Development and validation of perceived access to health care measurement instrument

ABSTRACT

Background: To achieve equity in access to healthcare, there is need for an appropriate method to measure and compare access to health care. Measuring access from user's perspective in terms of satisfaction and perceptions on access dimensions has been found to be associated with healthcare seeking behaviour, self-reported health status, and quality of life. This study is an attempt to develop and validate an instrument to measure and compare access from user's perspective. Materials and Methods: The instrument was developed using a standard methods including validating theoretical importance of items and constructs, ensuring representativeness and appropriateness for data collection, and the statistical evidence of the constructs and its reliability. A study was conducted where participants completed self-administered questionnaires. Structural and construct validity were measured using principal component analysis and the Pearson Correlation test for item-summary score correlation. Known groups validity was assessed using a two-sample t-test. Result: A 25-item AHC instrument and its subscales fulfilled content validity evaluation. Structural validity test found evidence for the existence of 6 components from the principal component analysis in data extraction: approachability, availability, accessibility, affordability, acceptability, and accommodation with an eigenvalue of above 1.0 and total cumulative variance of 63.67 percent. Construct validity test showed that the items of the instrument correlated with the hypothetical structure of the six summary scores and strong known groups validity. The result shows that the six latent factors and overall access have satisfactory internal consistency. Conclusion: The 25-item AHC instrument is a multidimensional, valid, and reliable instrument for measuring access to health care. Most importantly, with its all-encompassing indicators, the instrument can be used to measure and compare access to health care between population groups.

Keyword: Access to healthcare; Vulnerability; Disability; Multidimensional scale; Factor analysis