

## Psychometric Validation of Czech Version of Spiritual Needs Assessment for Patients: The First Part of Research

**Authors :** Lucie Mrackova, Helena Kisvetrova

**Abstract :** Spirituality is an integral part of human life. In a secular environment, spiritual needs are often overlooked, especially in acute nursing care. Spiritual needs assessment for patients (SNAP), which also exists in the Czech version (SNAP-CZ), can be used for objective evaluation. The aim of this study was to measure the psychometric properties of SNAP-CZ and to find correlations between SNAP-CZ and sociodemographic and clinical variables. A cross-sectional study with tools assessing spiritual needs (SNAP-CZ), anxiety (Beck Anxiety Inventory; BAI), depression (Beck Depression Inventory; BDI), pain (Visual Analogue Scale; VAS), self-sufficiency (Barthel Index; BI); cognitive function (Montreal Cognitive Test; MoCa) and selected socio-demographic data was performed. The psychometric properties of SNAP-CZ were tested using factor analysis, reliability and validity tests, and correlations between the questionnaire and sociodemographic data and clinical variables. Internal consistency was established with Cronbach's alfa for the overall score, respective domains, and individual items. Reliability was assessed by test-retest by Interclass correlation coefficient (ICC). Data for correlation analysis were processed according to Pearson's correlation coefficient. The study included 172 trauma patients (the mean age =  $40.6 \pm 12.1$  years) who experienced polytrauma or severe monotrauma. There were a total of 106 (61.6%) male subjects, 140 (81.4%) respondents identified themselves as non-believers. The full-scale Cronbach's alpha was 0.907. The test-retest showed the reliability of the individual domains in the range of 0.924 to 0.960 ICC. Factor analysis resulted in a three-factor solution (psychosocial needs (alfa = 0.788), spiritual needs (alfa = 0.886) and religious needs (alfa = 0.841)). Correlation analysis using Pearson's correlation coefficient showed that the domain of psychosocial needs significantly correlated only with gender ( $r = 0.178, p = 0.020$ ). Males had a statistically significant lower average value in this domain (mean = 12.5) compared to females (mean = 13.8). The domain of spiritual needs significantly correlated with gender ( $r = 0.199, p = 0.009$ ), social status ( $r = 0.156, p = 0.043$ ), faith ( $r = -0.250, p = 0.001$ ), anxiety ( $r = 0.194, p = 0.011$ ) and depression ( $r = 0.155, p = 0.044$ ). The domain of religious needs significantly correlated with age ( $r = 0.208, p = 0.007$ ), education ( $r = -0.161, p = 0.035$ ), faith ( $r = -0.575, p < 0.0001$ ) and depression ( $r = 0.179, p = 0.019$ ). Overall, the whole SNAP scale significantly correlated with gender ( $r = 0.219, p = 0.004$ ), social status ( $r = 0.175, p = 0.023$ ), faith ( $r = -0.334, p < 0.0001$ ), anxiety ( $r = 0.177, p = 0.022$ ) and depression ( $r = 0.173, p = 0.025$ ). The results of this study corroborate the reliability of the SNAP-CZ and support its future use in the nursing care of trauma patients in a secular society. Acknowledgment: The study was supported by grant nr. IGA\_FZV\_2020\_003.

**Keywords :** acute nursing care, assessment of spiritual needs, patient, psychometric validation, spirituality

**Conference Title :** ICNH 2021 : International Conference on Nursing and Healthcare

**Conference Location :** Riga, Latvia

**Conference Dates :** June 17-18, 2021