

RESEARCH ARTICLE

Review of Strategies in Promoting Attendance for Cervical Screening

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Abstract

Background: The importance of cervical screening has been addressed in numerous studies. However, reviews conducted to explore of strategies to promoting attendance for cervical screening have been limited. This study aimed to explore strategies to promote attendance for cervical screening. **Materials and Methods:** A literature search from databases (1994-2011) was undertaken to include papers that identified strategies related to the cervical screening. **Results:** Twenty-four papers were included in this review. The review of existing strategies identified valuable information on cervical screening and areas that could be improved in meeting womens' needs. **Conclusions:** The review highlighted important aspects of cervical screening that could be further addressed by promoting strategies to attendance. Assessing women's health beliefs, inpatient cervical cancer screening, nurse-led screening, and cognition-emotion focused programs are among the strategies to promote attendance for pap smear testing.

Keywords: Cervical screening - health professionals - pap smear - promoting attendance - strategies

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Introduction

Cervical cancer remains a significant cause of mortality and morbidity among women as it is the most common form of lower genital tract malignancy (Waxman, 2005). According to the data of the Turkish Ministry of Health for the year 2003, cervical cancer was in third place among genital cancers with 763 cases. The incidence rate was 2.2 (Ministry of Health, 2008).

Onset of intercourse before age 20 years, multiple sexual partners, sexual partner who has had multiple sexual partners, history of HPV or sexually transmitted disease, smoking, exposure to DES (diethylstilbestrol) in utero, lack of barrier method contraception are among the risk factors for cervical cancer (Foulks, 1998). Human papilloma virus is responsible for more than 99% of cervical cancers. It is also known that HPV plays a role in the aetiology of 85% of anal cancers, 50% of vulvar, vaginal and penile cancers and 20% of oropharyngeal cancers (Williamson et al., 2002). HPV types 16 and 18 are the highest risk carrying types that are responsible for 70% of cervical cancer cases (Güvenç, 2008).

Papanicolaou (Pap) smear testing is an effective method of detecting, preventing and delaying the progress of cervical cancer (Özgül, 2008). According to the Turkish National Cervical Cancer Screening Program standards, women should have undergone Pap smear tests after the age of 35 (Department of Cancer Control, 2008). The uptake rate for cervical screening varies not only

worldwide but also within populations. Many complex factors influence a woman's decision about cervical cancer screening. Factors thought to influence a woman's decision include socio-economic status, population mobility and ethnicity as well as extent to which women perceive themselves at risk of developing cervical cancer (Byrd et al., 2004). According to another study results, factors found to be related to women's decisions not to participate in cervical cancer screening at all include a lack of confidence in the benefits of screening, previous negative health care and preventive experiences, a belief in one's own ability to discern health changes or that one was not at risk for cervical cancer (Blomberg et al., 2008).

The introduction of population-based screening programmes for cervical cancer has contributed to a reduction in both mortality and morbidity rates by identifying those women who have an intraepithelial pre-invasive lesion (Foulks, 1998). However, the extent to which this condition is identified will depend on the uptake of cervical screening, in particular returning for repeat Papanicolaou (Pap) smears at the appropriate time interval.

It has been conducted numerous studies revailing strategies to promoting cervical screening separately. However, a review aims to reveal these evidence based strategies within one study is sparse. In this review, it was aimed to explore strategies to promoting the attendance Pap smear testing. It will provide guidance health professionals to promote the attendance cervical

Materials and Methods

Search method

The study aimed to identify papers from 1994 to 2011. The search was limited to publication from 1994 onwards as recent publications may have more relevance to current practice as compared with earlier studies. Four search terms (cervical screening; health professionals; pap smear; promoting attendance) were used to search in CINAHL, PubMed, ScienceDirect, Scopus and Web of Science databases. Additionally, reference lists of all the retrieved articles were checked for additional publications. Only those publications that met the following criteria were used: (i) the study had to have either identified factors that effect pap smear attendance or strategies related to promoting pap smear attendance; (ii) the papers had to be peer reviewed, including research and theoretical literature; Editorials, opinions or discussions were excluded.

Search outcomes

The search strategies yielded 318 articles, and after applying the inclusion criteria to the abstracts of these articles, 37 were included for full text review. After reviewing the full text of these articles, another 18 were excluded because they were insufficient in detail on the report of methodological processes or did not provide a full description or evaluate the outcome of the strategy. The reference lists of the remaining 19 were reviewed, and a further five articles were identified that met the inclusion criteria, making a total of 24 articles cited in this paper. 24 articles identified strategies related to factors that

effect pap smear attendance and promoting the attending cervical screening. Of the 24 papers, six were qualitative research studies, 14 were quantitative studies and four were theoretical literature. A summary of these studies can be found in Table 1. When evaluating the quality of the research studies, the methodologies used were found to be congruent with the studies' aims. Although the papers varied in methodological quality, their results supported and complemented each other. Twenty-four papers which have been reached in accordance with the key words and the inclusion criteria were read by the researcher separately. Strategy to promoting cervical screening were identified for all the papers.

Results

Research results have demonstrated that beliefs, motivation, knowledge, attitudes and previous experience of Pap smears affect women's decisions to have a Pap smear test (Harlan et al., 1991; McKiernan et al., 1996; Güvenç et al., 2011; Issah et al., 2011). Güvenç et al. (2011) used The Health Belief Model Scale for Cervical Cancer and Pap Smear Test and they concluded that the health beliefs of women affect their decisions to have a Pap smear test. On the other hand, Harlan et al. (1991) found intrinsic factors the main reason for non-compliance of Pap smear screening. A major reason stated by women for non-attendance was that they believed screening to be unnecessary as they had no health problems. Evidence from the data, however, suggested that other factors might also influence compliance rates such as education levels, the belief that there was very little they could do to reduce their chance of developing cervical cancer and being postmenopausal. McKiernan et al. (1996) state that

Table 1. Summary of Selected Literature Review Related to Strategies to Promoting Attendance for Cervical Screening

Author	Study aim	Study Design	Sample	Strategy used
Twinn and Cheng 1999	To examine the effectiveness of nurse-led screening programmes for cervical cancer	Case study design	A convenience sample of 50 women	Nurse-led screening
Güvenç et al. 2011	Development and psychometric testing of the Health Belief Model Scale for Cervical Cancer and the Pap Smear Test	Methodological research	237 women	Assessing the women's health belief
Richards and Klemm 2000	To introduce an inpatient cervicalcancer screening program	Review	Review	Inpatient cervical cancer screening
Park et al. 2005	To examine the effects of an emotion-cognition focused program on the decision of taking Pap tests.	Nonequivalent, control group	A convenience sample Intervention: 48 Control:48	Cognition-emotion focused program
Ackerson 2010	To identify personel influences that affect motivation in Pap testing	Qualitative	24 women	Offering women the choice of a provider
Maree and Wright 2011	To explore if cervical cancer information presented in a non-stigmatizing manner could promote screening in women	Exploratory survey	105 women	Non-stigmatizing manner
Ackerson and Preston 2009	To understand why some women with access to care do not seek cancer screening	Systematic review	19 papers	Offering information when patients come for unrelated reasons
Lartey et al. 2003	To ascertain the knowledge, and attitudes regarding the Pap test	Survey	538 women	Motivation of primary health care nurses to perform cervical screening
Duran 2011	To examine women's attitudes toward cervical cancer	Qualitative	11 women	Assessing the women's attitudes
Hoyo et al. 2005	To identify reasons for non-adherence to pap smear screening	Cross-sectional	144 women	Interventions addressing pain

intrinsic factors include knowledge, beliefs and attitudes towards both cervical cancer and Pap smears and extrinsic factors include the organization and delivery of the screening service as well as accessibility and acceptability of the service provided.

Ackerson (2010) demonstrated that the gender of the provider contributed to some women avoiding the screening test. She suggested that offering women the choice of a provider may decrease negative experiences associated with the exam, promoting repeat screening behavior. Güvenç et al. (2011) emphasized that shyness due to religious factors or gender roles might be an important reason for Turkish women not to have a Pap smear. They also emphasized that higher barrier perceptions on the part of women who had not had a Pap smear indicate that appropriate motivators should be in place and barriers should be reduced as much as possible to ensure the highest level of participation in screening programmes.

Seow et al. (1995) demonstrated that women's previous experience of Pap smears also influenced their intention to participate in screening programmes. Women who had had a previous smear cited factors such as embarrassment and discomfort influencing their decisions about returning for further screening. Among those women who had not had a previous smear their belief in their personal susceptibility of developing cervical cancer was identified as a significant factor influencing uptake rates. Hoyo et al. (2005) demonstrated that the perception that the Pap test was painful was associated with non-adherence to screening recommendations. They concluded that future interventions addressing pain during a Pap test will likely increase acceptability of and adherence to cervical cancer screening. Additionally, they suggested that pain could be addressed either by providing information during the pap test and/or using smaller lubricated speculums.

Twinn and Cheng (1999) demonstrated that high levels of satisfaction among those women who had experienced the screening procedure provided by the nurse practitioner.

Women demonstrated their confidence in the practitioner as well as their high level of satisfaction with her ability to explain what was happening during the procedure. The researchers concluded that appropriately trained nurses can contribute to the provision of screening programmes for Pap smears.

Akyüz et al. (2011) found that health professionals do not provide adequate information to HPV positive women because of ethical issues. Turkish society is rather traditional, thus sexuality is often acceptable under marriage conditions. As a result of this traditional way of thinking, women do not consider the possibility of having contracted a sexually transmitted disease. The researchers emphasized that healthcare staff, using a multidisciplinary approach, should determine how the patients are to be informed, bearing in mind the ethical issues. Contrarily In Botswana, the causes of cervical cancer that were most frequently identified by the women included sexually transmitted diseases, multiple parity, and multiple sexual partners (McFarland, 2003).

Eroğlu et al. (2011) found that women who are at risk for cervical cancer showed high positivity rate, especially in oncogenic HPV types. It has been also known that untreated infections caused by HPV 16 and 18 increases the risk for cervical cancer. It is therefore important to identification of women who are at risk through pap smear screening and to determine the presence of HPV as well. Breitkopf et al. (2005) suggest a need to improve women's understanding of the linkage between sexual behavior, HPV, Pap testing and cervical cancer. Their results also reflected concerns about the pain and discomfort of the Pap test, a need for better communication between providers and patients, a desire for more information on the exam procedure, questions regarding the importance of the Pap test and a need for information about the severity and treatment of abnormal results. Teitelman et al. (2009) emphasized that the new human papillomavirus vaccine advances cervical cancer prevention; however, provider-recommend screening with Papanicolaou tests and lifestyle modifications are still needed.

The inpatient cervical cancer screening program is an effective way to screen low-income and underserved females who otherwise may not be screened (Richards and Klemm, 2000). In the program, Pap screening has been the responsibility of a single nurse clinician in the gynecology and obstetrics department, with physician support as needed. The patient is sent letter. Letter informs the patient that her primary care physician has been sent a copy of the results and provides contact numbers for the hospital outpatient clinic. The primary attending physician is sent a faxed letter, signed by the Cervical Cancer Screening Program medical director, which includes the results of the cytopathology and the telephone number of the medical director with questions or concerns (Richards and Klemm, 2000).

In a review, Ackerson and Preston (2009), demonstrated that non-adherence results when women fear medical examinations, providers, tests and procedures, do not have/seek knowledge about risk and frame their current health as the status quo. They also stated that women who fear cancer or the screening process may paradoxically avoid

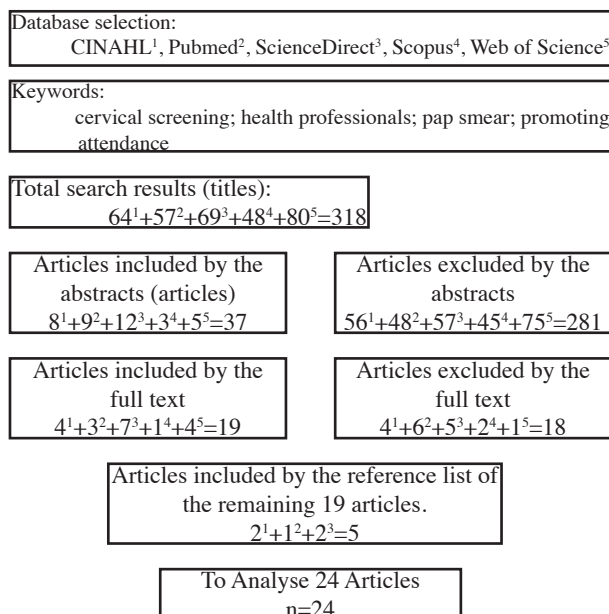


Figure 1. Data Extraction

the information needed to reduce their fear, meaning that even when the information is presented, it may be ignored. They emphasized that information about screening needs to be consistent, offered even when patients come for unrelated reasons, and presented in an active manner that encourages dialogue, rather than a passive one that easily ignored (e.g. a pamphlet).

Lartey et al. (2003) concluded that further education of the population and increased motivation of primary health care nurses to perform cervical screening are high priorities. Additionally, a dedicated screening team in a mobile clinic or incorporation of screening into routine primary care services were among the recommendations.

Park et al. (2005) examined the effects of a program focused on cognition-emotion as a useful strategy to increase participation in Pap screening by Korean women. The program made a difference in the intention to have the test and in the stage of adoption of action for Pap screening. The core contents of the program reflected the results of a previous qualitative study conducted through focus groups to explore cognitive and affective attributes that women experience related to Pap tests.

Discussion

This review identified the strategies to promoting cervical screening. Assessing the women's health belief, inpatient cervical cancer screening, nurse-led screening, and cognition-emotion focused programs are among the strategies to promoting attendance for pap smear testing.

In this review, it was determined that healthcare professionals need to understand how cultural values and beliefs influence screening practice and to develop programmes using culturally appropriate messages and strategies (Duran, 2011; Maree and Wright, 2011; Gu et al., 2012). Naish et al. (1994), in a qualitative study, identified extrinsic factors, such as the organization of the clinic and the gender of the smear taker. Similarly, Temple-Smith et al. (1995) demonstrated that the practitioner taking the Pap smear were also identified as important factors influencing uptake of the service. The women not only highlighted the need for the practitioner to be 'good' but also the majority believed they would be less embarrassed if the practitioner was female. Better understanding of these determinants will give guidance for the development of effective interventions with a reasonable chance of producing changes in health behaviour.

As in HPV infection, sometimes cultural and ethical reasons can make health professionals hesitant to give the facts. For example, Turkish society is rather traditional, thus sexuality is often acceptable under marriage conditions. As a result of this traditional way of thinking, women do not consider the possibility of having contracted a sexually transmitted disease (Akyüz et al., 2011; Duran, 2011). Therefore, the fact that 'HPV is sexually transmitted' could not be explained to women. Moreover, even HPV positive women have very limited awareness of HPV as a sexually transmitted disease as they are provided with insufficient information because of social and ethical considerations. Another reason for the lack of knowledge in this area is the fact that the most well-known sexually

transmitted infection is AIDS (Akyüz et al., 2011). This review also demonstrated that in some countries in the world, women predominantly associated cervical cancer with childbearing and sexual activity rather than with other factors. On the other hand, most of the women with at least one Pap smear test in their lifetime had opportunistic testing because they had gynaecological symptoms. These results suggest that Pap smear tests are used mostly as diagnostic rather than as screening tests.

Since sociocultural characteristics and health beliefs affect the decision to have a Pap Smear Test, it is important for health professionals to be aware of this, to inform women about the topic and make the experience of a gynaecological examination a positive one through effective communication (Maree and Wright, 2011). Understanding how sociocultural attitudes and health beliefs influence women's cervical cancer screening practices will help healthcare professionals to develop more effective cervical cancer screening programmes.

Widespread implementation of the vaccine and delivering cervical cancer screening is important. Health professionals are ideally suited to address these needs by providing education to patients and families. With their holistic approach to health care and high patient contact, nurses are in a particularly good position to enact such changes in clinic settings. They are in a position to provide information about Pap smears, risk factors for cervical cancer, and cervical cancer because they are in contact with women in a variety of settings (Maree and Wright, 2011; Damiani et al., 2012). For example, the nurse may meet a woman while she is obtaining prenatal or contraceptive care or when she brings a child for immunizations or well child care. Any of these times is ideal to discuss with the woman the need for routine gynecologic care. Nurses can use any contact with women to teach them how to help protect themselves from cervical cancer (Twinn and Cheng, 1999; Issah et al., 2011).

In conclusion, the review explored the strategies to promoting attendance for cervical screening. Assessing the women's health belief, inpatient cervical cancer screening, nurse-led screening, and cognition-emotion focused programs are among the strategies to promoting the attendance for pap smear.

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