



Health education for adherence to Papanicolaou: a literature review

Educação em saúde para adesão ao Papanicolaou: uma revisão de literatura

Educación en salud para adhesión al Papanicolaou: una revisión de literatura

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ABSTRACT

Objective: To identify health education interventions carried out for adherence to the Papanicolaou test. **Methods:** This is an integrative literature review carried out in the Medical Literature Analysis and Retrieval System Online (MEDLINE) databases via the National Library of Medicine National Institutes of Health (PubMed), Latin American Literature in Health Sciences (LILACS), Scientific Electronic Library Online (SciELO) and Cumulative Index to Nursing and Allied Health Literature (CINAHL) via EBSCO, using the MeSH Health Education and Papanicolaou Test descriptors. There was no delimitation of date or language so as not to restrict old publications that were of interest for analysis. A total of 1091 articles were found, and after applying the eligibility criteria, the final sample consisted of 18 papers. **Results:** Several educational strategies were described in the studies, being used alone or associated, among them: lectures/verbal communication, educational videos, printed materials, short mobile text messages, telephone calls, music, communication through media such as television, radio, newspapers, and loudspeakers, as well as home visits. The studies used at least one type of media or mobile health technology as an educational strategy, associated or not with printed material and/or verbal communication. **Conclusion:** Knowledge of the subject significantly increases adherence to the Papanicolaou test; educational strategies used as mobile technology, educational talks with the media, adapted messages, and advertising campaigns have proven to be effective in terms of informing, motivating, accepting, raising awareness and women's attitude, in addition to reducing obstacles and barriers imposed for adherence cytopathological examination and also on the importance of the vaccine against the human papillomavirus (HPV).

Descriptors: Health Education; Women's Health; Disease Prevention; Papanicolaou Test.

RESUMO

Objetivo: Identificar as intervenções de educação em saúde realizadas para a adesão ao exame Papanicolaou. **Métodos:** Trata-se de uma revisão integrativa da literatura realizada nas bases de dados Medical Literature Analysis and Retrieval System Online



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(MEDLINE) via National Library of Medicine National Institutes of Health (PubMed), Literatura Latino-Americana em Ciências da Saúde (LILACS), Biblioteca virtual Scientific Electronic Library Online (SciELO) e Cumulative Index to Nursing and Allied Health Literature (CINAHL) via EBSCO, utilizando os descritores MeSH Health Education e Papanicolaou Test. Não houve delimitação de data ou idioma, para não restringir as publicações antigas que interessassem para análise. Foram encontrados 1091 artigos, sendo que, após aplicados os critérios de elegibilidade, a amostra final foi composta por 18 artigos. **Resultados:** Várias estratégias educativas foram descritas nos estudos, sendo utilizadas isoladamente ou associadas, dentre elas: palestras/comunicação verbal, vídeos educativos, materiais impressos, mensagens de texto móvel curtas, ligações telefônicas, música, comunicação por meio da mídia como televisão, rádio, jornais e alto-falantes, além de visitas domiciliares. Os estudos utilizaram pelo menos um tipo de mídia ou tecnologia em saúde móvel como estratégia educativa associada ou não de material impresso e/ou comunicação verbal. **Conclusão:** Os conhecimentos sobre a temática aumentam significativamente a adesão ao exame Papanicolaou; as estratégias educativas utilizadas como tecnologia móvel, palestras educacionais junto à mídia, mensagens adaptadas e campanhas publicitárias demonstraram ser eficazes no que diz respeito à informação, motivação, aceitação, conscientização e atitude das mulheres, além de reduzir os obstáculos e barreiras impostas para a adesão ao exame citopatológico e também sobre a importância da vacina contra o Papilomavírus humano (HPV).

Descritores: Educação em Saúde; Saúde da Mulher; Prevenção de Doenças; Teste de Papanicolaou.

RESUMEN

Objetivo: Identificar las intervenciones en salud realizadas para adhesión a la prueba Papanicolaou. **Métodos:** Se trata de una revisión Integrativa de la literatura realizada em la base de datos Medical Literature Analysis and Retrieval System Online (MEDLINE) via National Library of Medicine National Institutes of Health (PubMed), Literatura Latino-Americana em Ciências da Saúde (LILACS), Biblioteca virtual Scientific Electronic Library Online (SciELO) y Cumulative Index to Nursing and Allied Health Literature (CINAHL) via EBSCO, utilizando los descriptores MeSH Health Education y Papanicolaou Test. No hubo límite de fecha o idioma, para no restringir las publicaciones antiguas que interesasen para análisis. Fueron encontrados 1091 artículos, siendo que, después de aplicados los criterios de elegibilidad, la muestra final fue compuesta por 18 artículos. **Resultados:** Varias estrategias educativas fueron descritas en los estudios, siendo utilizadas aisladamente o asociadas, entre ellas: conferencias/comunicación verbal, videos educativos, materiales impresos, cortos mensajes de texto móvil, llamadas telefónicas, música, comunicación por los medios como televisión, radio, periódicos y altavoces, además de visitas domiciliarias. Los estudios utilizaron por lo menos un tipo de medios o tecnología en salud móvil como estrategia educativa asociada, o no, de material impreso y/o comunicación verbal. **Conclusión:** Los conocimientos sobre la temática incrementaron significativamente la adhesión a la prueba Papanicolaou, las estrategias educativas utilizadas como tecnología móvil, conferencias educacionales junto a los medios, mensajes adaptados y campañas publicitarias demostraron ser eficientes en lo que se refiere a la información, motivación, aceptación, concientización y actitud de las mujeres, además de reducir los obstáculos y barreras impuestas para la adhesión a la prueba citopatológica y también sobre la importancia de la vacuna contra el apillomavirus humano (HPV).

Descriptores: Educación en Salud; Salud de la Mujer; Prevención de Enfermedades; Prueba de Papanicolaou.

INTRODUCTION

Uterine cancer is described as a tumor that develops from the alteration of the cells of the epithelium that lines the organ and compromises the entire latent area; it is considered the fourth most common type of cancer and the fourth cause of death among women. The two principal invasive cervical cancer are squamous cell carcinoma, which accounts for 90% of cases, and adenocarcinoma, responsible for 10% of cases, both caused by oncogenic types of the Human Papilloma Virus (HPV)⁽¹⁾.

The main strategy used to identify suggestive cells of malignant lesions in Brazil is the performance, by nurses and doctors, of the manual exam called Papanicolaou. This low-cost, highly effective, and easy-to-perform test is essential for the early detection of cervical cancer⁽²⁾.

As it is the type of cancer that has one of the highest potentials for prevention and cure when detected early, the Ministry of Health recommends that every woman who has or has had sexual activity be submitted to a Papanicolaou Test periodically. The World Health Organization (WHO) establishes coverage of 80% of the female population to obtain an epidemiological decrease in the occurrence and death of women from the disease. However, despite the effectiveness of the Papanicolaou Test, coverage in Brazil is still low, considering an 85% coverage of the female population to obtain an epidemiological impact⁽³⁾.

Given this context, it is necessary to understand why many women still have fears, doubts, and stigmas that result in low adherence to preventive examination. Health services must carry out promotion and prevention activities, which sensitize and guide users about what it is and how important it is to carry out this examination to reverse this health condition that has had serious consequences⁽⁴⁾.

Strategies that act on the social determinants of the health-disease process and promote adherence to preventive examinations are essential for early detection and reduction of mortality. For the control of uterine cancer, the importance of intersectoral educational actions offered to people or groups is highlighted, which are continuous and enlightening, with health planning and qualification of managers and professionals in the area.

The study is justified due to the high incidence of cervical cancer, and knowledge about effective interventions for adherence to the Papanicolaou Test is of great importance, which is the main strategy for early detection, as well as to reduce mortality from the disease. In this sense, considering the importance of health education to improve adherence to the exam and reduce the number of cases and deaths from uterine cancer.

Therefore, the present study aims to identify the health education interventions carried out for adherence to the Papanicolaou Test.

METHODS

It is an integrative literature review that allows the synthesis of published studies, points out gaps in knowledge guiding the development of new studies, and enables general conclusions on a given subject. The study was developed according to the following steps: 1) identification of the theme and selection of the hypothesis or research question; (2) establishment of criteria for inclusion and exclusion of studies; (3) definition of the information to be extracted from the selected studies; (4) assessment of included studies; (5) interpretation of results; and (6) presentation of the knowledge review/synthesis⁽⁵⁾.

The guiding question was: What are the main health education interventions carried out for adherence to the Papanicolaou Test? It was elaborated through the use of the mnemonic strategy PVO⁽⁶⁾ (Chart 1), in which P (*population*), V (*variable*), and O (*outcome*).

Chart 1 – Subject descriptors located in the Medical Subject Headings (MeSH) for the components of the research question according to the PVO strategy. Crato, Ceará, 2021.

Strategy Items	Components	MeSH
Population	Women	-
Variables	Health education actions	<i>Health Education</i>
Outcome	Adherence to cervical cancer screening	<i>Papanicolaou Test</i>

Source: Author's elaboration.

The study was carried out between May and July 2021 on the platforms: Medical Literature Analysis and Retrieval System Online (MEDLINE) via the National Library of Medicine National Institutes of Health (PubMed), Literatura Latino-Americana em Ciências da Saúde (LILACS), Biblioteca virtual Scientific Electronic Library Online (SciELO) and Cumulative Index to Nursing and Allied Health Literature (CINAHL) via EBSCO.

Using descriptors combined with the Boolean operator AND, the article search strategy was constructed in all databases. The search key was: (Health Education) AND (Papanicolaou Test). The eligibility criteria for selecting the studies were a) original (primary) articles, b) available in full text, and c) that addressed the implementation of health education actions on the Papanicolaou test. Duplicate articles were excluded, and it is noteworthy that there were no restrictions regarding the language and year of publication of the analyzed studies so as not to restrict old ones on the subject that were of interest to the analysis.

In the MEDLINE/PubMed database, 883 articles were obtained, of which 11 met the established inclusion criteria. In CINAHL, 172 studies were found, of which 7 met the established inclusion criteria. In LILACS, 21 articles were identified, but none met the inclusion criteria. Finally, in Scielo, 26 articles were found, but none met the inclusion criteria. Thus, 18 articles that were related to the theme and the objective and contemplated the established eligibility criteria, as shown in Figure 1 were included in the study.

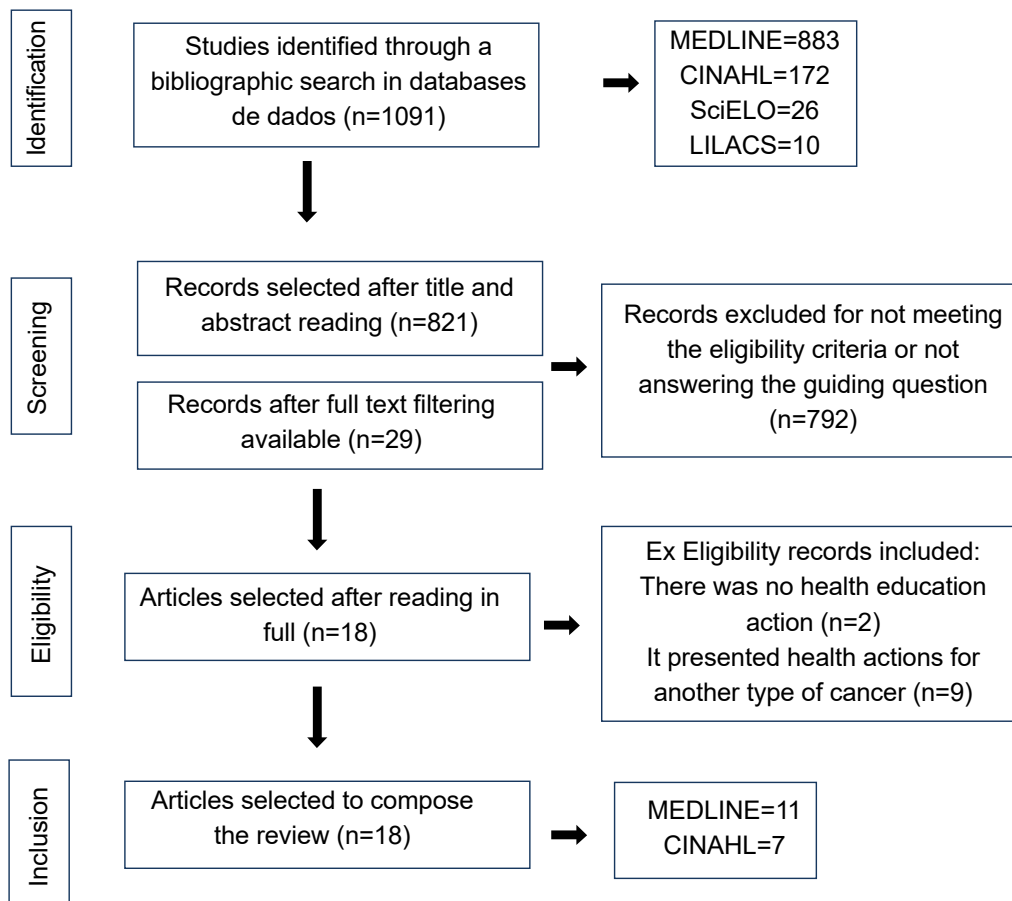


Figure 1 – Study selection flowchart.

RESULTS

18 articles were selected in the final sample, as shown in Chart 2. The year of publication of the studies ranged from 1998 to 2020, with the highest number of publications in the last 5 years, between 2017 and 2020, with 7 (39%) studies. All articles were written in English; 9 (50.0%) were carried out in North America (United States and Canada), followed by Asia (Turkey, South Korea, China, and Malaysia) with 6 (33.5%) and the rest of the publications distributed between Brazil, Greece, and Australia, each country with only 1 (5.5%) article published.

Of the analyzed studies, 8 (44.4%) had as their main objective to verify the effect/efficacy of health education interventions focused on the cervical cancer prevention topic. The number of participating women and the methodological design presented in the studies varied greatly; 6 (33.3%) intervention studies, followed by randomized clinical trials with 5 (27.7%), quasi-experimental with 4 (22.2%) and the others; ecological with 1 (5.6%), study found, cross-sectional with 1 (5.6%) and mixed methods study 1 (5.6%).

Several educational strategies were described in the studies, being used alone or associated, among them: lectures/verbal communication, educational videos, printed materials, short mobile text messages, telephone calls, music, communication through media such as television, radio, newspapers, and speakers, in addition to home visits. It was found that 15 (83.3%) studies used at least one type of media or M-Health technology as an educational strategy associated or not with printed material and/or verbal communication.

From the selected articles, the main results and conclusions indicate that knowledge on the subject significantly increases adherence to the Papanicolaou Test; Educational strategies used such as mobile technology, media educational talks, tailored messages, and advertising campaigns, have proven to be effective in terms of informing, motivating, accepting, raising awareness and empowering women. Besides reducing obstacles and barriers imposed for adherence to cytopathological examination and also on the importance of the vaccine against HPV.

Chart 2 – Summary of articles included in the integrative review. Crato, Ceará, 2021.

Authors	Year/ Country	Purpose of the Study	Outline/ Participants	Educational Strategies Used	Main Results and Conclusions
Romli R, Sa'adiyah Shahabudin NS, Mokhtar N ⁽⁷⁾ .	2020 Malasia	Examine the effectiveness of a health education program to improve knowledge and attitude towards cervical cancer and the Pap smear.	Community-controlled trial with 210 women.	Educational lecture; video; sharing experiences of a cervical cancer survivor; pamphlet; SMS text reminders.	The educational lecture alone was effective in improving knowledge about cervical cancer and the Pap smear, attitude, and testing performance. However, text reminders were more effective than the educational lecture alone in increasing Pap smear test acceptance.
Kurt G, Akyuz A ⁽⁸⁾ .	2019 Turkey	Evaluate the effectiveness of three interventions that are commonly used to increase the uptake of cervical cancer screening.	Intervention study with 356 women.	Individual education accompanied by an educational pamphlet; educational pamphlet only; just an invitation, no additional information.	Interventions to increase knowledge and awareness effectively encourage participation in cervical cancer screening.
Lee HY, Lee MH, Sharratt M, Lee S, Blaes A ⁽⁹⁾ .	2019 South Korea	illustrate how a culturally and individually tailored mobile texting intervention and mobile screening were developed (<i>mScreening</i>).	Intervention study with 20 women.	Mobile text messaging, mobile screening (<i>mScreening</i>).	The creation and delivery of culturally adapted and targeted messages and the use of technological intervention tools, such as visual images and graphic images, are effective ways of delivering content on the topics of this study.
Guvenc G, Akyuz A, Yenen MC ⁽¹⁰⁾ .	2018 Turkey	To determine the effect of three stages of nursing intervention to increase Turkish women's participation in the Papanicolaou test.	A quasi-experimental study with 2500 women.	Flyers; Telephone calls to provide information and make a personal invitation; face-to-face health education.	All three types of nursing interventions were effective in encouraging older women to participate in cervical cancer screening and increasing adherence to the Papanicolaou test.
Valdez A, Napoles AM, Stwort SL, Garza A ⁽¹¹⁾ .	2018 United States	To test the effectiveness of a cervical cancer education intervention to improve knowledge of risk factors, attitudes, self-efficacy, and self-reported behavior related to cervical cancer screening.	A randomized controlled clinical trial with 943 women.	Interactive touchscreen technology that created an individualized learning experience through multimedia (text, voice, music, graphics, animation, and video).	Improved knowledge and attitudes about cervical cancer but did not affect cervical cancer screening behavior
Koç Z, Özdeş E, Topatan S, Çınarlı T, Şener A, Danacı E et al ⁽¹²⁾ .	2017 Turkey	To determine the effect of cervical cancer and human papillomavirus education on healthy lifestyle, behavior, and beliefs.	Mixed methods study with 156 women.	Instructive training every two months lasting 60 minutes each.	The intervention improved health motivation and reduced perceived obstacles to the Papanicolaou test. Through increased knowledge and awareness, the rate of the Papanicolaou test has increased.
Nicolau AIO, Lima TM, Vasconcelos CTM, Carvalho FHC, Aquino OS, Pinheiro AKB ⁽¹³⁾ .	2017 Brazil	To test the effectiveness of behavioral and educational interventions, by telephone, for female attendance at the consultation to receive the Pap smear report.	A randomized clinical trial with 542 women.	Educational call and reminder call.	Efficacy in the educational and behavioral context, concerning usual care, to improve female attendance at the return appointment to receive the results of the Pap smear.
Foley OW, Birrer N, Rauh-Hain JA, Clark RM, Tavi ED, Carmen ⁽¹⁴⁾ .	2015 United States	Understand the factors that affect cervical cancer prevention, screening, and care.	Intervention study with 318 women.	Flyers, radio spots, and monthly education sessions are held at community centers focusing on cervical cancer awareness.	Improved acceptance of HPV vaccination, positive attitudes towards cervical cancer, recent visits to a health care professional, adherence to Pap smears, and intention to vaccinate themselves and their children.
Lee HY, Koopmeiners JS, Rhee TG, Raveis VH, Ahluwalia JS ⁽¹⁵⁾ .	2014 United States	To examine whether the <i>mScreening</i> intervention increased knowledge about cervical cancer.	A quasi-experimental study with 30 women.	Mobile phone technology via SMS or MMS short text message.	Mobile technology is a promising tool to increase awareness and uptake of cervical cancer screening.
Chania M, Papagiannopoulou A, Barbouni A, Vaidakis D, Zachos L, Merakou K ⁽¹⁶⁾ .	2013 Greece	To assess changes in women's beliefs and behavior about cervical cancer.	Intervention study, before and after, with 300 women.	Educational lectures, discussions, and pamphlets.	Effective intervention in modifying health beliefs and behavior concerning cervical cancer. Increased percentage of women getting a Pap smear after a health education meeting.
Love GD, Tanjasiri SP ⁽¹⁷⁾ .	2012 United States	Determining whether a soap opera-themed educational entertainment video is superior to a printed brochure for increasing knowledge, attitudes, and behavioral intent toward the Pap smear test.	A quasi-experimental study with 498 women.	Video with a health message presented in the form of a drama/soap opera; flyer.	Both educational strategies showed increases in knowledge and attitudes about cervical cancer and the Pap smear. These results suggest that any of the modalities can successfully educate.

Authors	Year/ Country	Purpose of the Study	Outline/ Participants	Educational Strategies Used	Main Results and Conclusions
Taylor VM, Jackson JC, Yasui Y, Nguyen TT, Woodall E ⁽¹⁸⁾ .	2010 United States	Evaluate the effectiveness of a lay intervention based on health professionals in improving levels of receipt of the Papanicolaou test.	R a n d o m i z e d controlled trial with 234 women.	Home visits; video; flyer.	Increased levels of Pap smear testing among women who have been screened but not among those who have never had it.
Morrell S, Perez AD, Hardy M, Cotter T, Bishop J ⁽¹⁹⁾ .	2009 Australia	Examine the cervical screening results of the mass media campaign implemented in 2007.	Ecological time series study with 27100 women.	Mass media advertising campaign broadcast on free-to-air TV.	Effectiveness of advertising campaign in increasing cervical screening rates, and increased screening participation of women in general.
Simayi D, Yang L, Li F, Wang Y, Amanguli A, Zhang W, et al et al ⁽²⁰⁾ .	2008 China	Evaluate the effectiveness of an educational intervention for cervical cancer awareness in low-income women.	Intervention study with 4475 women.	Informational pamphlet and broadcast of pamphlet content via a municipal loudspeaker system.	Significantly increased awareness of cervical cancer in low-income women. Economic development and mandatory education are two important solutions to raise general awareness of the disease.
Mock J, McPhee SJ, Nguyen T, Wong C, Doan H, Lai KQ, et al ⁽²¹⁾ .	2007 United States	Promoting cervical cancer screening among Vietnamese American women in Santa Clara County, California.	R a n d o m i z e d intervention study with 1005 women.	Advertisements distributed by television, radio, and newspapers. Lecture with health professionals using a flip chart.	The use of media together with the lecture increased the women's motivation to perform the first Papanicolaou tests and to update on the subject, being better than the media educational intervention alone.
Mullins R, Wakefield M, Broun K ⁽²²⁾ .	2007 Canada	Evaluate whether a mass media campaign could encourage women who were late to get a Pap smear test, without requesting unnecessary early rescreening.	Population-based cross-sectional study with 936 women.	educational television advertisement.	It is possible to run a mass media campaign to encourage cervical screening that is specific to women who are scheduled or overdue for a Pap smear. Without encouraging early rescreening among those who have not yet been tested.
Taylor VM, Hislop TG, Jackson JC, Tu S, Yasui Y, Schwartz SM, et al ⁽²³⁾ .	2002 United States	To assess the impact of two culturally and linguistically appropriate cervical cancer control educational interventions.	R a n d o m i z e d controlled clinical trial with 402 women.	Educational entertainment video and pamphlet-type printed material.	Interventions can improve Pap test levels. Both interventions used are effective in changing cervical cancer screening behavior.
Dignan MB, Michielutte R, Wells HB, Sharp P, Blinson K, Douglas CL ⁽²⁴⁾ .	1998 United States	Reduce cervical cancer mortality among Native American women by increasing the proportion they receive annual Pap smears to screen for cervical cancer.	Quasi-experimental study with 424 women.	Home visits with the presentation of information verbally, using video and printed material.	Increased knowledge and intention to perform the Pap smear annually.

Thus, the articles point out the importance of carrying out educational interventions for the production of knowledge, promoting changes in women's behavior and raising awareness about the prevention of cervical cancer, reducing the perception of obstacles, and increasing adherence to the Papanicolaou Test; in addition to other attitudes that promote health and cancer prevention, such as the improvement in the acceptance of vaccination against HPV.

DISCUSSION

This review sought to identify the health education interventions carried out for adherence to the Papanicolaou Test. There was a higher number of publications in the last five years, especially in verifying the effect/efficacy of interventions on health education about cancer and the uterine cervix, with an emphasis on the use of mobile health media and technologies.

According to the results of this study, most articles related to the researched topic were published in North America and all in English. In another review, study found in the literature with the related theme was observed that most articles that met the inclusion criteria were published in South America and in Portuguese⁽²⁵⁾.

In the past, the most used educational strategies were restricted to informative pamphlets distribution, lectures, and television advertisements, besides the use of local radios or loudspeakers and home visits and advertising campaigns^(18-20,24). Other more current alternatives are the use of interactive technologies through multimedia and mobile technologies through messages that include SMS/MMS videos and reminder phone calls^(7,9-11,13-15,17), as well as training and educational sessions with more constant intervals^(8,14,16).

In the analysis of the articles, it was observed that the predominant objective was to verify the effectiveness of the health education intervention focused on the mentioned theme. Another review study shows the importance

of testing the effectiveness of health interventions in different types of populations and evaluating them, not being able to generalize results to all audiences⁽²⁶⁾. It is relevant to choose the right strategy for the individuals you want to reach, checking the profile of local women to carry out actions that are consistent with reality.

The great variability of the strategies presented reinforces that, among behaviors for the prevention of uterine cancer, health education deserves emphasis, as in addition to guiding the disease and the performance of the cytological examination itself, it favors comprehensiveness in health, which has a positive impact in reducing the incidence of cervical cancer⁽²⁷⁾.

In this sense, continuing health education is necessary so that the guidelines passed on are followed, and women who started their sexual life undergo the Papanicolaou Test, especially those aged between 25 and 64 years old⁽²⁸⁾.

We highlight at least one multimedia use in health education interventions, such as videos, mobile text messages, and phone calls. A survey carried out in Turkey showed that mHealth technology had a positive effect, increasing the rate of adherence to the Papanicolaou Test and being well accepted by women, besides contributing to the early diagnosis and treatment of three study participants⁽²⁹⁾. In addition, it is relevant to highlight that the applied technology also sought to know the opinion of the participants regarding the level of satisfaction, difficulties, and understanding of the educational process in which they participated, which demonstrates a concern with the effectiveness of the activity carried out.

Strategies related to technology for health education help in information dissemination through posters, videos, or leaflets, bringing improvements in the prevention of cervical cancer, and enabling access to services, thus encouraging the search for improvements in quality of life⁽³⁰⁾. It is worth noting that health education is a preventive and enlightening means of great notoriety that guides women, even without an active sex life, providing knowledge on the subject, mainly regarding the importance and when to perform the examination. In this sense, the more knowledge about the topic, which should occur in different spaces, the more women will have more autonomy and support in making their own decisions and autonomy to carry out the preventive examination, consequently, the better their self-care and quality of life.

Thus, one should also be concerned with qualified listening and dialogue with participants and those involved in the educational process to identify demands and concerns, criticisms and praise, as well as to allow the exchange of experiences and to assess whether the communication used is effective.

Given the above, it is believed that mobile health technology use is an innovative and effective alternative to promote health education on the prevention of cervical cancer and change women's behaviors and attitudes about the Papanicolaou Test⁽³¹⁾. However, it must be remembered that despite the significant increase in the use of mobile devices, access to technologies is still not complete in the population⁽³²⁾ is up to the programs to fight cervical cancer to combine with alternative strategies; as well as seeking methods and resources that provide, besides knowledge and encouragement to adhere to the exam, access to the practical performance of the Papanicolaou Test, as is the case in Brazil with the Unified Health System (SUS).

Most of the interventions presented here used more than one educational strategy, which was combined to achieve the desired objectives. A study carried out in Iran accomplished an educational action that included a lecture, group discussion, questions and answers, educational pamphlets and posters, a film, and a PowerPoint that presented satisfactory results for the learning and development of a positive attitude and behavioral intention of women to undergo the Papanicolaou Test⁽³³⁾.

Other educational approaches presented were mass media such as television, radio, and newspapers. However, a systematic review shows that despite having a wider population reach and good results in terms of promoting knowledge about cancer and improving screening rates, further studies are needed to assess their real effectiveness, as well as whether campaign costs pay off for public health⁽³⁴⁾. Because of the above, it should be noted that educational actions, when transmitted vertically, especially those carried out through mass campaigns, may not have a significant reach since they transfer responsibility for their health condition to the individual without, however, ensuring proper care management and interaction with health professionals.

Given the results, 11 articles were identified, which bring as a relevant point the carrying out of educational actions as a means of reducing obstacles, beliefs, and barriers for women to carry out the preventive examination^(7,10,12-18,20,23). Another study states that the lack of information becomes the main barrier, bringing up taboos, prejudices, and fears that directly affect the woman's decision to seek the health service to prevent or detect early uterine cervix cancer, seeing the same as a diagnostic method, that is, looking for it only when symptoms appear⁽³⁵⁾.

Given the above, it is necessary to open spaces for dialogue with the community, seeking a language accessible to the entire population. For this, it is needed to carry out health education within the basic units, which is a path for

the joint construction of knowledge and, thus, awakening women to the importance of carrying out cancer prevention and empowering them for continuous self-care.

According to the results obtained, health education promoted better adherence of women to the cytopathological examination, as well as greater acceptance of the HPV vaccine, which is of great importance for the prevention of cervical cancer. Vaccination in the fight against HPV is essential, as it is effective, fast, free, without health risks, and does not have severe adverse reactions⁽³⁶⁾.

Thus, it is up to primary care professionals to analyze their educational actions by strengthening prevention and promotion actions aimed at the female public, seeking strategic solutions, and breaking barriers to improve the knowledge of these women⁽³⁷⁾.

This review contributes to the discussion on health interventions for adherence to the Papanicolaou Test and cervical cancer prevention. The reflections point to the importance of communication in health in the emancipation of women, who, through knowledge about the disease and the exam, start having an active role in promoting their health. Therefore, it is necessary to build spaces for dialogue in the community, targeting users of the public health network.

CONCLUSION

Several interventions that are carried out by health professionals for adherence to the Papanicolaou Test were identified, namely: educational lectures, educational videos, meetings focused on awareness and sharing experiences, use of printed materials, messages via smartphone, telephone calls to provide information, radio announcements, home visits, use of newspapers, free-to-air TV and municipal loudspeakers to transmit information.

Health education actions proved to be effective strategies for transmitting information to women, collaborating with awareness, adherence to the Papanicolaou Test, and general health promotion. As a limitation, we can point out the small number of national studies, a factor that does not allow viewing an overview of the Brazilian reality in its entirety. Because of the above, it is hoped that this study will contribute to further reflections on interventions for adherence to the Papanicolaou Test, as well as for professional practice in the disease prevention and health promotion field.

INTEREST CONFLICTS

The authors declare that there are no conflicts of interest.

CONTRIBUTIONS

Luana Fernandes Cruz and **Jessyca Moreira Maciel** contributed to the preparation and design of the study; the acquisition, analysis, and interpretation of data; and writing and revising the manuscript. **Janayle Kéllen Duarte de Sales**, **Livia Monteiro Rodrigues**, **Sheron Maria Silva Santos**, **Rachel de Sá Barreto Luna Callou Cruz**, **Dayanne Rakelly de Oliveira**, and **Edilma Gomes Rocha Cavalcante** contributed to the acquisition, analysis and interpretation of data; and writing and revising the manuscript.

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