59$). Nurses with specialized training displayed significantly higher confidence scores (4.5 vs 3.6, $p<0.01$).

GRAPH AND TABLE



DISCUSSION

This study reveals that while nurses demonstrate satisfactory knowledge of newborn safety protocols, specific gaps exist across experience levels. The strong correlation between knowledge and confidence underscores the value of specialized training. Targeted educational interventions, particularly simulation-based training for medication safety and clinical deterioration recognition, could enhance both knowledge and confidence, ultimately improving newborn safety outcomes.

CONCLUSIONS

Despite satisfactory overall knowledge scores, gaps exist in critical domains like medication safety and clinical deterioration. Specialized training significantly improves both knowledge and confidence. Implementing targeted simulation-based education across all experience levels is recommended to enhance newborn safety protocol adherence and improve care outcomes.

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