ABSTRACT

Background: Delirium is a common but serious condition in elderly inpatients. Health care professionals and especially nurses often seem to under-recognize delirium and perform badly in further actions and the overall management of delirium. This study assesses the clinical reasoning process using case vignettes to investigate more about the nurses' competence level and apply new opportunities to strengthen educational measures in this field.

Methods: The study was conducted as cross-sectional online survey. The questionnaire based on five case vignettes with each a different delirium type or similar diseases was developed as first step and validated through a multidisciplinary expert panel. Primary endpoint was the delirium competence of nurses. Descriptive analyses and group comparisons were made to examine differences between geriatric and internal medicine department nurses and nurses from other areas. Possible influences were evaluated using correlations and linear regression models.

Results: The questionnaire showed a good content validity and a substantial reliability (kappa = 0.79) in the review process. The final convenience sample of 115 nurses in Germany scored 42.6 (SD 4.9) points in the constructed Geriatric Delirium Competence Questionnaire Score (GDCQS), which includes recognition and management tasks with a range from zero to 55 points. Geriatric and internal medicine department nurses had, with a mean of 44.3 (SD 4.0) points, a significantly higher score than the other groups. Nurses scored best in detecting delirium in the hyperactive delirium case (79%) and overall had problems to correctly identify hypoactive delirium (46%). The results showed that the nurses had a better estimate of delirium presence or absence than the ability to diagnose correctly. The management tasks showed problems in the part of interdisciplinary communication and treatment of delirium. The ability to self-assess the own delirium knowledge after completing the questionnaire correlated with the GDCQS (r = 0.50, p-value < 0.001). As only predictor this variable had a significance in the multivariate model.

Conclusions: Overall, nurses' knowledge and competence level need to be improved. The developed online tool has the potential to be a solid self-instrument to assess delirium competence of nurses with a further use as part of delirium trainings.

Keywords: delirium, delirium recognition, delirium management, clinical reasoning, educational intervention, vignette-based questionnaire, nursing, geriatric, older adult