Shoulder Pain and Disability Index: validation of Iranian version

Bahman Aghaie: MSN of critical care nursing, Shahed University, Tehran, Iran
Reza Norouzadeh: Lecturer, Nursing and midwifery faculty, Shahed University, Tehran, Iran
Mohammad Reza Heidari: Assistant Professor, Nursing and midwifery faculty, Shahed University, Tehran, Iran

Corresponding Author: Reza Norouzadeh, norouzadeh@shahed.ac.ir

Abstract

**Background:** Pain and limitation of shoulder movement are the common complications after mastectomy in women that can severely affect the quality of life. Using of suitable instruments to measure the quality of limb function in these patients can be appropriate to guide intervention and treatment. For this purpose, this study was conducted to translate pain and shoulder dysfunction index (SPADI) to Persian language and determine it’s Psychometric specification.

**Methods:** This is a methodological study. Data were collected from 90 patients after radical mastectomy modified with shoulder pain. Data collection instrument included demographic sheet, and shoulder pain dysfunction index (SPADI), respectively. The first part of scale was a five-item questions to assess pain and second part was related to shoulder dysfunction consist of 8 items. Internal consistency of scale was calculated by Cronbach’s alpha coefficient and construct validity of the scale was analyzed by exploratory factor analysis.

**Results:** Cronbach's alpha for the total of scale was 0.94. Cluster correlation coefficient (ICC) was calculated 0.86 (CI =0.79- 0.91, P <0.001 between the first and second time assessment, respectively. Exploratory factor analysis indicated that the 79.94% of total variance is explained by the first 3-items.

**Conclusion:** The results suggest that SPADI have adequate reliability and validity to assess pain and shoulder dysfunction in Iranian women underwent mastectomy due to breast cancer.

**Keywords:** pain and shoulder dysfunction, radical mastectomy modified, validity, reliability, exploratory factor analysis.