Translation, Adaptation and Psychometric Testing of Nurses' Attitudes towards and Awareness of Research and Development in Nursing for use in Indonesian Primary Health Care Settings

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Signed Statement

I declare that this thesis presents work carried out by myself and contains no material that previously has been submitted for the award of any other degree or diploma in any university. To the best of my knowledge and belief, this thesis does not contain any materials previously published or written by another person except where due reference has been made in the text.

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Abstract

Aim: This study describes the Indonesian translation and adaptation process of the instrument *Nurses' attitudes towards and awareness of research and development within nursing (ATRAD-N) version II*, and psychometric testing of the translated instrument.

Background: The literature review presented herein highlighted the importance of understanding the attitudes of nurses towards research and research utilisation. This will enable us to understand the factors influencing use of research in nursing and the aspects that facilitate nurses to participate in research to improve nursing care. However, in the context of Indonesian primary health care services, nursing research and research utilisation has only recently been recognized as important and hence there is little or no relevant published research. In order to conduct such research, it is imperative to have a reliable and valid instrument that can be used in the context of Indonesian primary health care settings.

Method: The translation process was conducted systematically by applying the forward and back-translation method. Adaptation and content validity was assessed by inviting six experts from universities in Indonesia to review the relevance of the instrument in the context of Indonesian primary health care nursing. The psychometric testing was performed using construct validity (factor analysis) and homogeneity reliability tests (Cronbach's alpha coefficient) on a sample of 92 primary health care nurses from nine public health centres (*Pusat Kesehatan Masyarakat*) in the city of Banjarbaru and Banjarmasin, South Kalimantan, Indonesia.

Results: During the adaptation and content validity process, some changes were made to the instrument. The revised instrument showed acceptable content validity with an overall content validity index of 0.97. The factor analysis used principal component analysis with direct oblimin rotation. A five-factor structure was obtained that differed from those identified in previous studies. Seven items of the instrument did not load to any of the identified factors. The cumulative percentage of variance was 56.5%. The Cronbach's alpha coefficient for individual factors of the instrument ranged from 0.719 to 0.884, suggesting good internal consistency.

Conclusion: After the translation, adaptation and psychometric test process, the resulting form of the Indonesian translation of the instrument was found to be content valid and homogeneity reliable but not construct valid, in Indonesian settings. Further development, refinement and retesting would be essential to produce a psychometrically sound instrument.