Translation, modification and validation of the Chinese version of knowledge assessment instrument of pressure ulcer prevention

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Background: Nurses are patients' primary caregivers, having the most responsibility for pressure ulcers care, and thus their knowledge on pressure ulcers' prevention are critically essential. A valid and reliable assessment tool is important and valuable for assessing and determining the adequacy of nurses' knowledge on pressure ulcers and for tailoring continuing education. Literature review revealed that among the existing knowledge assessment tools, the instrument of assessing pressure ulcer knowledge of clinical nurses developed by Beeckman et al. (2010) is update and claimed with satisfactory psychometric properties. But there is no Chinese version and no reports on this instrument being trans-culturally used in Chinese population. Therefore, this study aimed to translate, modify and validate the instrument of assessing pressure ulcer knowledge of clinical nurses developed by Beeckman et al.

Method: Instrument development methodology design was used. The instrument was translated into Chinese and back-translated into English. Content validity was evaluated followed by a pilot test on the stability of the translated instrument. A convenience sample of 186 nurses was recruited to evaluate validity of the multiple-choice test items (item difficulty and discriminating index) and internal consistency reliability.

Results: The translated and modified instrument of assessing pressure ulcer knowledge demonstrated acceptable psychometric properties: a. overall content validity index (CVI=0.91); b. overall test-retest reliability was 0.826; c. item difficulty index was between 0.46 and 0.93; d. Overall values for discrimination were between 0.28 and 0.55; e. the internal consistency Cronbach's α was 0.792 for overall instrument and 0.426-0.804 for sub-themes.

Conclusion: This study represents the first trial to translate and modify an existing instrument measuring the knowledge of pressure ulcers in a Chinese sample. Findings indicated that this Chinese version of the instrument had acceptable psychometric properties and could be applied in the Chinese population.

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