



Barriers and Facilitators of Theory-based Cervical Cancer Screening: An Application of the Theoretical Domains Framework

Mehran Rostami Varnosfaderani¹, Zahedeh Khoshnazar¹, Iliia Ghotb Tahriri², Sayna Azimiyan², Fatemeh Ebrahimipoor², Fatemeh Amirmohseni², Parisa Hosseini Koukamari^{3*}

¹Student Research Committee, Shahid Beheshti University of Medical Sciences, Tehran, Iran

²Student Research Committee, Saveh University of Medical Sciences, Saveh, Iran/USERN office, Saveh University of Medical Sciences, Saveh, Iran

³Social Determinants of Health Research Center, Saveh University of Medical Sciences, Saveh, Iran

OPEN ACCESS

*Corresponding Author:

Social Determinants of Health
Research Center, Saveh
University of Medical Sciences,
Saveh, Iran

ABSTRACT

Introduction: One of the critical global health challenges is cervical cancer. In 2020, cervical cancer ranked fourth among the most commonly diagnosed cancers in women. Standard approaches for early detection include screening women through Pap smear and human papillomavirus testing. Regular participation in screening programs is crucial, as early detection of cervical cancer through Pap smear can significantly reduce the complications and mortality associated with the disease. Approximately 50-90% of women who have developed cervical cancer or died from the disease have never been screened. Therefore, the present study aimed to identify barriers and facilitators to cervical cancer screening in the context of women's self-care.

Methods and Materials: This cross-sectional study was conducted in the spring of 2023 among 200 women attending comprehensive health centers in Saveh City. Random sampling was conducted from the health system's file and the households of the attendees. The data collection tool was a questionnaire on the determinants of cervical cancer screening based on the theoretical domains framework, consisting of dimensions such as awareness, perceived threat, priority, memory, skills, resources, feelings, perceived behavioral control, social influences, beliefs about consequences, intention, and behavioral regulation. In the original study, the questionnaire demonstrated high reliability with a Cronbach's alpha of 0.80 across all twelve dimensions. In the present study, the formal and content validity and instrument reliability were assessed, and they displayed suitable psychometric properties. The data analysis was performed using SPSS 21.

Results: The average age of participants in the study was 35 years. Among the participants, 44% reported irregular Pap smear testing, and 17.4% had never undergone the test. Also, 60% of women did not have regular gynecological examinations, with 21% citing the absence of symptoms as the reason for not seeking medical attention. The average scores of the theoretical domains framework ranged from 67.8 to 45.12. The highest averages were related to priority, memory and reminders, context, and resources. According to the logistic regression analysis, all twelve domains of the theoretical domains framework influenced the likelihood of undergoing Pap smear testing. The model was able to predict 66% of Pap smear testing behavior.

Conclusion and Discussion: The present study measured the predictors of participation in cervical cancer screening programs among women in Saveh City based on the theoretical domain framework. The theoretical domain framework is crucial for supporting the design of interventions to change behavior. It is a comprehensive framework that combines domains from 33 different behavior theories and 128 theoretical constructs. Therefore, evaluating all potential behavioral predictors increases the likelihood of effectively designing interventions to promote behavior change. By using the theoretical domains framework, this study was able to identify the key determinants.

Citation:

Rostami Varnosfaderani M, Khoshnazar Z, Ghotb Tahriri I, Azimiyan S, Ebrahimipoor F, Amirmohseni F, Hosseini Koukamari P. Barriers and Facilitators of Theory-based Cervical Cancer Screening: An application of the Theoretical Domains Framework. *Iranian biomedical journal* 2024; 28(7): 9.

Keywords: Diagnosis, Neoplasms, Women

