

45th Biennial Convention (16-20 November 2019)

Development and Psychometric Evaluation of the Cervical Cancer Belief Scale

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Background/Introduction:

Despite the documented low use of the Pap smear services in Sub-Saharan Africa, instruments that are designed to measure beliefs about cervical cancer screening among black in this region are presently not available. Rather, instruments that are available are those that have been developed for and tested on white women in developed countries. Beliefs of these women about cervical cancer may be different from those of Black women in Sub-Saharan African. Valid and reliable instruments are needed to guide development of culturally relevant intervention programs. The aim of this presentation is to report on the development and testing of the psychometric properties of the Cervical Cancer Belief Scale.

Method

The study was done in four phases.

Item Generation: 15 items were generated for each of four conceptually defined HBM constructs: Perceived susceptibility, severity, benefits, and barriers.

Content Validity: Four content experts evaluated the content. Fifty five items were retained for instrument development: perceived susceptibility - 11, severity - 14, benefits - 15 and barriers - 15, all measuring on a 4-point Likert scale ranging from strongly disagree (1) to strongly agree (4).

Pilot Testing: The instrument was pilot tested on a convenient sample of 30 women in Botswana and revised as needed.

Reliability: The revised instrument was submitted to a larger sample of 300 Black women in Botswana, aged 30 years.

Findings

Validity: Validity Index (CVI) for the 55 items ranged from 0.50 – 1.00.

Reliability: Reliability analysis using Cronbach's Alpha gave generally satisfactory results with values from .53 to .89. Thirty six items were retained. Perceived Barriers (14 items), Perceived Benefits (8 items), Perceived Severity (4 items), and Perceived Susceptibility (10 items).

Conclusion

Understanding women's beliefs about cervical cancer and the Pap Smear test will assist development of effective cervical cancer screening programs. The findings have added new knowledge for the profession.

Title:

Development and Psychometric Evaluation of the Cervical Cancer Belief Scale

Keywords:

Cronbach's Alpha, Reliability and Validity

References:

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Abstract Summary:

The primary objective of the study is to report on the development of the instrument to measure beliefs about cervical cancer and screening among women in Botswana.

Content Outline:

Background/Introduction

Method

Findings

Conclusion

First Primary Presenting Author

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Author Summary: This study is a continuation of my program of research, which started with my dissertation findings. Guided by the Health Belief Model, my dissertation (McFarland, 2004) indicated a relationship between personal beliefs about cervical cancer and women's use of available cancer screening services. The program is dedicated to improving the understanding of the relationship between the personal beliefs about cervical cancer and preventive services. I have published several articles and presented at nationally and internationally.