



EDUCATIONAL INTERVENTIONS IN THE PREVENTION OF CERVICAL CANCER: AN INTEGRATIVE REVIEW

INTERVENÇÕES EDUCATIVAS NA PREVENÇÃO DO CÂNCER DE COLO UTERINO: REVISÃO INTEGRATIVA

INTERVENCIÓN EDUCATIVA EN LA PREVENCIÓN DEL CÁNCER DE CUELLO UTERINO: REVISIÓN INTEGRADORA

Priscila Fontenele de Paula¹, Saiwori de Jesus Silva Bezerra dos Anjos², Suellen Viana Lucena³, Hellen Livia Oliveira Catunda⁴, Priscila de Souza Aquino⁵, Ana Karina Bezerra Pinheiro⁶

ABSTRACT

Objective: to analyze the scientific evidences about educational interventions related to the prevention of cervical cancer. **Method:** an integrative review, with a view to answering the question << *What is the evidence on educational interventions for the prevention of cervical cancer?* >> For this, MEDLINE, CINAHL, LILACS, BDNF and the virtual library ScIELO of studies between 2007 to 2012 data were consulted. After the selection of the studies, we proceeded with the reading in full and then the data were extracted and organized for analysis. The final sample consisted of eighteen items. **Results:** there were highlighted the scarcity of Brazilian studies and the participation of nurses in the context of the authors. The predominant educational interventions were: educational media, discussion group and educational material. There were noted that the use of educational media, the combination of these interventions and the achievement in places with the highest concentration of women can be considered effective in the prevention strategy. **Conclusion:** the articles analyzed allowed providing effective educational interventions in promoting women's health, with emphasis on prevention of cervical cancer. **Descriptors:** Cervical Cancer; Health Education; Nursing.

RESUMO

Objetivo: analisar as evidências científicas acerca das intervenções educativas relacionadas à prevenção do câncer de colo do útero. **Método:** revisão integrativa, com vistas a responder à questão << *Quais as evidências sobre as intervenções educativas realizadas para prevenção do câncer de colo do útero?* >> Para isso, foram consultadas as bases de dados MEDLINE, CINAHL, LILACS, BDNF e a biblioteca virtual ScIELO, de estudos entre 2007 a 2012. Após a seleção dos estudos, procedeu-se com a leitura na íntegra e, em seguida, os dados foram extraídos e organizados para a análise. A amostra final foi composta por dezoito artigos. **Resultados:** destacaram-se a escassez de estudos brasileiros e a participação de enfermeiros no quadro de autores. As intervenções educativas predominantes foram: mídias educativas, grupo de discussão e material educativo. Percebeu-se que o uso da mídia educativa, a combinação de intervenções e a realização dessas em lugares de maior concentração de mulheres podem ser consideradas eficazes na estratégia de prevenção. **Conclusão:** os artigos analisados permitiram apresentar intervenções educativas eficazes na promoção da saúde da mulher, com ênfase na prevenção do câncer de colo do útero. **Descritores:** Câncer de Colo do Útero; Educação em Saúde; Enfermagem.

RESUMEN

Objetivo: Analizar la evidencia científica sobre las intervenciones educativas relacionadas con la prevención del cáncer cervical. **Método:** revisión integradora, con el fin de responder a la pregunta << *¿Cuál es la evidencia sobre intervenciones educativas para la prevención del cáncer de cuello uterino?* >> Para eso se consultó MEDLINE, CINAHL, LILACS y BDNF y la biblioteca virtual ScIELO, de los estudios entre los años 2007 a 2012. Después de la selección de los estudios, se procedió a la lectura en su totalidad y luego los datos se extrajeron y se organizaron para su análisis. La muestra final estuvo compuesta por dieciocho artículos. **Resultados:** destacaron la escasez de los estudios brasileños y la participación de las enfermeras en el contexto de los autores. Las intervenciones educativas predominantes fueron: medios educativos, grupo de discusión y material didáctico. Se dio cuenta de que el uso de los medios educativos, la combinación de estas intervenciones y el logro de los lugares con mayor concentración de mujeres se puede considerar eficaz en la estrategia de prevención. **Conclusión:** los artículos analizados han permitido realizar intervenciones educativas eficaces en la promoción de la salud de las mujeres, con énfasis en la prevención del cáncer cervical. **Descritores:** Cáncer de Cuello Uterino; Educación para la Salud; Enfermería.

¹Nurse, Master Student, Postgraduate Diploma in Nursing, Federal University of Ceará/PPGENF/UFC. Fortaleza (CE), Brazil. Email: priscila_fontenele@hotmail.com; ²Nurse, PhD in Nursing, Postgraduate in Nursing, Federal University of Ceará/PPGENF/UFC. Fortaleza (CE), Brazil. Email: saiwori@yahoo.com.br; ³Nursing Student, Federal University of Ceará/UFC. Fortaleza (CE), Brazil. Email: suellen_sb@hotmail.com; ⁴Nursing Student, Federal University of Ceará/UFC. Fortaleza (CE), Brazil. Email: hellen_enfermagem@yahoo.com.br; ⁵Nurse, PhD in Nursing, Postgraduate in Nursing, Federal University of Ceará/PPGENF/UFC. Fortaleza (CE), Brazil. Email: priscilapetenf@gmail.com; ⁶Nurse, PhD, Coordinator of the Postgraduate Program in Nursing, Federal University of Ceará/PPGENF/UFC. Fortaleza (CE), Brazil. Email: anakarinaufc@hotmail.com

INTRODUCTION

Cancer of the cervix (CCU) has become an obvious problem of global public health, characterized as the second most frequent type among women, behind the statistics for breast cancer. In Brazil, in 2012, there were expected 17.540 new cases of cervical cancer, with an estimated risk of 17 cases per 100 thousand women.¹

The CCU is developed from slow intra-epithelial changes which in phase between the precursor and its development can completely take approximately 10 to 20 years. This slowness in the course of the disease confirms that among all types of cancer, cervical cancer has one of the highest potential of prevention and cure, reaching 99% of cases when it is detected in early stages.²⁻⁴

It is essential to guide the population about the pap smear, considering that its periodic holding reduces mortality from cervical cancer in the population at risk.⁵ Thus, we emphasize the importance of health education as a means of educating the public and achieve efficient outcomes in control UCC.

Shares of health education are characterized as essential to therapeutic projects, providing autonomy to act as subjects, providing them with information, skills and tools that make them suitable for choices of behaviors, attitudes and interpersonal relationships producers of health.⁶

Health professionals should know the reality of the population so that they can provide guidance and conduct educational activities, seeking always suit the type of information conveyed, the language and the resources used by the level of knowledge of the population in order to achieve greater effectiveness of such activities.⁷

The playing field of nursing in preventing CCU became notorious, given the increasingly urgent need for interventions in this area in order to minimize mortality from this disease. In primary care, the nursing professional has been responsible for much of Pap tests, however, it has been found that a distancing professional educational interventions at the expense of the consultations.⁸

Studies were performed with the goal of developing educational interventions for the prevention of cervical cancer, and thus demonstrate the most effective types of interventions to increase knowledge and adherence of women across the Pap smear, which is paramount to survey these studies. In order to promote the improvement of nursing

care to women's health in the fight against cervical cancer, the realization of this study aims to examine the evidence available in the literature on effective educational interventions related to the prevention of cervical cancer. Therefore, this study will be relevant as it seeks to encourage the use of research results by the professional nursing practice.

METHOD

An integrative literature review, which aims to gather and synthesize research findings on a particular topic, providing a deeper understanding of the topic investigated.⁹

For realization of this review, were covered by the recommended literature steps: defining the topic and formulating the research question; establishment of criteria for the selection of publications; definition of the information to be extracted from selected studies and classify these patients, assessment of studies included in review, interpretation of results and, finally, release of synthesized and evaluated knowledge.⁹

To develop this study, it was formulated the following question << What is the evidence on educational interventions for the prevention of cervical cancer? >>

The databases consulted were: Medical Literature Analysis and Retrieval System Online (Medline), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Literature Latin American and Caribbean Health Sciences (LILACS), Database Nursing (BDENF) and the virtual library Scientific Electronic Library online (SciELO). The literature survey was conducted between May-June 2012.

For the selection of the sample was defined as inclusion criteria: articles in Portuguese, English or Spanish with abstracts available in the above data bases and virtual library, be full research article and be available electronically; contain information that addressed the core question and answer the research objective and be an article published in the last five years between 2007 and 2012. "Cervical cancer" and "health education": the descriptors were used. Exclusion criteria were defined: non-adherence to the proposed theme, not production for the last five years or be repeated articles in different databases.

The search made possible to find 471 studies: 33 in LILACS, 357 from MEDLINE, 59 in CINAHL, 18 in BDENF and 4 in SciELO. After applying the inclusion criteria previously established, there were selected for this

integrative review, 18 articles, two identified in LILACS, five in MEDLINE, CINAHL eight, one at BDENF and two in SciELO (Table 1) virtual library. There were included in the selection that after reading the summary and title of each one of them there was the relevance to the research question.

Table 1. Selection of articles in the databases BDENF, LILACS, MEDLINE, CINAHL and SciELO library in accordance with the criteria established. Fortaleza, CE, 2012.

	Lilacs	Medline	Cinahl	Bdenf	SciELO	Total
Production found	33	357	59	18	4	471
Does not address the topic of the study	7	36	49	5	-	97
Repeated	1		2	3	2	8
It is not available electronically	21	316	-	8	-	345
It's not a production of the past five years	2	-	-	1	-	3
Total Selected	2	5	8	1	2	18

After the selection of articles was performed to reading these in full and then were extracted and organized the data for later analysis. Name (s) of the author (s); year identification data item (article title: To better characterize the articles included in the review, a methodological tool based on the proposed integrative review¹⁰, which included the following was prepared publication, journal, country of origin and level of evidence of studies), participation of nurses in the context of authors, types of educational intervention studies. The instrument allowed cataloging items and record information contemplated in its aspects.

A system of hierarchical classification of the quality of evidence of the studies selected for this review was used. This classification is based on six levels: Level I - evidence from meta-analysis of multiple randomized controlled trials, Level II - evidence of individual studies with experimental design; Level III - evidence from studies with a quasi-experiment, as with the study without randomization single group pre and post-test, time-series or case-control; Level IV -

evidence from studies with non-experimental design, as descriptive, qualitative research or case studies; Level V - evidence from case reports or data obtained from systematic, verifiable data quality, or program evaluation; Level VI - evidence based on the opinion of respected authorities or opinion of expert committees, including interpretations of information not based on research.¹¹

The purpose of the analysis and interpretation of the data followed the design described in literature ⁹, which is the synthesis of the data recorded in the data collection instrument and discussion of the data extracted from the articles. The analytical process was conducted by three researchers to ensure greater reliability in structuring the analysis.

To make the presentation of the main results, we created a figure with the following information: Title of paper, Authors, Year, Journal, and Country Evidence Level of the study (Figure 1). The types of educational interventions related to the prevention of cervical cancer were categorized into a table (Table 2), with the findings discussed descriptively according to the literature.

publication year, and journal, country of origin and level of evidence were presented in Figure 1.

RESULTS

The data from the integrative review, emphasizing the article title, authors,

Title	Author	Year	Periodical	Country	Level of evidence
Primary health care to women's health: a preventive educational approach in the fight against cervical cancer of uterus.	Prado MPMC, Silveira CLP.	2010	J Nurs UFPE on line	Brazil	Nível 4
Health education for prevention of cervical cancer in women in the municipality of Santo Ângelo/RS.	Casarin MR, Piccoli JCE.	2011	Ciênc. saúde coletiva	Brazil	Nível 4
Knowledge of women about the Pap smear.	Valente CA, Andrade V, Soares MBO, Silva SR.	2009	Rev esc enferm USP	Brazil	Nível 3
A community-based education program about cervical cancer improves knowledge and screening behavior in Honduran women. ¹⁴	Perkins RB, Langrish S, Stern LJ, Simon CJ.	2007	Pan Am J Public Health	U.S.A	Nível 2
Knowledge, attitude and practices in the prevention of cervical cancer and HPV in adolescents.	Cirino FMSB, Nichiata LYI, Borges ALV.	2010	Esc Anna Nery	Brazil	Nível 3
Effective lay health worker outreach and media-based education for promoting cervical cancer screening among vietnamese american women. ¹⁶	Mock J, Mcphee SJ, Nguyen T, Wong C, Doan H, Lai KQ et al.	2007	Am J Public Health	U.S.A.	Nível 2
Faith moves mountains: an appalachian cervical cancer prevention program. ¹⁷	Schoenberg NE, Hatcher J, Dignan MB, Shelton B, Wright S, Dollarhide KF.	2009	Am J Health Behav	U.S.A.	Nível 4
Health locus of control and assimilation of cervical cancer information in deaf women. ¹⁸	Wang R, Aldridge AA, Malcarne VL, Choe S, Branz P, Sadler GR.	2010	J Canc Educ	U.S.A.	Nível 2
Salud es vida: development of a cervical cancer education curriculum for promotora outreach with latina farmworkers in rural southern Georgia. ¹⁹	Luque J, Mason M, Reyes-Garcia C, Hinojosa A, Meade CD.	2011	Am J Public Health	U.S.A.	Nível 3
The impact of HPV information on perceived risk of cervical cancer. ²⁰	Marlow LAV, Waller J, Wardle J.	2009	Cancer Epidemiol Biomarkers Prev	U.S.A.	Nível 3
Evidence-based intervention to reduce access barriers to cervical cancer screening among underserved chinese american women. ²¹	Wang X, Fang C, Tan Y, Liu A, Ma GX.	2010	J Womens Health	U.S.A.	Nível 3
Evaluation of a cervical cancer control intervention using lay health workers for vietnamese american women. ²²	Taylor VM, Jackson JC, Yasui Y, Nguyen TT, Woodall E, Acorda E et al	2010	Am J Public Health	U.S.A.	Nível 2
The effect of school-based cervical cancer education on perceptions towards human papillomavirus vaccination among Hong Kong Chinese adolescent girls. ²³	Kwan TTC, Tam K, Lee PWH, Chan KKL, Ngan HYS.	2011	Patient Educ Couns	China	Nível 3
Pap smear versus speculum examination: can we teach providers to educate patients? ²⁴	Fry AM, Ferries-Rowe EA, Learman LA, Haas DM.	2010	J Womens Health	U.S.A.	Nível 3
A cervical cancer community-based participatory research project in a native american community. ²⁵	Christopher S, Gidley AL, Letiecq B, Smith A, McCormick AKHG.	2008	Health Educ Behav	U.S.A.	Nível 3
Multi-site implementation of health education programs for latinas. ²⁶	Sudarsan NR, Jandorf L, Erwin DO.	2011	J Community Health	U.S.A.	Nível 2
Evaluation of a radionovela to promote HPV vaccine awareness and knowledge among hispanic parents. ²⁷	Kepka D, Coronado GD, Rodriguez HP, Thompson B.	2011	J Community Health	U.S.A.	Nível 2
Encouraging the right women to attend for cervical cancer screening: results from a targeted television campaign in Victoria, Australia. ²⁸	Mullins R, Wakefield M, Broun K.	2008	Health Educ Res	Australia	Nível 4

Figure 1. Presentation of selected articles, according to title, authors, year of publication, periodical, country and level of evidence of the study. Fortaleza, CE, 2012.

With respect to the year in which they were published, there is a growing number of publications from 2009, culminating in a greater number in 2010, 6 (33,3%) and articles in the year 2011, 5 (27,8%).

By analyzing the places of the research of 18 selected items, you realize that 14 (77,8%) were published in journals of international origin, revealing the small number of these surveys in the Brazilian context.

Regarding the level of evidence of the study, there were 8 (44,5%) publications of

evidence level III, 6 (33,3%) level II and 4 (22,2%) level IV, indicating that publications entered in this integrative review have moderate level of evidence. Regarding the participation of nurses in the context of authors, only 5 (27,8%) articles were from nursing jobs.

The articles were analyzed and the educational interventions were categorized according to their proposals presented in Table 2.

Table 2. Distribution of items according to the characterization of educational interventions. Fortaleza, CE, 2012.

Types of educational interventions	n = 29	%
Letter, pamphlet or educational material	6	20,69
Counseling by phone	2	6,90
Educational media (radio, TV, video, slides, journal)	10	34,48
Lectures or discussion groups	9	31,03
Home visit	2	6,90

It was met in the integrative review reports of 29 educational interventions and was realized that audiovisual and interactive interventions were the most prevalent related knowledge in promoting the prevention of cervical cancer.

DISCUSSION

The analysis of the articles highlighted the lack of Brazilian studies and participation of nurses in the context of the authors of the articles, which does not mean that nurses are not making interventions, however, translates to little scientific literature on intervention research using theories that support its use as well as methodological designs with the highest level of evidence, thereby contributing to consolidated practice of evidence-based nursing.⁸

The interventions were tested in order to become increasingly effective health care of women in combat and control the CCU. Educational interventions were found with higher prevalence: educational media (TV ad, radio and newspaper, video, slides), lectures or discussion groups and educational materials (letters, flyers, folders).

Several articles emphasize the use of educational videos as effective in promoting awareness strategy, especially when it is developed according to the needs of the population, which to attain, must always pay attention to the language and visuals provided because the video is a dynamic way to inform the viewer.^{19,22-3}

In Southern California, a video in sign language was developed specifically to help deaf women in the early detection of cervical cancer by improving their access to education. The study showed that women showed an increase in knowledge as a result of the educational intervention, supporting the idea that providing education in sign language would be beneficial for deaf women.¹⁹

Similar study conducted in New York City with 134 Chinese women recruited from four community-based organizations Asian aimed to increase knowledge and improve practice in relation to cervical cancer screening. The women were divided into intervention and control group. All women participated in educational sessions conducted by teachers of Chinese community health, in addition to

receiving educational materials on screening for cervical cancer. The intervention group also participated in a discussion with a doctor and watched a video in Chinese language. Within 12 months after the interventions, screening rates were significantly higher in the intervention group (70%) compared with the control group (11,1%).²² Other findings underscore the importance of using, where appropriate, combination of interventions to achieve better efficacy in adherence of women to Pap smear.¹⁶⁻⁷

A study with Vietnamese American women in Santa Clara County, California, aimed to compare the effects of a combined intervention. The interventions included training of groups with distribution of booklets and a media campaign with 15 listings distributed between TV, radio and newspapers. One group, containing 491 women participated in the combination of these two interventions and another group of 477 women participated only of the education campaign by the media. It was found that the combined intervention led more women to perform the Pap test than education alone by the media.¹⁷

Still considering the importance of the combination of interventions to promote knowledge, 134 adolescents between 14 and 19, a public school in São Paulo attended a lecture on prevention of cervical cancer, and received educational materials. It was stressed that the limited access to knowledge about the topic in question in family life, should be compensated for the information in the classroom, using appropriate techniques and languages for this age group.¹⁶

The educational activities on the prevention of cervical cancer can be performed in various locations, where there is large concentration of women, such as health centers, associations, malls and churches have seen the relevance of the problem, and awareness that an educational activity can raise the people. Health professionals have used these spaces as a way to attract the attention of women to self-care.^{12-8,24-5}

In the region of Appalachia - Virginia (USA), 420 women were recruited members of a church who had never or rarely been screened for cervical cancer, to attend educational workshops developed by "Faith Moves

Mountains" program. The participants mentioned the churches as useful sites for the development of such interventions.¹⁸

Research conducted in a polyclinic in the city of Muriaé/MG selected 76 women who would perform preventive with research nurse. Lectures were held in the waiting room of the unit, and the positive result was the involvement of all participants in the intervention to women Pap tests in a period of less than one year to perform the next query returns.¹² It is noteworthy that the various interventions are effective, as it promotes knowledge and adherence of women to prevent cervical cancer. The combination and the use of appropriate locations for the development of educational interventions should also be considered when improving their effectiveness.

CONCLUSION

The findings of this review to the attention to the small number of Brazilian studies related to the topic in question, as well as reduced expression of the participation of nurses in the production of intervention studies. The results further reflect the importance of nurses to improve the knowledge and conduct intervention research that support their professional practice.

Articles Reviewed allowed to present effective educational interventions in promoting women's health, with emphasis on prevention of cervical cancer. It was noticed that the use of educational videos was a positive strategy to promote the knowledge, since the constraints and needs of the target audience were respected. However, it highlights that the combination of interventions, be they media, lectures and educational materials, maximized the rate of compliance among women Pap smear. In addition, the review showed that the implementation of educational interventions in places where there is large concentration of women was relevant, so that attracted the attention of these women for self-care.

Thus, the integrative review can be considered an effective tool as it provides a scientific basis to the nurse about the research topic, basing their practice and improving the care provided to women regarding the prevention of cervical cancer.

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Corresponding Address

Priscila Fontenele de Paula

Rua Súcia, 931

Bairro Vila Betânia

CEP: 60714-140 – Fortaleza (CE), Brazil