VULNERABILIDADE DE JOVENS E ADOLESCENTES À INFECÇÃO POR HPV E AS CONDUTAS PREVENTIVAS DA ENFERMAGEM

VULNERABILIDAD DE LOS JÓVENES Y ADOLESCENTES A LA INFECCIÓN POR HPV Y LA CONDUCTA PREVENTIVA DE ENFERMERÍA

VULNERABILITY OF YOUNG AND ADOLESCENTS TO HPV INFECTION AND NURSING PREVENTIVE CONDUCT

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RESUMO: Trata-se de uma revisão de literatura, utilizando diferentes bases de dados e descritores, "HPV", "adolescentes", "jovens" e "enfermagem", com objetivo de conhecer as principais causas de vulnerabilidades à infecção pelo HPV em jovens e adolescentes, bem como as ações da enfermagem que favorecem a prevenção de contaminação por este vírus. Foi possível evidenciar que a população jovem tem comportamentos sexuais de risco, os deixando vulneráveis à infecção por HPV, e isso sugere que o enfermeiro necessita estar apto para assistência integral e contínua aos jovens e adolescentes, identificando situações de risco, desenvolvendo ações educativas e preventivas juntamente com a família e comunidade, visando o melhoramento da saúde sexual e reprodutiva desta faixa etária.

PALAVRAS-CHAVE: Adolescentes. HPV. Jovens. Enfermagem. Prevenção de doenças.

RESUMEN: Esta es una revisión de la literatura, utilizando diferentes bases de datos y descriptores "HPV", "adolescentes", "jóvenes" y "enfermería", para conocer las principales causas de vulnerabilidad a la infección por HPV en jóvenes y adolescentes, así como acciones de enfermería que favorecen la prevención de la contaminación por este virus. Se pudo demostrar que la población joven tiene comportamientos sexuales de riesgo, lo que los deja vulnerables a la infección por VPH, y esto sugiere que la enfermera debe poder brindar atención integral y continua a Jóvenes y adolescentes, identificando situaciones de riesgo, desarrollando acciones educativas y preventivas junto a la familia y la comunidad, con el objetivo de mejorar la salud sexual y reproductiva de este grupo de edad.

PALABRAS CLAVE: Adolescentes. HPV. Jovenes. Enfermería. Prevención de enfermedades.

ABSTRACT: This is a review of the literature, using different databases and descriptors, "HPV", "teenagers", "young" and "nursing", in order to know the main causes of vulnerability to HPV infection in young people and adolescents as well as the nursing actions that favor the prevention of contamination by this virus. It was possible to show that the young population

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has riskier sexual behaviors, leaving them vulnerable to HPV infection, and this suggests that the nurse needs to be able to provide comprehensive and continuous care to the young people and adolescents, identifying risk situations, developing educational and preventive actions together with the family and community, aiming at improving the sexual and reproductive health of this age group.

KEYWORDS: Adolescents. HPV. Young. Nursing. Prevention of diseases.

Introduction

Human papillomavirus (HPV) infection is among the most common public health problems in Brazil and worldwide, with great prevalence in the young population. The sexual behavior of young people and adolescents is a topic that has great relevance in the field of health. The early onset of sexual life, the lack of fixed sexual partners, and the use of alcohol and other drugs make young people to be considered a vulnerable group to sexually transmitted infections, especially HPV infection (BRASIL, 2017).

The proposal of this work is analyzed from the young population most susceptible to HPV infection. It is understood that an investigation in the area of nursing is essential in order to point out causes and preventive actions in the resolutive fight against this type of demand, considering that in this phase the unprotected sexual life may start, providing high vulnerability to problems of sexual and reproductive nature (RODRIGUES; SOUSA, 2015).

The lack of adequate information about the Human Papilloma Virus and the failure to use condoms leads them to acquire this virus, which is the main cause of cervical cancer, in addition to its association with other types of cancers such as penis, oropharynx and even rectal anal cancer. Given this, it is necessary to understand why young people and adolescents become so vulnerable to HPV infection? What types of actions can nursing perform to help prevent this infection?

In this sense, a literature review was carried out, using scientific articles in Portuguese, manuals, books, magazines, newspapers and publications from the Ministry of Health, based on publications from the last 10 years, which dealt with aspects of HPV related to young people and adolescents and also the means of prevention of this virus, by nursing. Being the search for the material through electronic consultation in the databases LILACS (Latin American and Caribbean Literature in Health Sciences), SciELO (Scientific Electronic Library Online), BVS (Virtual Health Library) and BDENF (Database of Nursing).

The present work, therefore, focuses on studying the human papillomavirus and how susceptible young people and adolescents become to this infection, it is still sought to verify,

through the data provided by the available literature, whether they know what it is the virus as well as how to prevent it, in addition to showing how nursing can contribute, preventively, in order to reduce the amount of infected by this virus in the young population, aiming to improve the sexual and reproductive health of this age group.

Methodology

This study brings a review of the literature, of a descriptive and qualitative character, based on academic research through materials already prepared, consisting of scientific articles in Portuguese, manuals, books, magazines, newspapers and publications from the Ministry of Health, based on the publications of the last 10 years, being the search for the material through electronic consultation in the databases LILACS (Latin American and Caribbean Literature in Health Sciences), SciELO (Scientific Electronic Library Online), BVS (Virtual Health Library) and BDENF (Nursing Database). The following keywords are being used to search for articles in the databases: "HPV", "ADOLESCENTES", "JOVENS", "ENFERMAGEM"³.

From the search performed, the material will be read and translated, as well as their analysis. For this analysis, some steps will be followed, such as the selection of material, considering inclusion criteria the texts that deal with aspects of HPV related to young people and adolescents and also the means of preventing this virus that can be assisted by nursing. Those who do not meet the inclusion criteria are excluded.

Thus, the following steps were carried out: bibliographic research regarding the analyzed content; survey of information and data collection through research in published works; analysis and interpretation of the collected data.

Main characteristics of the HPV virus

HPV is an English acronym Human papillomavirus (Human Papilloma Virus), it is an epitheliotropic virus that causes infections in the skin and mucous membranes (LETO *et al.*, 2011). This virus "induces infections predominantly in the genital tract". Approximately 30% of the sexually active population is infected with it (FRANCO, 2015, p. 284). Human papilloma virus (HPV) was the first oncogenic virus to be transmitted experimentally from one host to another (SANTOS; ROMANOS; WIGG, 2008, p. 455).

³ Since the Keywords need to be the same to achieve similar results on another search they were not translated, but they read: HPV, Adolescents, Young people, nursing.

Currently, HPV infection is the most common sexually transmitted disease, that is, it is the main viral infection transmitted by sex. According to the Ministry of Health (2017), the main form of HPV transmission is sexual (oral-genital and genital-genital), and it also can, rarely, be transmitted during childbirth or even by certain objects. The National Cancer Institute (INCA, 2012) points to HPV as the precursor of cervical cancer and is responsible for 90% of cervical cancers. "Infection with the Human Papilloma Virus (HPV) is characterized as a sexually transmitted disease with high prevalence in the world" (RODRIGUES; SOUSA, 2015, p. 2). According to the HPV Institute around the world, there are around 600 million people infected. Worldwide, about 10% of women have HPV. Among them, 30% to 50% are young people under 25 years old. In relation to females, the uterine epithelium is less resistant than the penile epithelium in males and, during sexual intercourse, lesions can occur in the vaginal epithelium, leaving females more susceptible to HPV infection (RODRIGUES; SOUSA, 2015).

However, just as in females, adolescents and young males are also exposed to HPV infection. The frequency of genital warts is higher in males than in females, predominantly in the age group of 20-24 year olds. Since HPV infection in males is associated with the development of cancer of the anus, penis, tongue, mouth and throat, in females it is more commonly associated with cervical cancer. In Brazil it is estimated that 9 to 10 million people are carriers of the virus and that 700 thousand new cases are registered every year. Among the sexually active population, it is estimated that 80% will contract HPV during their lifetime, causing significant illnesses. 17,540 new HPV cases are expected to appear, 780 of which are located in the state of Maranhão. According to the Hospital Association Moinhos de Vento, the prevalence of HPV in young people and adolescents in São Luís (MA) is 59.1% (BRASIL, 2017).

Vulnerabilities of young people and adolescents to HPV infection

There are several definitions for being an adolescent/young person, according to the Statute of the Child and Adolescent (ECA, 2018), citizens aged between 12 and 18 years are considered adolescents. Some scholars consider that young age comes soon after adolescence, more precisely between 19 and 29 years old. The youth statute states that those aged between 15 and 29 are considered young. But for the IBGE (Brazilian Institute of Geography and Statistics, 2010) the official statistics body, young people must be defined as individuals between 15 and 24 years old. However, classifying this age group in this way is only quantifying it to produce health programs (BRASIL, 2016).

Adolescence can be understood as a biologically fundamental process, which occurs in young people and adolescents between 10 and 19 years of age. It is a period in which several changes take place, which may be of a physiological order, controlled by hormones that provoke the appearance of secondary sexual characteristics, or by psychological factors (BRASIL, 2016).

In the beginning of adolescence/youth, biological transformations and changes in personality occur simultaneously, causing the body to acquire a new shape and simultaneously modifying the mental image (SILVA; CRUZ; COELHO 2008). The propitious changes in this phase, also known as puberty, occur in universal and well-known ways, as they modify the child giving it height, physical shape and adult sexuality (AYRES, 2012).

As it is a transition phase between childhood and adulthood, adolescence is characterized by a period of doubts and conflicting feelings regarding the experience of sexuality. Adolescents are part of a group that needs differentiated attention because, for the most part, they start sexual life when they still have low knowledge about sexually transmitted diseases (STDs) and have a wrong understanding about the personal risk of acquiring these diseases, taking into account that they do not use effective protection measures (JARDIM *et al.*, 2013).

According to Paiva (2008), sexuality by young people and adolescents is being lived more and more freely nowadays, however, although there is freedom and sexual stimulation, there are divergences in the experiences between them, in which most of the time risky sexual behavior, neglecting to prevent sexually transmitted infections (STIs). Young people and adolescents, most of the time, are not prepared to assume such responsibility, due to their immaturity, inexperience and lack of access to information, whether in the school or family environment, characteristics specific to this age group (JARDIM *et al.*, 2013).

According to Cirino, Nichiata and Borges (2010), young people and adolescents constitute a population of high susceptibility to sexually transmitted infections, considering that, the beginning of sexual life brings them closer to health problems in the sexual and reproductive sphere. Sexually transmitted infections are prevalent in adolescence/youth and facilitate contamination by various sexually transmitted diseases, including HPV.

Given the above, there are several risk factors that lead to HPV infection in young people and adolescents: the beginning of early sexual life; the variation of partners; the non-use of condoms and the use of illicit drugs; smoking and the use of oral contraceptives, which are favorable to sexually transmitted infections, especially HPV (RODRIGUES; SOUSA, 2015).

The onset of early sexual life and promiscuity as a risk factor for HPV infection

The "lose of virginity" is included in a set of factors and experiences that form part of the social and sexual identity of individuals, for young people the first sexual intercourse is an event that, in addition to marking the transition process, adulthood is the beginning of new possibilities of body use with other individuals (GONÇALVES *et al.*, 2009).

According to Silva *et al.* (2015), the principle of sexual practice is a very important moment in the lives of young people and adolescents. However, although this practice allows them to enter a world of new discoveries, it can also place them in a group of high vulnerability to sexually transmitted infections including HPV. It is, usually, in the adolescence/youth phase when individuals begin their sexual practices.

According to Macêdo *et al.*, (2015), although young people and adolescents are physiologically prepared, early sexual initiation linked to biological, psychological and social factors, tend to increase the vulnerability to STIs, making young people and adolescents become preferential targets for HPV infection, therefore, the earlier the onset of sexual activity, the greater the risk of infection.

According to Silva *et al.*, (2015) with the earlier onset of sexual activity by young people and adolescents, the chances of increasing promiscuity are greater, as they will certainly have a longer period of sexual activity and, consequently, more sexual partners until that obtain stable, monogamous and lasting relationships. Therefore, the human papillomavirus is constantly found among young people and adolescents due to the fact that sexual relations in this age group occur with a large number of partners and most of them unprotected, which positively influences the occurrence of HPV infection (MACÊDO *et al.*, 2015).

For Carrilo and Goldenberg (2014), having multiple sexual partners, being sex workers, as well as their clients, are relevant risk factors that leave young people and adolescents highly vulnerable to the presence of sexually transmitted infections, which may result in an increase of 25 at 36 times the risk of contagion by HPV.

Lack of prevention and use of contraceptives favorable to HPV infection

It is believed that the precociousness in sexual intercourse in adolescence, accompanied by failures and/or inconsistency, together with the high rates of sexual practices with different partners, makes young people and adolescents favorable to sexually transmitted infections, especially HPV. The condom is still not used by all young people and not in all sexual relations, considering that its use depends, among other reasons, "on the affective involvement of the

moment, financial issues and access to methods, as well as the degree of freedom and autonomy achieved in this age group" (LIMA *et al.*, 2014).

It is understood with the study by Torres *et al.* (2013), that not only the price is an impediment to purchase condoms, but shame is an important factor preventing access to it. It is noted that the free condom distribution campaigns, the way they are made, do not work correctly with adolescents, as they are monolithic and do not take into account the specificities and difficulties associated with each sex and each class, therefore, are made for a "unisex, one-size-fits-all" teenager.

Young people and adolescents tend not to use condoms when they start sexual practice early, among other causes and reasons associated with use and non-use, which tend to be very different in each situation, condom use is determined not only by individual factors, but also socio-cultural. And for the condom to work to avoid HPV, it is necessary that it be used in all sexual relations, as a single relationship is enough for the transmission of sexually transmitted diseases to occur (BRASIL, 2017).

The non-use of condoms, as well as poor hygiene, which includes: contamination by fingers, sharing of sex toys and a history of sexually transmitted infections, predispose this group to contamination and the development of HPV infection. In addition to the fact that trust in your partners, especially in stable relationships, serves as a justification for not using condoms, which is also a risk factor for contamination by human papillomavirus (CARRILO; GOLDENBERG, 2014).

The use of contraceptives is another risk factor that leaves adolescents vulnerable to sexually transmitted infections, especially HPV. Not only because the contraceptive will prevent unwanted pregnancies, making them not insist on condoms, but also because it is a factor of relevant etiopathogenesis, especially if the use of it happens before the complete development of the female genital tract, that is, before the age of 17 (LUSTOSA *et al.*, 2016).

In populations where the number of partners among men is high, and prostitution is common, the risk of female adolescents acquiring HPV depends more on the sexual behavior of their partners than on themselves (CARRILO; GOLDENBERG, 2014). Regarding HPV contamination in females, Lustosa *et al.* (2016) states that:

Female adolescents are more vulnerable to HPV infections due to exposure of the cervical transformation zone (Junction Squamocolumnar) during adolescence, which does not occur in adulthood. In this location, columnar cells undergo squamous metaplasia that makes them more prone to infections by sexually transmitted pathogens, such as HPV. It is also the place of origin of most precursor lesions and cervical carcinomas. In addition to this, during

adolescence there is less production of cervical mucus, which is responsible for forming a kind of protective barrier against infectious agents, which associated with a larger area of ectopia becomes a contributing factor for HPV infection (p. 345).⁴

Both young and adolescents, male and females, infected with HPV, are most often carriers of the virus, but are mostly unaware when they do not have visible symptoms and can transmit the virus to their sexual partners. However, the evolution and manifestation are different in both sexes. This is because there are anatomical and hormonal differences. The woman's genital organ allows for greater development and multiplication of HPV, and more severe complications can occur, such as lesions, which, if left untreated, can develop into cervical cancer, although in men there are several forms of cancer that they can also affect you, such as penis cancer, so there is a need to use condoms, which can be female or male (BRASIL, 2017).

Drug use and HPV

According to studies by Campo-Aria, Ceballo and Herazo (2010), young people and adolescents use alcohol and drugs as relaxation, fun, for breaking shyness, to be able to express themselves better, and also as a means of "escaping from reality", which leaves them exposed to innumerable risks, mainly to casual sexual relations that most of the times occur unprotected, thus evidencing the association between the behavioral way of risk for sexual and reproductive health to the use of licit and illicit drugs in the population of young people and teenagers.

For Pires *et al.* (2010), this is the young person's/adolescent's way of demonstrating that nothing will happen to them, "in relation to drug use, they consider that they are not so dangerous, that they can walk away from them at any time, having total control of the situation", making them less aware of the risk, increasing their use. This, on the other hand, places the adolescent drug user in a highly vulnerable group

Among the diseases related to the use of drugs, especially infectious diseases, especially HPV, may be due to the sharing of needles and syringes or even sexual intercourse without the use of condoms while still under the influence of chemical substances, mainly linked to users

⁴ As adolescentes são mais vulneráveis às infecções por HPV devido à exposição da zona de transformação da cérvice (Junção Escamocolunar, JEC) durante a adolescência, o que não ocorre na vida adulta. Neste local, as células colunares sofrem metaplasia escamosa que o torna mais propenso a infecções por agentes patogênicos de transmissão sexual, como o HPV. Sendo também o local de origem da maioria das lesões percursoras e carcinomas cervicais. Além deste, durante a adolescência há uma menor produção de muco cervical, sendo este responsável por formar uma espécie de barreira protetora contra agentes infecciosos, que associado a uma área maior de ectopia torna-se um fator contribuinte para a infecção pelo HPV (p. 345).

with low education and low purchasing power. Thus, the use of drugs may also be related to other risk factors for the health of young people and adolescents, such as greater involvement in illegal activities, greater involvement in prostitution, for example, having sex in exchange for drugs (DUAILIBI; RIBEIRO; ORANGE, 2008).

Preventive nursing behaviors facing HPV infection in young people and adolescents

The nurse acts as a health educator and his actions can contribute to the reduction of possible HPV problems in young people and adolescents. The nurse is a professional trained to carry out health education actions, about the infection by the HPV virus and other sexually transmitted infections, making the individual aware of safe sex, use of condoms from beginning to end of the oral, anal and vaginal sexual act. Guide adolescents to reduce the number of partners, because the more sexual partners, the greater the risk of HPV infection. The nurse is one of the professionals who is closest to the individuals, therefore, he is a professional who has an extremely important role in preventive health, using his familiarity and knowledge to disseminate relevant information to young people and adolescents, becoming a propagator of preventive rules for them to have a healthy life (DUAVY et al., 2017).

Thus, in the Family Health Strategy Nurse there is a new model of health care, being a professional who has great relevance, since it is his responsibility, among others, the gynecological consultation, as well as educational activities aimed at self-care and disease prevention. Therefore, it is the competence of nursing to alert young people and adolescents about sexual health behaviors, risk factors after HPV infection - associated with the risk of developing cervical or penis cancer, for example - and screening methods for early detection of the disease (BRASIL, 2016).

Therefore, when carrying out educational activity individually, that is, as part of counseling, you need planning taking into account the ability of young people and/or adolescents to understand, as well as the educational level, personal history and family history, in a holistic and specific way to each patient, respecting their cultural beliefs and habits. Thus, professionals need to be aware of the guidelines of programs that involve young people and adolescents, promoting actions on hygiene and a healthy lifestyle, which makes nurses fundamental in the prevention of HPV (QUINTELLA; ZANON, 2012).

Nurses, being professionals who usually have close and direct interaction with patients, can be the first contact with them. At the consultation, the young person and/or adolescent and their family can be evaluated, to identify factors that increase the risk of HPV infection, and to

guide interventions that can be performed by nursing or by referral to other team of multidisciplinary professionals (FERREIRA; ROCHA, 2014).

In his studies, Cianciarullo (2011), states that the nursing consultation must establish a relationship of trust between the professional and the client, ensuring the confidentiality of the service, raising the self-esteem of the same, promoting dialogue and, therefore, the verbalization of feelings and concepts, as well as knowledge of the body itself, emphasizing self-care and enabling the perception of probable risk situations to be experienced.

Thus, according to Duavy *et al.* (2017), "during the consultation the nurse must identify aspects of the patient's life and health history, in addition to other information such as personal and family background". However, the authors show that not only the theoretical-scientific aspects must be taken into account, which can cause psycho-affective damage in the nurse-client relationship.

Regarding this deeper relationship between nurses and the population, Duavy *et al.* (2017), state that it establishes circumstances to critically redefine the practice in several health services, aiming at a service that meets the demands of individuals. Thus, Quintella and Zanon (2012) affirm that "a posture between health professionals and the population is becoming established in Brazil, aimed at generating new knowledge and new forms of social organization".

The nurse plays an extremely crucial role in actions to prevent HPV infection, taking into account that nursing practices are undergoing constant changes, in which there is greater professional autonomy, especially in nursing, freedom and development of nurses' skills, modernizing assistance and the need to work in harmony with the multidisciplinary team. Which leads to an optimized consultation and results in better service (QUINTELLA; ZANON 2012).

According to the Ministry of Health (2009), nurses are considered to be the main professional working in the adolescent's health program, directing their care to monitor young people and/or adolescents holistically, taking into account the principles and guidelines of the Unified Health System (SUS). In this sense, nursing should consider the social technique linked to the community, showing that the main objective of nurses in relation to young people/adolescents is to act in health promotion and disease prevention - especially HPV infection - in this vulnerable group, offering young people and adolescents interdisciplinary care, together with the family and society (BRASIL, 2009).

Nursing professionals have increasingly shown health promotion and disease prevention activities as important forms of health care. These activities help young people and teenagers

to stay healthy, and improve their current or future level of well-being. Disease prevention activities, especially HPV infection, are aimed at protecting the client against real or potential health threats. Both are oriented towards the future and differ between motivations and goals. Based on the assumption that adolescence is the moment when it comes to the search for sexual identity, body transformation and sexual experiences, it is necessary to think about the issue of sexuality, which can be understood as an important element in the formation of identity of the young person and/or adolescent, through the discovery of the body image of themselves and of the neighbor and of the established relationships. In addition, despite sexuality as a normal daily practice, it brings great complexity with regard to related cognitive, sensory and cultural aspects (LIMA et al., 2014).

Given the above, it is up to nurses, in view of the skills and competences of the profession, to be willing to listen to young people and adolescents, gain their confidence, guarantee confidentiality and exchange knowledge. Therefore, the discussion on this theme should not only permeate the physiological aspects of the human organism, but also add cultural and social values, making young people and adolescents aware of their own attitudes, trends and feelings (LIMA et al., 2014).

Nurses must be caregivers and health promoters, and must approach the reality of young people and adolescents so that they know the problems that afflict them and can contribute to the development of public policies, as well as prevention and treatment programs, always aiming at improvement of a good quality of life. In this context, dealing with the health of young people and/or adolescents in the prevention of risks and injuries is shown to be efficient with the use of health education, through workshops, lectures, conversation circles and meetings. However, it is necessary to be aware of the vulnerabilities and risks to which these young people and adolescents are exposed. For this, it is necessary that nurses know their area of expertise, as well as the work of their team and, especially, to know adolescents and young people. Because you cannot provide assistance services to young people and teenagers without knowing them. It is essential that nursing knows this population, so that there is an improvement in the quality of care for young people and adolescents (LIMA et al., 2014).

Accordingly, Ferreira et al. (2015), says that "the vaccine is an important instrument for the prevention of cervical cancer worldwide. It is a recombinant product that stimulates the humoral response, capable of inducing high antibody titers, superior to natural infection". In 2014, the Ministry of Health included the HPV vaccine in the National Vaccination Calendar. It is provided for free, by the Unified Health System (SUS), to girls aged 11 to 13 years. However, from 2015 it was established that girls aged 9 to 14 years and boys aged 11 to 14

years will be vaccinated (INSTITUTO ONCOGUIA, 2014). Regarding HPV prophylactic vaccines, Ferreira et al. claim that:

> They are composed of VLPs (Virus-Like Particles), structures similar to the viral capsid, but do not have viral DNA, which provides security for the vaccine, since replication is not possible. The prophylactic vaccines already approved by ANVISA and available on the market are: the bivalent, Cervarix® (GSK), which protects against viral types 16 and 18 and the quadrivalent, Gardasil® (MSD), which protects against viral types 6, 11, 16 and 18. The vaccines are manufactured using the same technology, but with minor differences with regard to the genetically modified organism, choice of adjuvant, dosage and indication. Both proved to be safe and effective for their intended purposes. They present partial and ephemeral cross protection to other types of HPV not present in vaccines. These types are 31, 33, 35, 39, 45, 51, 52, 58, 59, 68. This is due to the genetic similarity between some types of HPV. The HPV vaccination campaign in Brazil started in March 2014. The target audience for this campaign is girls between 9 and 13 years old. The vaccination scheme adopted by the Ministry of Health is called "extended" and consists of three doses. The vaccine used in the Brazilian campaign is the quadrivalent vaccine (Gardasil®) recommended by the World Health Organization (FERREIRA et al., P. 02, 2015).5

Human Papillomavirus infection plays an important role in the development of cervical cancer. Studies show that the virus is present in more than 90% of cervical cancer cases. Prevention can be done through the preventive exam, which is the main and most widely used method for screening for cervical cancer, also known as the Papanicolau test (BRASIL, 2017).

According to the WHO, sexually active women should undergo the preventive exam at least once a year, considering that the priority of the collection is of a preventive nature. Although the national reality is different from the recommended, considering that many women are still resistant to the exam due to the lack of guidance, modesty, historical and cultural factors, among others. It is desirable that 48 hours before the collection of the exam, the woman does not perform douches or use vaginal creams, nor have sex, as these factors can cause changes in the results of the exams. Marques e Ramos p. 56 (2017), regarding the cytopathological examination, state that:

⁵ São compostas por VLPs (Vírus-Like Particles), estruturas semelhantes ao capsídeo viral, mas não possuem DNA viral, o que proporciona segurança à vacina, já que não é possível a replicação. As vacinas profiláticas já aprovadas pela ANVISA e disponíveis no mercado são: a bivalente, Cervarix® (GSK), que protege contra os tipos virais 16 e 18 e a quadrivalente, Gardasil® (MSD), que protege contra os tipos virais 6, 11, 16 e 18. As vacinas são fabricadas utilizando a mesma tecnologia, mas com pequenas diferenças no que se refere ao organismo geneticamente modificado, escolha do adjuvante, posologia e indicação. Ambas se apresentaram seguras e eficazes para os fins destinados. Apresentam proteção cruzada parcial e efêmera a outros tipos de HPV não presentes nas vacinas. Esses tipos são 31, 33, 35, 39, 45, 51, 52, 58, 59, 68. Isso se deve à similaridade genética entre alguns tipos de HPV. A campanha de vacinação contra o HPV no Brasil teve início em março de 2014. O público alvo dessa campanha são as meninas entre 9 e 13 anos. O esquema de vacinação adotado pelo Ministério da Saúde é chamado de "estendido" e composto por três doses. A vacina utilizada na campanha brasileira é a quadrivalente (Gardasil®) recomendada pela Organização Mundial da Saúde (FERREIRA et al., p. 02, 2015).

The Nurse is responsible for the integral assistance to women's health, which must cover the following sets of actions: Promotion, prevention, diagnosis, treatment and rehabilitation. It is responsible for the control of risk factors, gynecological consultation and Papanicolau exam collection in Basic Health Units, as well as encouraging the increase in the demand for prevention. Provide satisfactory technical assistance, guiding the woman during the consultation about what will be done at the time of collection, in order to ensure safety and greater comfort in the preventive examination. It is the role of the Nurse to provide home care when necessary, to supervise and coordinate the staff of the Basic Health Unit. Supporting the team of the unit is extremely important, through meetings, study groups, health education, thus making the team be cohesive in relation to the recruitment and orientation of these women (MARQUES; RAMOS, p. 56, 2017).⁶

Cruz and Jardim (2013), emphasize that "health professionals are seen as the last source of knowledge for adolescents about this preventive exam" and, they add, that they should work not only in the area of the health institution, but also in doing partnerships with prevention and health promotion actions in the community, establishing contact with young people and adolescents in other environments such as the school, among others. It is mentioned by the authors that "in order to make adolescents aware of their participation in health promotion, it is worth reaffirming the nurse's responsibility in the educational actions carried out in their professional practice", as in individual nursing care and home visits that make it possible to know even more better the life situation of the adolescent and his family, strengthening the bond between him and the nurse.

Final considerations

Human Papillomavirus (HPV) infection infects dozens of young people and adolescents annually, being worrisome, since many of them are unaware of the disease, mainly because it is an asymptomatic virus, where patients in this age group are unaware that they have the virus, however, disseminate the same. In most cases, this infection appears in a latent form and no lesions appear, which increases the number of young people and adolescents infected.

⁶ O Enfermeiro é responsável pela assistência integral à saúde da mulher que deve abranger os seguintes conjuntos de ações: Promoção, prevenção, diagnóstico, tratamento e reabilitação. É responsável pelo controle dos fatores de risco, realização da consulta ginecológica e da coleta de exame de Papanicolau nas Unidades Básicas de Saúde, bem como incentivar o aumento da demanda de prevenção. Prestar assistência técnica satisfatória, orientando a mulher durante a consulta acerca do que será realizado no momento da coleta, a fim de garantir segurança e maior conforto no exame preventivo. É papel do Enfermeiro realizar atenção domiciliar quando necessário, supervisionar e coordenar a equipe da Unidade Básica de Saúde. Dar suporte a equipe da unidade é de extrema importância, através de reuniões, grupos de estudos, educação em saúde, fazendo assim com que a equipe seja coesa em relação a captação e orientação dessas mulheres (MARQUES; RAMOS, p. 56, 2017).

This group becomes susceptible to HPV infection, as they do not have adequate knowledge about the virus and by risky life and sexual practices, mainly due to the early beginning of sexual activity (the earlier the greater the risk of infection), abstaining from use condom and high sexual activity, in addition to the use of contraceptives and the use of alcohol and other drugs. Thus, it is concluded that living adolescence and/or youth with HPV, includes silence, secrets, concerns, search for normality, finding differences, doubts about the virus and still adherence to treatment.

Therefore, attention must be paid to the urgency of the implementation of preventive actions by nursing that investigate perceptions, difficulties and specific needs for each demand. The nurse must be attentive to the quality of care to be provided, removing any form of prejudice and discrimination, focusing on the promotion and prevention of the human papillomavirus, with actions that should be aimed at mobilizing young people and adolescents, aiming at the practice of self-care, through educational and preventive activities.

It is necessary to adhere to strategies on the part of health professionals, especially nurses, to act in order to facilitate the adherence of young people and adolescents to health services, aiming at the prevention of HPV infection, having a differentiated performance, holistically, respecting young people and/or adolescents in their individuality, privacy, confidentiality and the right to learn about the disease and the factors that involve it and especially about their health. It is suggested to carry out activities in conjunction with young people and adolescents, health professionals, family and community. It is evident the importance of the nurse in the nursing consultation, raising awareness about the prevention of HPV, through exams, reinforcing the use of condoms and prophylactic vaccines.

REFERENCES

AYRES, J. R.; PAIVA V.; BUCHALLA C. M., Vulnerabilidade e Direitos Humanos – Prevenção e Promoção da Saúde – **Livro I - Da Doença à Cidadania**. Curitiba: Juruá Editora, 31 ago., 320 p., 2012.

BRASIL. Decreto Lei nº 12.852, de 5 de agosto de 2013. Institui o Estatuto da Juventude e dispõe sobre os direitos dos jovens, os princípios e diretrizes das políticas públicas de juventude e o Sistema Nacional de Juventude - SINAJUVE. **Diário Oficial da União**, Brasília, DF, 6 ago. 2013. Disponível em: http://www.planalto.gov.br/CCIVIL_03/_Ato2011-2014/2013/Lei/L12852.htm. Acesso em: 20 nov. 2019.

BRASIL. Ministério da Saúde. Estudo epidemiológico sobre a prevalência nacional de infecção pelo HPV (POP-Brasil): Resultados preliminares. **Associação Hospitalar Moinhos de Vento**, Porto Alegre. 2017. 119 p.

BRASIL. Ministério da Saúde. Guia Prático Sobre HPV. 2017. 45 p.

CAMPO-ARIAS, A.; CEBALLO, G. A.; HERAZO, E. Prevalência do padrão de comportamento de risco para a saúde sexual e reprodutiva em estudantes adolescentes. **Rev. Latino-Am. Enfermagem**, Colômbia, v. 12, n. 2, mar./abr. 2010.

CIRINO, M.; NICHIATA, L.; BORGES, A. Conhecimento, atitude e práticas na prevenção do câncer de colo uterino e hpv em adolescentes. **Escola Anna Nery Revista de Enfermagem**, São Paulo, v. 14, n. 1, p. 126-34, jan./mar. 2010.

CRUZ, D. E.; JARDIM, D. P. Adolescência e Papanicolau: conhecimento e prática. **Adolescência & Saúde,** Rio de Janeiro, v. 10, n. 1, p. 34-42, abr. 2013.

DUAILIBI, L. B.; RIBEIRO, M.; LARANJEIRA, R. Perfil dos usuários de cocaína e crack no Brasil. **Cad. Saúde Pública** [online], [S.L], v. 24, n. 4, p. 547-557, jan. 2008.

DUAVY L. M. *et al.* A percepção da mulher sobre o exame preventivo do câncer cérvicouterino: estudo de caso. **Ciência & Saúde Coletiva**, Rio de Janeiro, v. 12, n. 3, p. 733–742, maio/jun. 2017.

FERREIRA, G. *et al.* Papilomavírus humano e a eficácia da vacina profilática para neoplasia intra epitelial cervical. **SIMPÓSIO DE ASSISTÊNCIA FARMACÊUTICA**, São Camilo, v. 1, n. 2, p. 1-3, maio 2015.

FRANCO, M. et al. Patologia: Processos Gerais. 6 ed. São Paulo: Atheneu. 2015. 338 p.

GONCALVES, H. *et al.* Determinantes sociais da iniciação sexual precoce na coorte de nascimentos de 1982 a 2004-5, Pelotas, RS. **Rev. Saúde Pública**, São Paulo, 2009. Disponível em http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-8910200800090006&Ing=pt&nrm=iso. Acesso em: 20 nov. 2019.

INCA. Instituto Nacional do Câncer. **Tipos de câncer**. Disponível em: http://www2.inca.gov.br/wps/wcm/connect/inca/portal/home. Acesso em: 28 fev. 2018.

INSTITUTO NACIONAL DE CIÊNCIA E TECNOLOGIA DAS DOENÇAS DO PAPILOMAVÍRUS HUMANO. **Guia do HPV** – entenda de vez os papilomavírus humanos, as doenças que causam e o que já possível fazer para evitá-los. São Paulo: jul. 2013. 41 p. Disponível em:

http://www.incthpv.org.br/upl/fckuploads/file/guia%20do%20hpv%20julho%202013_2.pdf. Acesso em: 6 out. 2019.

INSTITUTO ONCOGUIA. Vacina HPV. 2014. Disponível em:

http://www.oncoguia.org.br/conteudo/perguntas-e-respostas-sobre-a-vacina-profilatica-contra-o-hpv/2592/488/. Acesso em: 16 nov. 2018.

JARDIM, F. A. *et al.* Doenças Sexualmente transmissíveis: a percepção dos adolescentes de uma escola pública. **Cogitare Enferm**, v. 18, n. 4, p. 663-668, out./dez. 2013.

LETO, M. *et al.* Infecção pelo papilomavírus humano: etiopatogenia, biologia molecular e manifestações clínicas. **Anais Brasileiros de Dermatologia**, São Paulo, v. 86, n. 2, p. 306-

317, jul. 2011.

LIMA, P. V. C. *et al.* Saúde do adolescente – conceitos e percepções: revisão integrativa. **Rev. enferm. UFPE on line**, Recife, PE, v. 8, n. 1, p. 146-154, jan. 2014.

LUSTOSA, N. H. R. *et al.* Conhecimento e atitudes de adolescentes em relação à prevenção da infecção por HPV e sua correlação com o câncer de colo do útero. **Temas em Saúde**, João Pessoa, PB, v. 16, n. 3, p. 333-352, jan. 2016.

MACÊDO, F. L. D. S. *et al.* Infecção pelo HPV na adolescente. **Feminina,** Teresina, PI, v. 43, n. 4, jul./ago. 2015.

MARQUES, J. M.; RAMOS, E.S.F. Atuação do enfermeiro frente ao exame colpocitológico. **Revista Educação, Meio Ambiente e Saúde**, [S.L], v. 7, n. 2, abr./jun. 2017.

PAIVA, V. *et al.* Idade e uso de preservativo na iniciação sexual de adolescentes brasileiros. **Revista de Saúde Pública**, São Paulo, v. 42, supl.1, jun. 2008.

PIRES, M. M. *et al.* Reconstructing past ecological networks: the reconfiguration of seed-dispersal interactions after megafaunal extinction. **Oecologia**, São Paulo, v. 175, n. 4, p. 1247–1256, maio 2014.

QUINTELLA; C. ZANON, C.M.A. A atuação da enfermagem: uma contribuição para prevenção do câncer ginecológico. Projeto de tese. Universidade Federal de Santa Catarina, Florianópolis, 2012.

RODRIGUES A.; SOUSA J. Papilomavírus humano: prevenção e diagnóstico. **Revista de Epidemiologia e Controle de Infecção**. São Paulo, v. 5, n. 4, p. 197-202, 2015.

SANTOS, N.; ROMANOS, M.; WIGG, M. **Introdução à:** Virologia Humana. 2 ed. Rio de Janeiro: Guanabara Koogan, 2008. 532 p.

SANTOS, T. M. B. D. *et al.* Fatores que contribuem para o início da atividade sexual em adolescentes: revisão integrativa. **Rev. de Atenção à Saúde,** Recife, PE, v. 13, n. 44, p. 64-70, jan. 2015.

SILVA, A. D. S. N. *et al.* **Início da vida sexual em adolescentes escolares:** um estudo transversal sobre comportamento sexual de risco em Abaetutuba, Estado do Pará, Brasil. Instituto de Ciências Biológicas, Belém, PA, ago./abr. 2015.

SILVA, G. R.; CRUZ, N. R. D.; COELHO, E. J. B. Perfil nutricional, consumo alimentar e prevalência de sintomas de anorexia e bulimia nervosa em adolescentes de uma escola da rede pública no município de Ipatinga, MG. **Revista Digital de Nutrição**, Ipatinga, MG, v. 2, n. 3, ago./dez. 2008.

TORRES, T. R. F. *et al.* O cuidado de enfermagem na saúde sexual e reprodutiva dos adolescentes. **Revista oficial do núcleo de estudos da saúde do adolescente**/UERJ, v. 10, Supl. 1, abr. 2013.

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