

MEASURING BARRIERS TO INCONTINENCE CARE SEEKING

Hypothesis / aims of study

Health disparities in a heterogeneous population can partially be explained by differences in access to quality healthcare. Incontinent female Hispanics and Non-Hispanic African Americans may have unique barriers to incontinence care to which Caucasians remain unexposed. Barriers are specific, objective, external conditions that prevent someone from seeking care. Yet a incontinence-specific barrier measurement tool has not been validated to operationalize a barrier variable. The objective of this study was to establish the factor validity of a modified Melnyck's Barrier Scale and estimate its reliability in a racially heterogeneous incontinent female population.

Study design, materials and methods

Melnyck's Barriers Scale was developed to operationalize the concept of barriers as the consumer's perceptions of cost or obstacles to care. The 19-item modified Melnyck's Barrier Scale was constructed from 3 items with the highest loadings on the relationship factor, 2 items with the highest loadings on the site-related factor, 3 items with the highest loadings on the cost factor plus 3 items from the incontinence medical literature which were hypothesized to load on the cost factor, 3 items with the highest loadings on the fear factor, and 2 items with the highest loadings on the inconvenience factor plus 3 items from the incontinence medical literature which were hypothesized to load on the inconvenience factor. Racially heterogeneous incontinent focus group participants (n=63) were administered the 19-item questionnaire to refine its wording prior to conducting computer assisted telephone interviews (CATI). CATIs were conducted on a nonprobability sample of 275 incontinent females (95 Caucasian, 95 African American, 80 Hispanic, 5 Other). Study participants were asked to rate the degree to which barrier items affected their seeking medical care for incontinence on a 4-point Likert scale ranging from 0 (none) to 3 (greatly). A confirmatory factor analysis was conducted to confirm the structure of the modified Melnyck's Barrier Scale and assess its fit in our racially heterogeneous incontinent female population. Cronbach's alpha coefficients were estimated to establish the reliability of the final barrier measurement model and its subscales.

Results

Only 1 of 6 barrier items ("Office hours at the office or clinic are limited") from the incontinence medical literature was retained in the model. This barrier item loaded on the inconvenience factor with a factor loading of 0.812. In the final model, the 14-item modified Melnyck's Barrier Scale contained 3 items that loaded on the inconvenience factor (factor loadings 0.659-0.812). The barrier item with the highest loading ($r = 0.812$) on the inconvenience factor was "office hours at the office or clinic are limited." Three items loaded on the relationship factor (factor loadings 0.452-0.796). The barrier item with the highest loading ($r = 0.796$) on the relationship factor was "the physician or nurse practitioner doesn't take time to explain what he or she is doing or why, or answer my questions." Two items loaded on the site-related factor (factor loadings 0.554-0.960). The barrier item with the highest loading ($r = 0.960$) on the site-related factor was "the office or clinic is too far away." Three items loaded on the cost factor (factor loadings 0.481-0.891). The barrier item with the highest loading ($r = 0.891$) on the cost factor was "my insurance is too complicated to figure out." Three items loaded on the fear factor (factor loadings 0.457-0.624). The barrier item with the highest loading ($r = 0.624$) on the fear factor was "I am afraid to find out I have a serious problem." A CMIN/DF of 2.12, GFI of 0.93, CFI of 0.93, and a RMSEA of 0.064 (P CLOSE 0.060) established the fit of our final model. Cronbach's alpha coefficient for the final 14-item Modified Melnyck's Barrier Scale was 0.828 (Inconvenience subscale 0.79, Relationship subscale 0.68, Site related subscale 0.69, cost subscale 0.71, fear subscale 0.57)

Interpretation of results

The 14-item modified Melnyck's Barrier Scale is a valid and reliable tool for measuring barriers to incontinence care seeking. It can be used to measure barriers in a racially heterogeneous incontinent female population.

Concluding message

Race-specific barriers to incontinence care seeking are potentially modifiable which should increase the percentage of women who seek care thereby reducing health disparities between heterogeneous populations. (Supported by NICHD R03 HD-00-012)

FUNDING: National Institute of Child and Human Development