Journal of Nursing
Revista de Enfermagem
UFPE On Line
ISSN: 1981-8963

REFLECTIVE ANALYSIS ARTICLE

REFLECTIONS ON NURSES' ROLE AND ACTIONS OF PUBLIC HEALTH TO PREVENT CERVICAL CANCER

REFLEXÕES SOBRE O PAPEL DO ENFERMEIRO E AÇÕES DE SAÚDE PÚBLICA PARA PREVENÇÃO CONTRA CÂNCER DO COLO DO ÚTERO

REFLEXIONES SOBRE EL PAPEL DEL ENFERMERO Y ACCIONES DE SALUD PÚBLICA PREVENIR EL CÁNCER CERVICAL

Thais Fernanda Pedi Gonçalves[1], Gabriela da Silva Reis Gimenes[2], Vivian Aline Preto[3], Eliane Patricia Cervelatti[4]

ABSTRACT

Objective*:** to reflect on the role of the nurse in the face of actions for prevention of cervical cancer informing the public measures adopted by the government. ***Method: a descriptive study, reflective analysis type, based on the narrative literature review. ***Results:*** there was the need for multiple reinforcement as the preparation of nurses in care and educational campaigns in the prevention of cancer as in the vaccine campaigns against HPV. the disclosure of prevention by permanent programs is necessary. ***Conclusion:*** the importance of the nurse's role in this issue, coupled with the need for prevention programs, early diagnosis and disease control is critical and prevention of cervical cancer. ***Descriptors:*** Cervix Neoplasms Uterus; Prevention of cervical cancer; Papilloma Virus Vaccine.

RESUMO

***Objetivo*:** refletir sobre o papel do enfermeiro, diante das ações para prevenção do câncer do colo do útero informando as medidas públicas adotadas pelo governo. ***Método*:** estudo descritivo, tipo análise reflexiva, com base na revisão de literatura narrativa. ***Resultados*:** observou-se a necessidade de reforço múltiplo quanto à preparação do enfermeiro na assistência e campanhas educativas, tanto na prevenção do câncer como nas campanhas da vacina contra o HPV. Faz-se necessário a divulgação de prevenção por meio de programas permanentes. ***Conclusão*:** a importância do papel do enfermeiro nessa problemática, associada a necessidade de programas de prevenção, diagnóstico precoce e controle da doença é fundamental e na prevenção do câncer do colo do útero. ***Descritores*:** Neoplasias do Colo do Útero; Prevenção de Câncer de Colo de Útero; Vacinas Contra Papilloma Vírus.

RESUMEN

Objetivo*:** reflexionar sobre el papel de la enfermera en la cara de las acciones para la prevención del cáncer de cuello uterino informar a las medidas públicas adoptadas por el gobierno. ***Método: estudio descriptivo y reflexivo tipo de análisis, basado en la revisión de la literatura narrativa. ***Resultados:*** no había la necesidad de refuerzo múltiple como la preparación de enfermeras en la atención y campañas de educación en la prevención del cáncer como en las campañas de vacunación contra el VPH. la divulgación de la prevención mediante programas permanentes es necesario. ***Conclusión:*** la importancia del papel de la enfermera en este tema, junto con la necesidad de programas de prevención, diagnóstico y control de la enfermedad temprana es crítica y la prevención del cáncer de cuello uterino. ***Descriptores:*** Cáncer de Cuello Uterino Útero; Prevención del Cáncer de Cuello Uterino; Vacuna Contra el Virus del Papiloma.

[1]Nurse, Catholic University Center Salesiano Auxilium. Araçatuba (SP), Brazil. E-mail: thais_fpg@hotmail.com; [2]Nurse, Catholic University Center Salesiano Auxilium. Araçatuba (SP), Brazil. E-mail: joice_catarine@hotmail.com; [3]Nurse, Master Professor in Psychiatric Nursing, Nursing Course, Catholic University Center Salesiano Auxilium de Araçatuba, PhD student, School of Nursing of Ribeirão Preto, University of São Paulo/EERP/USP. Ribeirão Preto (SP), Brazil. E-mail: viviusp@yahoo.com.br; [4]Biologist, PhD, Professor in Genetics, Nursing Course, Catholic University Center Salesiano Auxilium de Araçatuba. Ribeirão Preto (SP), Brazil. E-mail: ecervelatti@hotmail.com

INTRODUCTION

Cancer is the set of non-communicable diseases, which have in common the uncontrolled growth of cells, altering their physiological mechanism. Dividing rapidly, these cells tend to be very aggressive and uncontrollable, migrating and invading tissues and organs, determining the formation of tumors or maligns neoplasms.[1-3] This disease is the second leading cause of death in Brazil, second only to cardiovascular disease.[3]

Cancer causes may be internal to the body (hereditary) or external, where the environment and socio-cultural habits are risk factors for cancer by altering the genetic structure (DNA) of cells.[3-5] These external cause cancers are most, around 90% of cases.[3]

One can cite the cervical cancer, which is associated with the sexual habits and is a frequent cancer among women, especially in the age group 30 to 49 years.[3,5-6] This disease has a slow evolution without clinical manifestation in the beginning, it is caused by contamination of the Human Papilloma Virus (HPV), sexually. Consistent studies of HPV have been developed from the decade of 1980.[7] This disease can be 100% prevented with complete sexual abstinence for all sexual practices, because condoms do not guarantee total protection, because HPV can be transmitted even by sexual practice where there is penetration.[8-10]

There have already been 100 types of HPV that can infect humans, of which 50 involving the mucosa of the genital tract were identified and sequenced. 15 were classified types of high risk viruses such as 16, 18, 31, 33, 35, 39, 45, 51, 52, 56 and 58. HPV type 16 is the most prevalent infections in the genital tract, arriving at 66%, as well as the most commonly detected in cervical invasive carcinoma.[7,9]

Contamination with this virus has a high prevalence in both sexes (75-80% of the population will be infected during their lifetime), and half of all new cases occur in the first three years of sexual activity.[10-1] Contamination with this virus has a high prevalence in BOTH sexes (75-80% of the population will be infected During Their Lifetime), and half of all new cases Occur in the first three years of sexual activity.[11]

The HPV virus has a high incidence in the countries of the poorest continent in the world. This table also reflected in morbidity and mortality rates, as the measures to combat the disease are associated with the implementation of the prevention program and control the disease adopted in each country.[2,7] In addition, persistent infection with oncogenic HPV are worrying because they increase the risk of intraepithelial neoplasia and cancer.[9]

On the issue of cervical cancer, infection is cause necessary but not sufficient for the development of cancer, since only a fraction of women carry the virus develop the disease.[7,12,13] Studies show that 20 to 40% of the population is infected with HPV, the rate varying according to age and immune.[12]

Multicentre studies confirmed the presence of HPV in almost 100% of the epithelium invasive carcinoma. In rare cases carcinomas without the presence of HPV, assuming that this was not caused by the virus or there is the possibility that occurred failure to detect the same.[2,5,7,13] The oncogenic HPV types are associated with cervical cancer and its precursors, which are varying degrees of precancerous lesions; cervical intraepithelial neoplasia (CIN), are divided into three groups depending on the commitment of the epithelial thickness by atypical cells. The natural history of the disease showed that cervical cytology without dysplasia and CIN I (mild dysplasia) have similar behavior, and most show regression. However, the persistence of HPV infection can cause the development of CIN II, high-grade lesions or CIN III which is considered as genuine precursor of cancer. It is estimated that the time of infection to the onset of CIN III oscillate between one and ten.[2,5,9,14]

The development of risk factors of this cancer may vary according to HPV infection: early onset of sexual activity, multiple sexual partners, smoking, multiparity, history of sexually transmitted diseases, low education, use of oral contraceptives for more than ten years and inadequate nutrition.[1-4,14-5] The patient prognosis with cervical cancer depends on several factors such as age, stage, tumor volume, histologic type of uterine body invasion, depth of stromal invasion, degree of differentiation, lymphovascular invasion and the presence of lymph node metastases.[5]

The treatment will be done according to the disease stage, tumor diameter and personal factors such as age and fertility

preservation. One should take into account that each case must be evaluated and supervised by a doctor.[16] Among the more common treatments for cervical cancer: surgery, which removes all the tumor, therefore it is an invasive procedure; radiotherapy method that can make tumor cells lose their clonogenicity, and chemotherapy, which method uses chemical substances, chemotherapeutic calls (alone or combined) that not only destroys tumor cells, but also affects normal cells.[1,3]

According to the Ministry of Health, the factors responsible for the high levels of cervical cancer in Brazil: shortage of human and material resources available in the health system for prevention, diagnosis and treatment of disease, inadequate use of existing resources, poor coordination between the health services in providing assistance at many levels of care, lack of definition of norms and behavior, low level of health information in the general population and lack of information necessary for the planning of health actions.[17-18]

To achieve the patient's behavior changes with cancer and demystify the stigma surrounding the disease, and an early and accurate diagnosis requires a comprehensive care to patients, professionals trained to deal with this clientele and concern for the humanization of assistance at all areas, these are nursing, psychological, medical, among others. Furthermore, it is essential the family as the foundation of the patient and can collectively build a less strenuous path and less experienced to face cancer. With family support, problems related to a diagnosis as feared by all become less tolerable and more concrete hope and clear.[1,15,19]

Proper preparation of the nursing staff for the demands of caring for these patients is essential. The nurse is the professional responsible for the educational process of this team, and their competence disclose information to customers, with regard to risk factors, prevention and early detection actions, guiding and taking to other models of behavior and healthy habits.[17,20]

In addition to the care of the patient, the adoption of measures to reduce the incidence of this disease is needed. Every year, there are 500.000 new cases of uterine cervix cancer worldwide. The statistics show the need to strengthen the prevention of this cancer and its precursor lesions, in order to reduce numbers of deaths, since it is a worldwide public health problem.[2,10,12,18]

Cervical cancer is an extremely important issue for health professionals, especially nurses, to work directly in the field of prevention, diagnosis, treatment and combat this disease. In this context, it is essential to develop a work that has the focus to address and discuss preventive methods, government programs and the role of the nurse, on the issue of prevention of this disease.

OBJECTIVE

- To reflect on the role of the nurse in the face of actions for prevention of cervical cancer informing the public measures adopted by the government.

METHOD

This work was developed through a literature narrative review, which is drawn from scientific articles and books, facilitating the addition of information to better study and development work.

The collection of scientific papers was conducted from November 2014 to May 2015. The following descriptors were used: cervical cancer, prevention of cervical cancer, vaccines against papilloma virus. Altogether found 28 articles, of which 8 were eliminated and 20 selected (two homepage PubMed, 18 Scielo virtual library), and the Ministry of Health publications, Brazil School, INCA, Nursing Journal and Nursing Practice books and Medical Surgical Nursing Treaty.

Only the items available in full, in Portuguese or English, which had relevance to the topic and published between 2003 and 2015 were used for the development of this work, the others were excluded, but two books for definition and treatment of disease.

The work here was divided into stages, for better preparing the same. Thus, the first phase of the research was the desired articles, the second was the reading and analysis of the material obtained, which allowed the identification of what would be used or not and the third stage was the mounting of the job in question in accordance with all reflections made.

DISCUSSION

Prevention of cervical cancer is a very important issue to health professionals, but also includes nurses. The nurse can provide an important contribution to the prevention of cervical cancer, highlighting, among others, their participation in the control of risk factors in the realization of gynecological and pap smear, influencing to a greater and better service to demand, effecting a quality registration system and intervened to the appropriate referral of women who present cytologic changes.[20-1]

The nursing consultation is an important time to perform this examination, besides being an ideal opportunity to strengthen the bond between the woman and the professional. Although there are difficulties in carrying out this procedure, especially in primary care, its implementation has unquestionable relevance in various aspects of nursing care daily, besides facilitating individual educational activities.[21-2]

Nurses should indicate and provide the necessary guidance to knowledge, prevention and control of adverse effects that may arise during the nursing consultation. It is a time when patients are able to feel more valued, providing a closer relationship and individual with this professional, establishing an atmosphere of informality and flexibility. Thus, the query is seen not as a simple technical procedure, but as a rich interpersonal relationships.[15,22]

The nurse can help in choosing the best resource for the treatment of disease and work on improving this with the patient, so that she can gain confidence and face the front of problems.[25] Furthermore, it is this professional monitor and evaluate the progress of the objectives and goals of the national strategy to control the disease, aiming beyond the primary, secondary and tertiary prevention, but also focused on the diagnosis and treatment of cancer fight.[23]

Primary prevention of cervical cancer is related to decreased risk of infection by the human papillomavirus (HPV). Transmission of HPV infection occurs through sex, presumably through microscopic abrasions on mucous or anogenital skin. Primary prevention is when it prevents the onset of the disease through the intervention in the environment and their risk factors, preventing the disease from occurring, preventing its development.[4,23-4]

Currently, a useful tool in this context is the use of HPV vaccines. Once the infection is usually acquired soon after onset of sexual activity, the vaccine is recommended for women who have not started this activity. The age for vaccination is suggested at 11 and 12, may begin from 9 years. Due to the young age of the target group for vaccination, doctors and parents should assist in decision making. So that the protection is complete and effective, it takes three intramuscular doses of vaccine. The interval between the first and the second dose is six months and the third dose, which acts as a booster should be administered five years after the first.[10-2,15,25]

Vaccination does not modify the natural history of infection by pre-existing HPV, but protects against strains to which there was no prior exposure. This observation highlighted the need of immunization before the onset of sexual activity. Thus, evaluating on the perspective of public health systems in the poorest regions, the priority should be to vaccinate pre-adolescentes.[10]

The HPV vaccines currently available cover subtypes 16 and 18 and, in the case of quadrivalent also 6 and 11. Those types are responsible for 70% of carcinomas and precancerous lesions high grade. They are drawn from the empty capsules protein produced by recombinant technology, which do not contain DNA or biological products.[9-10,12]

The bivalent vaccine showed an efficacy of 91.6% against incidental infection and 100% against persistent by HPV 16 and 18. The vaccine is safe, well tolerated and highly immunogenic, suggesting that mass vaccination will reduce the burden caused by diseases associated with HPV.[9]

In addition, a further important fact is that the immune responses triggered by both were very high, and it was observed antibody titres more than a hundred times higher than those observed in women of the same age naturally exposed to different HPV study. It should be noted that the obtained immune responses are, in essence, species-specific, ie they must protect against the types of HPV contained in the vaccine test.[12]

Although there is evidence on the immunogenicity and safety of the vaccine in boys between 9 and 15, there is no data

about efficacy in men of any age and is not recommended for males; Also, it has not been tested in patients with the human immunodeficiency virus (HIV) infection, malnutrition, intercurrent malaria and helminths infection.[10]

The vaccine has other restrictions and should, for example, be avoided in the presence of febrile diseases, being postponed until the resolution of the picture. Furthermore, there is a contraindication for individuals with a history of hypersensitivity to yeast, once it has proved minimal risk of anaphylaxis in individuals with a history of allergic reaction Saccharomyces cerevisiae or any other component of the product. Added to this was reported syncope after vaccination is recommended observation for 15 minutes after application.[10]

It is essential that health professionals, especially nurses, are well informed regarding the HPV vaccine, because there are still many questions regarding the same and the general population needs to feel safe to join in a comprehensive manner to your use.

Since the primary prevention has failed, the strategy is to invest in secondary prevention, known as early diagnosis, which is based on the theory that cases of invasive carcinoma is preceded by a series of lesions, cervical intraepithelial neoplasia (NICs), which can be detected allowing their treatment. We wanted to make an analysis of pre-neoplastic or neoplastic lesion as soon as possible and at a stage which allows an effective therapeutic intervention, seeking to reverse, halt or at least slow the progress of neoplasia. The screening programs (screening) cancer cervix are considered secondary prevention measures.[14,23-24,26]

In this context, the strategy used is the realization of the most widespread examination in the world to detect the disease: the Pap test, developed by the pathologist George Papanicolaou. This examination has identified women with precancerous cell changes, making it possible to observe an association of sexual activity with the development of cervical cancer. The screening by Pap smear (Pap smear) is critical because with early diagnosis can prevent the evolution of a possible tumor.[5,7,12]

This examination should be performed in women who have or have had sexual activity, 25 to 59 years old, initially every year and carefully with three-year period after obtaining two consecutive negative for dysplasia or neoplasia, held annually.[17,21,24,26] Between 30 to 39 years there is a greater propensity to develop cancer, it is this age group that the high-grade lesions at highest incidence.[6] For women under the age of 25 years have a higher propensity to HPV infection with low-grade lesions, and over the age of 65, performing the scan Papanicolaou annually, have reduced risk of developing cancer. Although this examination is prioritized in the age group 25-59 years, it is important to note that nothing prevents women outside this range perform the examination, because this should be done from the moment that begins sexual activity.[5,21,26]

Studies show that lack of knowledge of the population about the Pap smear reduces the demand for such women in health services, mainly because they think that this test is only for older women or promiscuous. Other factors such as fear (both pain as the result), shame or embarrassment, also interfere with the examination, noting that the latter category is due to the fact that a stranger that will hold, becoming more evident when the professional is male.[15,27]

The COFEN Resolution nº 381/2011, regulates the execution, the nurse, the collection of material for the Pap smear Papanicolaou method. The Federal Council of Nursing (COFEN), using the powers conferred upon it by Law nº 5.905, of July 12, 1973, and the Regulations of the Local Authority, approved by Resolution COFEN nº 242 of August 31, 2000.

Art. 1. Within the nursing team, collecting material for the Pap smear Papanicolaou method is the private nurse, observing the legal provisions of the profession.

Sole Paragraph: The nurse must be equipped with the knowledge, competence and skills to ensure technical and scientific rigor the procedure, paying attention to the continuous training necessary for its realization.

Art. 2. The procedure referred to in the previous article should be run in the context of nursing consultation, given the principles of the National Comprehensive Care Policy

Women's Health and provisions of Resolution nº 358/2009 COFEN.[28]

Early detection of cervical cancer or precursor lesions is fully justified, since the curability can reach 100%, and a large number of times, the resolution will still take place on an outpatient basis.[26]

In a more advanced stage of disease, the used strategy is the use of tertiary prevention, which comprises the shares to be offered directly or indirectly to women who developed a clinically manifest tumor, which involves rehabilitation and palliative care for patients with late symptomatic disease with the aim of reducing the damage and the adverse effects of the disease.[23]

Early diagnosis and the greatest healing perspective represent the first barrier to be overcome with multilateral effort involving government officials, media, population and health professionals. Educational campaigns aimed at informing the population of the need for early detection of disease, even through consultations, although directed to another complaint, are a cancer prevention opportunity and are ways to alleviate the harsh reality of late diagnosis.[27-29]

In Brazil, some studies claim, the cancer prevention does not receive attention characterized by educational activities. This results in the lack of public awareness about the importance of early diagnosis and the lack of definition of health services on the path to be followed by women, since the first complaint to the diagnosis and specialized treatment.[11,17]

Education for the health of the general public through enlightenment campaigns and adherence to monitoring and prevention programs associated with the effectiveness of both methods are the keys to the success of new strategies to combat cervical cancer. In Brazil, as in emerging countries, only makes opportunistic prevention, which unfortunately does not change the mortality curve. It is up to those governments promote permanent programs of population screening. Cancer of the cervix is no longer a medical problem in that science provides all the means for its prevention. Its solution depends on economic means and political will.[15,22]

Other studies, however, argue that through a joint effort between the Ministry of Health and all Brazilian states, are offered prevention and early detection services in the early stages of the disease as well as treatment and rehabilitation throughout the country.[20]

The Brazilian government, encouraged by the World Conference on Women held in Beijing in China in 1995, developed the Viva Mulher Program (National Program of Cancer Control of Cervical and Breast), which is the development and practice strategies to reduce mortality and physical effects, psychological and social aspects of cervical cancer and breast cancer.[15,20] This program provides services for prevention and detection in the early stages of the disease and its precursor lesions and the treatment and rehabilitation of women. Regarding the control of cervical cancer, the actions include early detection through Pap test, ensuring the proper treatment of the disease and its precursor lesions in 100% of cases and monitoring the quality of care for women in different stages of the program.[26]

A positive example is the popular movement called "Pink October" held around the world. Although the main goal is to draw attention to the current reality that most affects the female population, breast cancer, with actions aimed at reducing such fatality, they also cover cervical cancer. This event allows an approach to issues facing women's health, contributing to health professionals in health promotion and prevention activities.[27]

In addition, the Ministry of Health decided to implement, from 2014, in partnership with state and municipal departments of Health, the HPV vaccine in the National Vaccination Calendar for Teens. Addressed in the first phase to girls from 11 to 13 years of age, the vaccine will reach, in 2015, girls from 9 to 11 years and, in 2016, only to 9 years. The first dose of the vaccine was applied between March 10 and April 10, 2014, the second in September and the third will take place in five years, from the first dose.[25]

The Health System Brazil has a good experience in vaccination coverage with the implementation of national programs, enabling an efficient promotion of vaccination against the main types of HPV oncogenics in the target population.[30]

It is reasonable to assume that the gradual implementation of HPV vaccination may be observed change in the frequency of Pap smear. The expectation for the coming decades, however, is that the prevention of

cervical cancer continues to be based on periodic screening of the population through the Pap test alone or in conjunction with molecular testing of HPV. The safe and effective vaccines against HPV could be important tools for cervical cancer prevention worldwide, particularly in developing countries. Promoting HPV prophylactic measures creates great prospects, the expectation is that in 20 years occur the reduction of the incidence rates of precursor lesions and cancer, which is the second cause of death in women from cancer worldwide, bringing substantial benefit the population's quality of life.[12]

CONCLUSION

The nurse has a significant role in preventing cervical cancer, acting through guidance to the target audience, gynecological, in performing the Pap smear, effecting a quality registration system, forwarding urgent and correctly women with abnormal cytology and help in choosing the best resource for the treatment of disease.

There are three types of prevention, and primary related to decreased risk of infection by HPV, for total sexual abstinence and the vaccine. The secondary is early diagnosis by the Papanicolaou test, which seeks to diagnose, reverse, stop or slow the progress of cancer. Tertiary prevention actions are women who developed cancer, involving the rehabilitation and palliative care.

Nurses should be well informed regarding the application of the vaccine, which is gaining ground in the fight against HPV, solving doubts of the general population, as has been proven with scientific evidence that the application of the vaccine will result in the reduction of infected index, which in turn will lead to reduced spending on cancer treatment, which are expensive. Moreover, it is essential that health policies to develop education programs that discuss the topic, encourage and facilitate access to the types of prevention of Brazilian women.

REFERENCES

1. Nettina, SM. Prática de enfermagem. Enfermagem no câncer. 7th ed. Rio de Janeiro: Guanabara Koogan; 2003. p.132-56.

2. Almeida AF, Holmes ES, Lacerda CCC, Farias CF, Costa MBS, Santos SR. Métodos de detecção de câncer de colo uterino entre profissionais da saúde. J Nurs UFPE on line [Internet]. 2015 [cited 2015 Nov 15];9(1):62-8. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/download/6797/11150.

3. Escola Brasil. Doenças e doenças: Câncer [Internet]. [cited 2015 Apr 11]. Available from: http://www.brasilescola.com/doencas/cancer.htm

4. Cestari MEW, Zago MMF. A prevenção do câncer e a promoção da saúde: um desafio para o Século XXI. Rev bras enferm [Internet]. 2005 Mar/Apr [cited 2015 Apr 11];58(2):218-21. Available from: http://dx.doi.org/10.1590/S0034-71672005000200018

5. Leite CCS, Gonçalves RL, Baptista RS, França ISX, Magalhães, Aragão JS. A consulta de enfermagem na prevenção do câncer de colo do útero. J Nurs UFPE on line [Internet]. 2013 [cited 2015 Nov 15];7(8):5076-82. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/download/4445/6865.

6. INCA. Controle de câncer do colo do útero: Ações de controle; Detecção precoce. [Internet]. 2015 [cited 2015 Apr 11]. Available from: http://www2.inca.gov.br/wps/wcm/connect/acoes_programas/site/home/nobrasil/programa_nacional_controle_cancer_colo_utero/deteccao_precoce

7. Nakagawa JTT, Schirmer J, Barbieri M. Vírus HPV e câncer de colo de útero. Rev bras enferm [Internet]. 2010 Mar/Apr [cited 2015 Mar 06];63(2):307-11. Available from: http://dx.doi.org/10.1590/S0034-71672010000200021

8. Weaver BA. Epidemiology and natural history of genital human papillomavirus infection. J Am Osteopath Assoc [Internet]. 2006 [cited 2014 Nov 30];106 (3Suppl 1): S2-8. Available from: http://www.ncbi.nlm.nih.gov/pubmed/16729554

9. Nadal SR, Manzione CR. Vacinas contra o papiloma virus humano. Rev bras colo-proctol [Internet]. 2006 July/Sept [cited 2014 Nov 30];26(3):337-40. Available from:http://www.scielo.br/pdf/rbc/v26n3/a17v26n3.pdf

10. Nadal LRM, Nadal SR. Indicações da vacina contra o papilomavirus humano. Rev bras. colo-proctol. Rio de Janeiro. [Internet]. 2008 Jan/Mar [cited 2015 Jan 24]; 28(1): 124-26. Available from:

http://www.scielo.br/scielo.php?pid=S0101-98820080001000019&script=sci_arttext

11. Costa LA, Goldenberg P. Human papillomavirus (HPV) among youth: a warning sign. Saúde soc. [Internet]. 2013 Jan/Mar [cited 2015 Feb 23];22(1):249-61. Available from: http://dx.doi.org/10.1590/S0104-12902013000100022

12. Linhares AC, Villa LL. Vacinas contra rotavírus e papilomavírus humano (HPV). J Pediatr [Internet]. 2006 July [cited 2015 Feb 23];82(3):s24-s25. Available from: http://dx.doi.org/10.1590/S0021-75572006000400004

13. Walboomers JM, Jacobs MV, Manos MM, Bosch FX, Kummer JA, Shah KV, Snijders PJ, Peto J, Meijer CJ, Muñoz N. Human papillomavirus is a necessary cause of invasive cervical cancer worldwide. J Pathol [Internet]. 1999 Sept [cited 2015 Mar 23];(1):12-9. Available from: http://www.ncbi.nlm.nih.gov/pubmed/10451482

14. Sellors JW, Sankaranarayanan R. Colposcopia e tratamento da neoplasia intra-epitelial cervical: Manual para principiantes. Capítulo 2: Introdução à neoplasia intraepitelial cervical (NIC). [Internet]. [cited 2015 Mar 23]. Available from: http://screening.iarc.fr/colpochap.php?lang=4&chap=2

15. Silva VSC, Mochel EG, Lima SF, Meneses LFS. Reflexões Câncer do colo do útero: saberes e práticas de mulheres usuárias da atenção básica. J Nurs UFPE on line [Internet]. 2014 [cited 2015 Nov 15];8(6):1628-35. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/download/4360/9297

16. INCA. Câncer: Tipo de câncer: Colo do útero - Tratamento [Internet]. 2015 [cited 2015 Apr 11]. Available from: http://www2.inca.gov.br/wps/wcm/connect/tiposdecancer/site/home/colo_utero/tratamento1

17. Merighi MAB, Hamano L, Cavalcante LG. O exame preventivo do câncer cérvico-uterino: conhecimento e significado para as funcionárias de uma escola de enfermagem de uma instituição pública. Rev esc enferm USP [Internet]. 2002 Sept [cited 2015 May 01];(36)3:289-96. Available from: http://dx.doi.org/10.1590/S0080-62342002000300012

18. Jorge RJB, Diógenes MAR, Mendonça FAC, Sampaio LRL, Jorge Júnior R. Exame Papanicolaou: sentimentos relatados por profissionais de enfermagem ao se submeterem a esse exame. Ciênc saúde coletiva [Internet]. 2011 May [cited 2015 Apr 09];(16)5:2443-51. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232011000500013

19. Barros DO, Lopes RLM. Mulheres com câncer invasivo do colo uterino: suporte familiar como auxílio. Rev bras enferm [Internet]. 2007 May/June [cited 2015 Apr 09];(60)3:295-8. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672007000300009

20. Beghini AB, Salimena AMO, Melo MCSC, Souza IEO. Adesão das acadêmicas de enfermagem à prevenção do câncer ginecológico: da teoria à prática. Texto contexto - enferm [Internet]. 2006 Oct/Dec [cited 2015 Apr 09];15(4):637-44. Available from: http://dx.doi.org/10.1590/S0104-07072006000400012

21. Melo MCSC, Vilela F, Salimena AMO, Souza IEO. O enfermeiro na prevenção do câncer do colo do útero: o cotidiano da atenção primária. Rev bras cancerol [Internet]. *2012* [cited 2015 Apr 09];*58(3):389-98*. Available from: http://www1.inca.gov.br/rbc/n_58/v03/pdf/08_artigo_enfermeiro_prevencao_cancer_colo_utero_cotidiano_atencao_primaria.pdf

22. Frigato S, Hoga LAK. Assistência à mulher com câncer de colo uterino: o papel da enfermagem [Internet]. 2003 July [cited 2015 Mar 09] Available from: http://www.inca.gov.br/rbc/n_49/v04/pdf/ARTIGO1.pdf

23. Zeferino LC. Prevenção primária, secundária e terciária do câncer - organização e utilização dos serviços de saúde [Internet]. [cited 2015 Mar 09]. Available from: http://www.bibliomed.com.br/bibliomed/bmbooks/oncologi/livro1/cap/cap03.htm

24. Pinho AA, França-Junior I. Prevenção do câncer de colo do útero: um modelo teórico para analisar o acesso e a utilização do teste de Papanicolaou. Rev Bras Saude Mater Infant [Internet]. 2003 Jan/Mar [cited 2015 Mar 09];(3)1:95-112. Available from: http://dx.doi.org/10.1590/S1519-38292003000100012

25. Guedes F. HPV.. Ministério da Saúde. Falando sobre câncer do colo do útero. Rev Enferm [Internet]. 2014 Oct/Nov [cited 2015

Apr/Dec 11];09:40-3. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/inca/falando_cancer_colo_utero.pdf

26. Christóforo RZ, Martins L, Chociai SMJ, Cassins G, Borges PK. Análise do impacto da ação outubro rosa: exame colpocitopatologico do colo de útero. 12. CONEX – Apresentação Oral – Resumo Expandido [Internet]. [cited 2015 Apr 11]. Available from: http://sites.uepg.br/conex/anais/artigos/452-1523-1-DR-mod.pdf

27. Brasil. Conselho Federal de Enfermagem. Resolução Cofen nº 381/2011 [Internet]. Normatiza a execução, pelo enfermeiro, da coleta de material para colpocitologia oncótica pelo método de Papanicolaou [cited 2015 Dec 08]. Available from: http://www.cofen.gov.br/resoluo-cofen-n-3812011_7447.html

28. Câncer no Brasil: presente futuro. Editorial. Rev Assoc Med Bras [Internet]. 2004 [cited 2015 Apr 11];50(1):1-1. Available from: http://www.scielo.br/scielo.php?pid=S0104-42302004000100001&script=sci_arttext

29. Zardo GP, Farah FP, Mendes FG, Franco CAGS, Molina GVM, Melo GN de Vacina como agente de imunização contra o HPV. Ciênc saúde coletiva [Internet]. 2014 Sept [cited 2015 Mar 03];19(9):3799-808. Available from: http://www.scielo.br/scielo.php?pid=S1413-81232014000903799&script=sci_arttext

Submission: 2015/12/15
Accepted: 2016/02/05
Publishing: 2016/06/01

Corresponding Address

Eliane Patrícia Cervelatti
Centro Universitário Católico Salesiano Auxilium
Rua Kameo Ussui, 312
Bairro Pinheiros
CEP 16012-300 – Araçatuba (SP), Brazil