

Cervical Cancer And Prevention Strategies In Public Health: Barriers And Opportunities

Câncer de Colo do Útero e Estratégias de Prevenção na Saúde Coletiva: Barreiras e Oportunidades
Cáncer de Cuello Uterino y Estrategias de Prevención En Salud Pública: Barreras y Oportunidades

RESUMO

O câncer de colo do útero é um dos principais problemas de saúde pública, sendo uma das maiores causas de mortalidade por neoplasias em mulheres, especialmente em países em desenvolvimento. O presente estudo, por meio de um ensaio teórico, buscou analisar as barreiras e oportunidades na prevenção desse tipo de câncer no contexto da saúde coletiva. A metodologia consistiu na revisão e análise crítica de artigos científicos, diretrizes institucionais e políticas públicas voltadas ao rastreamento da doença. Os resultados evidenciaram que as principais barreiras incluem o acesso limitado aos serviços de saúde, desigualdades socioeconômicas, falta de conhecimento sobre a importância do exame citopatológico e hesitação em relação à vacinação contra o papilomavírus humano. Além disso, desafios estruturais, como a baixa cobertura vacinal e a demora no diagnóstico, agravam a situação. No entanto, há oportunidades significativas para aprimorar a prevenção da doença, incluindo a ampliação da busca ativa de mulheres para a realização do exame preventivo, o fortalecimento da educação em saúde e a incorporação de novas tecnologias, como a autocoleta para detecção do papilomavírus humano. Conclui-se que estratégias intersetoriais e políticas públicas mais eficazes são essenciais para garantir o acesso equitativo à prevenção e ao tratamento do câncer de colo do útero, reduzindo a mortalidade associada à doença e promovendo a saúde feminina de forma integral.

DESCRITORES: Câncer do colo do útero; Prevenção; Saúde coletiva.

ABSTRACT

Cervical cancer is one of the main public health problems, being one of the leading causes of mortality due to neoplasms in women, especially in developing countries. This study, through a theoretical essay, aimed to analyze the barriers and opportunities in the prevention of this type of cancer in the context of public health. The methodology consisted of a review and critical analysis of scientific articles, institutional guidelines, and public policies related to disease screening. The results showed that the main barriers include limited access to health services, socioeconomic inequalities, lack of knowledge about the importance of the cytopathological exam, and hesitancy regarding vaccination against the human papillomavirus. Additionally, structural challenges such as low vaccination coverage and delays in diagnosis worsen the situation. However, there are significant opportunities to improve disease prevention, including expanding active search for women to undergo screening, strengthening health education, and incorporating new technologies such as self-sampling for human papillomavirus detection. It is concluded that intersectoral strategies and more effective public policies are essential to ensure equitable access to the prevention and treatment of cervical cancer, reducing disease-related mortality and promoting women's health in a comprehensive manner.

DESCRIPTORS: Cervical cancer; Prevention; Public health.

RESUMEN

El cáncer de cuello uterino es uno de los principales problemas de salud pública y constituye una de las mayores causas de mortalidad por neoplasias en mujeres, especialmente en países en desarrollo. El presente estudio, a través de un ensayo teórico, buscó analizar las barreras y oportunidades en la prevención de este tipo de cáncer en el contexto de la salud colectiva. La metodología consistió en la revisión y análisis crítico de artículos científicos, directrices institucionales y políticas públicas orientadas al tamizaje de la enfermedad. Los resultados evidenciaron que las principales barreras incluyen el acceso limitado a los servicios de salud, las desigualdades socioeconómicas, la falta de conocimiento sobre la importancia del examen citopatológico y la hesitación en relación con la vacunación contra el virus del papiloma humano. Además, desafíos estructurales, como la baja cobertura vacunal y la demora en el diagnóstico, agravan la situación. No obstante, existen oportunidades significativas para mejorar la prevención de la enfermedad, incluyendo la ampliación de la búsqueda activa de mujeres para la realización del examen preventivo, el fortalecimiento de la educación en salud y la incorporación de nuevas tecnologías, como la auto-toma para la detección del virus del papiloma humano. Se concluye que las estrategias intersectoriales y las políticas públicas más eficaces son esenciales para garantizar el acceso equitativo a la prevención y al tratamiento del cáncer de cuello uterino, reduciendo la mortalidad asociada a la enfermedad y promoviendo la salud femenina de manera integral.

DESCRIPTORES: Cáncer de cuello uterino; Prevención; Salud colectiva.

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INTRODUCTION

Cervical cancer (CC) is one of the most prevalent malignant neoplasms among women worldwide, representing a major public health problem, especially in developing countries. In Brazil, this neoplasm is the fourth leading cause of cancer death in women, behind only breast, colorectal, and lung cancers¹. Due to its high incidence and preventable mortality, it is essential to develop effective strategies for its prevention and control.

The main cause of CCU is persistent infection with oncogenic subtypes of Human Papillomavirus (HPV), notably types 16 and 18, which are associated with about 70% of cases of the disease. Screening for neoplasia through cytopathological examination, known as the Pap smear, is one of the most effective strategies for the early detection of cancer precursor lesions and is recommended by the Ministry of Health for women between 25 and 64 years of age who are sexually active⁽³⁾. However, despite the existence of national and international guidelines for screening for the disease, adherence to preventive testing is still insufficient in many regions, especially among vulnerable and low-income populations.

Studies indicate that several barriers hinder preventive screening and adherence to the CCU screening protocol. Among the main challenges are restricted access to health services, lack of knowledge about the impor-

tance of prevention, misinformation about HPV transmission, and cultural resistance to gynecological exams. In addition, social factors such as education, marital status, and age strongly influence women's adherence to screening. Younger women without children, for example, are less likely to undergo preventive screening, which increases the risk of late diagnosis and progression of the disease to more advanced stages¹.

The Family Health Strategy (ESF) plays an essential role in promoting health and preventing CCU by offering free cytopathological screening and conducting health education activities aimed at raising awareness among the female population. However, the literature reveals that there are still difficulties in implementing these strategies due to a lack of resources, lack of training for professionals, and resistance among the population to participate in preventive actions^{3,4}.

Given this scenario, the present study seeks to analyze cervical cancer prevention strategies in the context of public health, identifying barriers and opportunities to improve screening adherence. Understanding the factors that hinder the implementation of preventive actions can contribute to the development of more effective public policies and to the expansion of health services aimed at early diagnosis of the disease.

METHOD

This study is a theoretical essay, a

methodological approach that differs from empirical research in that it is not based on the collection and analysis of primary data, but rather on conceptual reflections and interpretations of knowledge already produced on the subject under investigation. The theoretical essay aims to develop a critical and in-depth argument based on bibliographic sources, exploring concepts, theories, and propositions that broaden the understanding of the object of study⁵.

The theoretical essay is argumentative and interpretative in nature, based on a continuous dialogue with existing academic literature. In this sense, the present research adopts a qualitative approach, as it favors the analysis of texts and concepts over numerical measurements and statistical tests⁽⁵⁾. The study is structured based on a critical reading of scientific articles, books, and institutional documents, seeking to reflect on cervical cancer and prevention strategies in the context of public health.

Academic databases were consulted, including Scientific Electronic Library Online (SciELO), Virtual Health Library (VHL), and Google Scholar, to identify relevant publications on cervical cancer, its barriers, and opportunities in public health. The selection of materials considered the relevance, methodological rigor, and timeliness of the publications.

Based on the literature reviewed, the main discussions on cervical cancer prevention were organized, exploring both the limitations and

possibilities for advancement in this field. The study dialogues with public health theories and concepts, as well as with disease screening and control policies.

The last stage consisted of the central problem of the essay, articulating the challenges and possibilities of cervical cancer prevention from a theoretical perspective. This process involved analyzing the main barriers faced in screening for the disease and discussing innovative strategies to increase women's adherence to cytopathological examination and vaccination against Human Papillomavirus (HPV).

As proposed, a theoretical essay does not seek to present absolute truths, but rather to stimulate critical thinking and contribute to the formulation of new questions and approaches on the topic. Thus, this study does not intend to exhaust the discussion on cervical cancer, but rather to offer a reference point that allows for broadening the debate and strengthening prevention policies in the field of public health.

As this is a theoretical essay, this research did not involve the direct participation of human subjects, and therefore did not require submission to the Research Ethics Committee. However, all sources used were duly referenced, respecting the ethical principles of academic integrity.

RESULTS AND DISCUSSION

The results of this theoretical essay indicate that the prevention of cervical cancer remains a challenge in public health, mainly due to structural, cultural, and individual barriers that compromise adherence to screening and vaccination against Human Papillomavirus (HPV). Analysis of the selected articles reveals that the main difficulties in implementing preventive strategies involve access to health

services, social inequality, misinformation, and gaps in primary care.

Cervical cancer screening through cytopathological examination (Pap smear) has been widely recommended as an effective strategy for early diagnosis of the disease. However, several studies indicate that adherence to the test is still low, especially among women in situations of socioeconomic vulnerability. Authors⁽⁶⁾ point out that women living in rural areas face greater difficulties in undergoing the test, whether due to the distance to health services, the lack of adequate transportation, or the unavailability of trained professionals to perform the procedure.

Another factor that hinders screening is women's negative perception of the test. Authors⁽⁷⁾ have shown that many women associate Pap smears with pain, discomfort, embarrassment, and fear of diagnosis, which generates resistance to undergoing the test. In addition, there are specific barriers for certain population groups, such as lesbian women, people with disabilities, and older women, who often encounter fragmented care that is insensitive to their particularities.

HPV vaccination is one of the most effective strategies for primary prevention of cervical cancer, protecting against the most oncogenic viral types (HPV-16 and HPV-18). However, vaccination coverage is still below ideal levels. Authors analyzed⁽⁸⁾ the factors that contribute to low vaccination uptake and identified that lack of knowledge about the importance of the vaccine and parents' hesitation to allow their children to be immunized are significant barriers.

In addition, misinformation and *fake news* about the HPV vaccine have had a negative impact on population uptake. Many adolescents and their guardians still believe myths about the vaccine, such as that it could encourage early sexual activity or cause seri-

ous adverse effects, which hinders the expansion of vaccination coverage and compromises the long-term effectiveness of the prevention strategy.

Cervical cancer is considered a marker of social and gender inequalities in health, as it mainly affects low-income women with limited access to medical services. Another study⁽⁹⁾ highlights that women served by the Unified Health System (SUS) face longer delays in receiving Pap smear results and referrals for diagnosis and treatment, which compromises the chances of early detection of the disease.

In addition, the lack of infrastructure and specialized professionals in poorer regions directly affects the SUS's ability to offer comprehensive care to patients. The scarcity of adequate equipment for cytopathological examinations and delays in referral to specialized services increase the risk of the disease progressing to advanced stages, reducing the chances of cure.

Given the barriers identified, the literature suggests several opportunities to strengthen strategies for the prevention and control of cervical cancer in public health. Research emphasizes that strengthening health education actions and increasing the involvement of primary care professionals are essential to ensure greater adherence to preventive strategies.

Another alternative would be to expand the active search for women who do not undergo regular preventive exams, in addition to incorporating new technologies to improve access to screening, such as self-collection for HPV testing, which could increase adherence among women who avoid gynecological exams for cultural or emotional reasons.

Finally, there is a consensus in the literature on the importance of more effective and well-structured public policies that guarantee not only the provision of services but also their ac-

cessibility and quality. This includes improving the Family Health Strategy (ESF), greater training of health professionals, and investments in massive campaigns to combat misinformation about the HPV vaccine and the importance of preventive exams.

FINAL CONSIDERATIONS

Cervical cancer is a preventable and treatable disease, but structural, social, and cultural barriers still hin-

der the success of prevention strategies. Evidence shows that the combination of HPV vaccination, regular cytopathological screening, and easier access to diagnosis and treatment can significantly reduce the incidence and mortality of the disease. However, it is essential that the SUS and health managers implement more effective measures to expand access and reduce the inequalities that still impact women's health in Brazil.

This theoretical essay reinforces

the need for intersectoral strategies involving education, health, and public policies to promote equity in access to preventive services. Only through coordinated and structured actions will it be possible to overcome the

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