Kusumadewi, D. U., Nisman, W. A., & Khrisnamurti, S. (2026)
Jurnal Keperawatan Soedirman – Vol 21, No 3 page 227–232
http://jos.unsoed.ac.id/index.php/jks/index

ORIGINAL ARTICLE

TRANSLATION, ADAPTATION, AND PSYCHOMETRIC TESTING OF THE INDONESIAN VERSION OF THE NEONATAL CARE KNOWLEDGE AND PRACTICES QUESTIONNAIRE

Dyah Utami Kusumadewi[1], Wenny Artanty Nisman[2]*, Sinta Khrisnamurti[3]

1. School of Nursing, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
2. Department of Paediatrics and Maternity Nursing, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
3. Nursing Service Work Team, RSUP Dr. Sardjito Yogyakarta, Indonesia

Article Information
Received: 11 September 2025
Revised: 29 January 2026
Accepted: 20 June 2026

***Corresponding Author**
Wenny Artanty Nisman
wenny.artanty@ugm.ac.id

DOI
10.20884/1.jks.2026.21.3.17733

ABSTRACT

Newborns are susceptible to various health complications that may lead to mortality. Therefore, postpartum mothers play a critical role in preventing newborn deaths by providing optimal neonatal care. The Neonatal Care Knowledge and Practices Questionnaire (NCKP-Q), developed by Singh et al. (2019) in Nepal, assesses postpartum mothers' knowledge and practices regarding neonatal care and associated factors. However, there is a lack of readily available measurement tools to assess mothers' knowledge and practices in Indonesia. This study aimed to evaluate the construct validity and internal consistency of the Indonesian version of the NCKP-Q. A total of 120 postpartum mothers from six community health centers in Yogyakarta City were recruited through convenience sampling. The six steps of cross-cultural adaptation were applied. The 24-item questionnaire was analyzed using confirmatory factor analysis (CFA) with the ULSMV estimator. The analysis demonstrated adequate model fit and internal consistency reliability after several items were removed (RMSEA = 0.021; GFI = 0.893; CFI = 0.962; TLI = 0.956; KR-20 = 0.715). The Indonesian version of the 17-item NCKP-Q was proven to be a valid and reliable instrument. Further research with larger community-based samples is recommended to support the broader application of this approach in neonatal health promotion and education.

Keywords: *Confirmatory factor analysis; knowledge; neonatal care; practices; psychometric testing*

ISSN : 1907-6637 **e-ISSN : 2579-9320**

BACKGROUND

Newborns have immature immune systems during the first 28 days of life (Ricci et al., 2021), making them highly susceptible to illness and complications. According to the World Health Organization (WHO, 2024), approximately 2.3 million newborns died in 2022. In Indonesia alone, 18,281 newborn deaths were reported (Ministry of Health of the Republic of Indonesia, 2023). These deaths are largely attributed to the inadequate quality of newborn care (Ministry of Health of the Republic of Indonesia, 2023; WHO, 2024). As the primary caregiver, the mother plays a crucial role in decreasing the newborn mortality rate.

Naturally, a strong maternal instinct to nurture newborns begins in the postpartum period (Alligood, 2014; Martin et al., 2022). Postpartum mothers should comprehend the demands of newborn care, including thermal regulation, cord care, breastfeeding, immunization, and recognition of danger signs (Ministry of Health of the Republic of Indonesia, 2014). Several studies have demonstrated that adequate knowledge can lead to a 60% improvement in newborn care practices (Abdu et al., 2019; Mardiah et al., 2019; Rintiani et al., 2023; Tuglo et al., 2023). Therefore, nurses should assess postpartum mothers' knowledge and practices to facilitate early identification and management of newborn health issues.

Nurses require valid and reliable measurement tools to assess their clients and provide high-quality care (Toney-Butler & Unison-Pace, 2023). Several instruments have been