

Development and validation of a questionnaire measuring self-perceived hospital hygiene

While developing a surveillance system for nosocomial infections the author wanted to find a way to assess patient reported outcomes. Therefore he developed a patient questionnaire on self-perceived hospital hygiene. In this Master-Thesis the author reports validation data of the questionnaire measuring aspects of satisfaction, safety and information that are relevant to patients in the context of hospital hygiene. A 16-item questionnaire using four Likert-type response categories was developed and administered to 630 patients in three Swiss hospitals during the period from November 9th to December 9th 2009. Responses were checked for missing values and ceiling effects. Principal component analysis and analysis of variance were performed and internal consistency tested. The response rate was 45%; the analyses were performed on a sample of 282 questionnaires. Missing values ranged from 0.4-5.7% per item. The items showed an overall mean satisfaction score of 1.13 (range: 1.03-1.33) with justifiable ceiling effects. Principal component analysis produced four components comprising aspects of cleanliness, appearance of personnel, apparent contamination and adherence to guidelines. The four scales had good internal consistency (Cronbach- α = 0.704 – 0.827). Item correlation was homogeneous and of adequate size. Analysis of variance showed significant differences in satisfaction scores with older, male and participants with additional insurance having a better perception of hospital hygiene than their counterparts. The findings of the PCA with four factors indicates good internal consistency and fairly homogeneous item correlations, showing that the factors are internally reliable. ANOVA results show plausible age effects. Similar effects have been described in the literature. Gender effects could also been shown, but here the literature is not as concurrent. Some studies report findings of women being more critical or report more problems with health care services while others did not find a distinct gender correlation to satisfaction. The overall results suggest that the instrument is a reliable and valid instrument to assess hospital hygiene perceived by patients.