

Psychometrics of the Expected Knowledge (EKhp) and the Received Knowledge of Hospital Patients (RKhp) instruments

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Introduction

Empowering patient education is crucial for patients with health problems, and its importance is acknowledged in international strategies (European Commission, 2017; World Health Organization, 2013). In patient education, received knowledge corresponding to expected knowledge seems to support empowerment of patients. To evaluate the empowerment in patient education, instruments are needed. Therefore, the Expected Knowledge of Hospital Patients (EKhp) and the Received Knowledge of Hospital Patients (RKhp) were developed (Klemetti et al., 2015; Rankinen et al., 2007).

Objective

Objective of this study was to evaluate psychometrics of the EKhp and the RKhp with international data to enable international use of the instruments.

Methodology

EKhp and RKhp are based on six elements of empowering knowledge: bio-physiological, functional, experiential, social, ethical and financial. Instruments have been used in numerous studies in Finland (Klemetti et al., 2015; Rankinen et al., 2007). In this study, instruments were translated into six languages and tested in seven European countries (Cyprus, Finland, Greece, Iceland, Lithuania, Spain and Sweden) in 2009–2012. Theoretical construct of the instruments was evaluated with confirmatory factor analysis and internal consistency was demonstrated with Cronbach's alpha.

Results

1595 orthopaedic patients from seven countries participated in the study. Confirmatory factor analysis supported the structures (40 items and six subscales) of instruments with few exceptions. R-squares of subscales were satisfactory in every country (range in the EKhp was 0.333–0.887, and in the RKhp 0.330–0.989). Both instruments had satisfactory internal consistency (Cronbach's alpha value for the whole instrument of the EKhp ranged between the countries from 0.87 to 0.99, and in the RKhp from 0.97 to 0.99).

Conclusions

Based on the psychometric evaluation, the EKhp and the RKhp are structurally valid and internally consistent instruments to evaluate patient education internationally. Instruments enable comparison of expected knowledge and received knowledge in patient education, thus providing unique and important information for nurses supporting empowerment of patients.

Reference:

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