Development and psychometric testing of osteoporosis prevention self-efficacy scale – Adolescent form

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The advanced cancer treatment for pediatric cancer has increased adult survivors of childhood cancer. These survivors have reduced bone mineral density (BMD) while beginning to age. Self-efficacy is crucial for enhancing individual health behavior in osteoporosis prevention. There is a paucity of valid and reliable scales to capture the self-efficacy for adolescents with cancer either in Taiwan or other countries. The purpose of this study was to develop and examine the psychometric properties of the Osteoporosis Prevention Self-Efficacy Scale – Adolescent Form (OPSES-AF). In the first stage, the content validity was established by six experts. In the second stage, confirmatory factor analysis (CFA) was performed. Data was collected from 120 adolescents who aged 13–20 and who were treated with cancer in the two medical centers from February to July 2015. The finalized OPSES-AF was a 7-item scale through CFA. Item responses were on a 5-point Likert scale ranging from 1 to 5 with total scores ranging from 7 to 35; higher scores reflected higher confidence to complete osteoporosis prevention activities. Construct validity was established through CFA that revealed a good fit of the model: RMSEA=0.042 and p value of RMSEA=0.51; NFI=0.96; NNFI=0.98; CFI=0.99; IFI=0.99; RFI=0.93. Cronbach’s alpha was 0.80. Guttman split-half coefficient was 0.80. Spearman-Brown coefficient was 0.81. The OPSES-AF showed appropriate results for describing the self-efficacy of osteoporosis prevention for adolescents with cancer.

Biography

Wu W W completed her PhD degree in 2009 from University of Washington. Currently, she is the Assistant Professor of School of Nursing, University of Nursing and Health Sciences. She has published more than 15 papers in reputed journals.

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