

KNOWLEDGE AND ATTITUDES OF WOMEN TOWARDS CANCER AND SCREENING METHODS

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Summary

Introduction: Global estimates indicate 527,624 new cases and 265,672 deaths from cervical cancer per year. Lack of knowledge and poor attitude towards disease and risk factors can influence screening practices and the development of preventive behaviour for cervical cancer.

The aim of this review is to evaluate the knowledge, attitude, procedures and factors for cervical cancer in women.

Research material and methods: Relevant articles for this review have been identified by searching the electronic database: MEDLINE / PubMed. The search was limited to articles published between 2017 and 2019 in English. Based on the key words (cervical cancer, screening, knowledge and attitudes of women), a review of selected articles dealing with this topic was made. This paper presents an analytical meta-analysis based on secondary data published in scientific journals.

The results of the research indicate a lack of awareness and a negative attitude towards cervical cancer as a barrier to early screening and the need for more educational campaigns in order to overcome the identified knowledge gaps and increase the number of screenings for cervical cancer.

Conclusion: A review of the results of these studies indicates the importance of creating awareness, increasing knowledge, promoting the active search for health information and experiences of receiving information from any source of information related to cervical cancer. It will therefore be necessary to integrate cervical cancer prevention strategies with other reproductive health services at all levels of the health care delivery system.

Key words: cervical cancer, knowledge, attitude, screening.

Introduction

Every year, more than half a million women are diagnosed with cervical cancer, and the disease results in over 300,000 deaths worldwide. Recent global figures estimate 527,624 new cases and 265,672 deaths from cervical cancer annually. Cervical cancer rates are highest in East Africa (including Zimbabwe) and lowest in West Asia. However, it is the second most common type of cancer in women in the Southeast Asian region and the leading cause of cancer death in low- and middle-income women (1). When it comes to the Scandinavian countries, the incidence of cervical cancer in the 1960s was higher in Denmark than in Norway and Sweden. However, decades of cytological screening are likely to contribute to the convergence of the incidence rate across Scandinavia, with the incidence of cervical cancer still remaining the lowest in Sweden (2).

Cervical cancer can be largely prevented. Approximately 90% of cervical cancers occur in low- and middle-income countries that lack organized HPV screening and vaccination programs. In high-income countries, the incidence and mortality from cervical cancer have halved in the last 30 years since the introduction of formal screening programs. The treatment of cervical cancer is based on the FIGO 2009 stage of cervical cancer. Treatment depends on the extent of the disease at diagnosis and locally available resources, and may include radical hysterectomy or chemo and radiation, or a combination of both. Cervical cancer is usually preceded by a slowly progressive preinvasive lesion, dysplasia, which can be detected by a screening test, the Papanicolaou test. Because dysplasia and early invasive cancer typically develop in young women, the need for conservative management is of great importance for preserving a woman's reproductive ability. Conservative, fertility-preserving surgeries have become standard therapy for low-risk women, in the early stages of the disease (3-5)

Most deaths from uterine cancer occur in women who have never been examined or treated as well as in those who have emphasized risk factors. The progression of cervical cancer to its later stages can be prevented by screening and treatment of premalignant lesions. Thus, in developed countries, the incidence of cervical cancer is controlled thanks to effective screening programs, especially the systematic use of the Papanicolaou (Pap) test. In many developing countries,

screening services are not available to the majority of the population or are poorly accessible, as is the case in all transition countries (8).

Lack of knowledge and poor attitude towards disease and risk factors can influence screening practices and the development of preventive behavior for cervical cancer. **The aim** of this review is to evaluate the knowledge, attitude, procedures and factors for cervical cancer in women.

Research material and methods: Relevant articles for this review have been identified by searching the electronic database: MEDLINE / PubMed. The search was limited to articles published between 2017 and 2019 in English. Based on the key words (cervical cancer, screening, knowledge and attitudes of women), a review of selected articles dealing with this topic was made. This paper presents an analytical meta-analysis based on secondary data published in scientific journals.

Research results

Karadag Arli et al. conducted a cross-sectional study, involving 1,886 women in Turkey. Data were collected through a questionnaire. The knowledge and behavior of women aged 40 and over about screening methods or cervical cancer were examined in accordance with the level of education. The results showed that the rates of those who had a clinical examination and Pap test were significantly lower in women aged 39 and over ($p < 0.01$). This study identified the most important risk factors for cervical cancer as low level of education, high number of births, obesity and low socioeconomic development. For this reason, public health strategies need to be developed to minimize these risk factors (9).

Jovanović V. et al. conducted a study to examine the relationship between women's knowledge of cervical cancer and the pap test and the perception of barriers to women's participation in preventive screening. The study included 300 women aged 21 to 69, residing in the city of Belgrade (Serbia), who underwent a medical examination at the University Clinic for Gynecology and Obstetrics - "Narodni Front" from June to December 2014. The survey data collection instrument was a modified questionnaire. Patients were divided into three groups: the study group consisted of women who regularly participated in screening (more than three years), women who never

participated in screening, and a control group that included women who regularly participated in screening.

Women who regularly participated in screening (52.7%) had adequate knowledge about cervical cancer and Pap test, while women who participated irregularly (79.4%) or never participated (71.9%) did not have adequate knowledge. There was a significant statistical difference between cervical cancer and Pap test awareness in the group of subjects who participated regularly compared to subjects who participated irregularly or never in screening ($p = 0.000$). As for knowledge about the human papilloma virus (HPV), 80% of women did not know that the Pap test could not be used to detect HPV, and that abnormal Pap test results were a possible consequence of HPV (61.7%). The majority of women (93.7%) had little knowledge of the role of the Pap test in the early detection of cervical cancer. The authors found a significant statistical correlation between women's participation in screening and barriers to participate. Women who participated irregularly or never had barriers such as: lack of time ($p = 0.000$), difficult access to health facilities ($p = 0.000$), lack of knowledge about the Pap test procedure ($p = 0.000$), discomfort ($p = 0.000$) and anxiety about Pap test results ($p = 0.036$). Women who participated regularly did not have prejudices when choosing a gynecologist, unlike the other two groups ($p = 0.028$) (10).

Awewke YH. et al. conducted a cross-sectional survey in Ethiopia, with a total of 583 subjects selected by the random causation technique. A tested questionnaire with structured interviewers was used to collect data. In the results, the authors state that 270 respondents had poor knowledge (46.3%) about cervical cancer and screening methods. Inadequate health behavior, lack of information on cervical cancer and its prevention, as well as lack of interest in this topic were shown to be related to risk factors and poor knowledge (11). A study aimed to assess knowledge about cervical cancer was conducted on the female student population, also in Ethiopia. A total of 84 (14.5%) study subjects were sexually active. Of all participants, 232 (40.5%) had heard of cervical cancer, 195 (35.6%) had a good knowledge of cervical cancer, and only 185 (33.2%) thought they were susceptible to cervical cancer. The authors conclude that the level of knowledge about cervical cancer and the perception of acquiring the disease is very poor, and that interventions and health education are needed to improve awareness that will affect the health of young women, thus preventing morbidity and mortality from cervical cancer (12).

Mukama T. et al. conducted a cross-sectional study in eastern Uganda, in which 900 women aged 25 to 49 participated. The knowledge and attitude of women towards the prevention of cervical cancer were assessed and evaluated, based on a survey questionnaire. In the results of the study, the authors state that the majority (794; 88.2%) of the respondents had heard of cervical cancer, the majority (557; 70.2%) received information from the radio, and 120 (15.1%) from health care institutions. Most women (562; 62.4%) knew at least one preventive measure (743; 82.6%) and at least one symptom or sign of the disease. The majority (684; 76.0%) of respondents believe that they are at risk of cervical cancer, while (852; 94.6%) consider it a serious disease. Although general knowledge about cervical cancer prevention was relatively high in women, and attitudes were generally encouraging, specific knowledge about screening was low. There were also undesirable perceptions and beliefs regarding cervical cancer among the subjects (13).

In India, a study was conducted, which was designed to assess knowledge, attitude and practice towards cervical cancer, screening and prevention. A total of 403 respondents participated in the study, who were interviewed using a pre-qualified cervical cancer questionnaire. The majority (301; 74.6%) of the respondents had heard about cervical cancer, (168; 41.6%) of them had heard about it from the media, and (83; 20.5%) had heard from friends. Most women knew the symptoms (259; 64.2%), risk factors (253; 62.7%), screening methods (310; 76.9%) and preventive measures (249; 61.7%) for cervical cancer. More than half of women (252; 62.5%) have a positive attitude towards screening. More than three-quarters of women (349; 86.6%) have no practice at cervical screening. Although women have a good knowledge, a positive attitude towards the screening and prevention of cervical cancer, there is still a gap that prevents the introduction of prevention in India (14).

Gu C et al. conducted a study with aim to understand the perception of cervical cancer risk and the role of personal risk factors influencing screening behaviour among Chinese women. Qualitative research design was used. The authors conducted a semi-structured, in-depth interview with 27 women in China. Participants identified that cervical cancer had serious consequences, but were psychologically distanced from the disease because they considered "cervical cancer to be a shameful and deadly disease." Although women identified some of the risk factors for the disease, they had little specific knowledge about human papillomavirus infection in humans, the association with cervical cancer, and the importance of cervical screening (15).

Akinoltan M. et al. conducted a study aimed to assess the correlation of knowledge about the risk of cervical cancer and examine the socio-demographic predictors of self-reported barriers to screening among groups of unemployed low-income women. Data from this study and procedure include 433 women, who received irreversible financing for tests for cervical cancer over a period of 33 months. Data include demographics, knowledge of risk factors, and agreement on potential barriers to screening. Descriptive analysis showed a significant correlation between educational level and knowledge of risk factors ($P < 0.01$). Multivariate analysis found that compared to Caucasians, Hispanics had an increased fear of finding cancer (OR 1.56, 95% CI 1.00-2.43), fear of language barriers (OR 4.72, 95% CI 2.62-8.50), and male physicians (OR 2.16, 95% CI 1.32-3.55) as barriers. Hispanics (OR 1.99, 95% CI 1.16-3.44) agreed that a lack of knowledge about cancer was an obstacle. The identified barriers varied according to age, marital status, and previous screening. Programs aimed at conducting free or subsidized screenings for medically underinsured women should include culturally relevant education and patient care, in order to reduce barriers and improve compliance with safety net screening (16).

Conclusion

Studies conducted around the world have reported a lack of awareness and a negative attitude towards cervical cancer as a barrier to early screening. Therefore, more educational campaigns are needed to bridge the identified knowledge gaps and increase the number of cervical cancer screenings. It is also necessary to take educational measures in order to raise women's awareness of risk factors, as well as to overcome fear and shame, with the ultimate goal of reducing the incidence and mortality caused by cervical cancer in the world.

A review of the results of these studies indicates the importance of creating awareness, increasing knowledge, promoting the active search for health information and experiences, receiving information from any source of information related to cervical cancer. Therefore, it will be necessary to integrate cervical cancer prevention strategies with other reproductive health services at all levels of the health care delivery system.

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