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Perceptions of pregnant adolescents on human papillomavirus: an exploratory study

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ABSTRACT

Aim: To analyze the perception of pregnant teenagers in relation to human papillomavirus (HPV). **Method:** This is an exploratory and qualitative study, conducted between April and May 2012 in the home area of the Family Health Strategy team of the city Imperatriz/MA. Data were obtained through interviews with nine pregnant teenagers in their homes. For the data, we used content analysis. **Results:** it was noticeable that the conceptions of pregnant adolescents regarding HPV are still confusing and erroneous, since they attribute common characteristics of sexually transmitted diseases (STDs) to HPV, not knowing how to define what its specific characteristics are. They have absolutely no knowledge in terms of the implications that the virus can bring during pregnancy. **Conclusion:** HPV is still a matter of much uncertainty for adolescents with regard to the issues surrounding it, especially during pregnancy, which increases the vulnerability of young pregnant women to the virus.

Descriptors: Adolescents; Pregnancy; Sexually Transmitted Diseases; Nursing.

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INTRODUCTION

This study intends to analyze the perception of pregnant teenagers in relation to human papillomavirus (HPV). It is based on the fact that teenage pregnancy is considered a real risk factor for HPV infection, since the virus can reach large proportions resulting from the increased vascularity in the vaginal canal. The immunological and hormonal changes that occur during this time also influence it[1-2].

For adolescents suffering from HPV, pregnancy is a potentially serious condition, since the virus types 16 and 18 may cause laryngeal papillomas in infants and children, as well as hemorrhage associated with vaginal delivery and genital warts that grow quickly and lead to mechanical obstruction of the birth canal in late pregnancy[2].

HPV is an infectious agent that attacks the female genital system and it manifests itself by means of lesions known as condyloma acuminata, genital warts or cockscomb. It is a DNA uncultivable virus of the parvovirus group, which includes more than 100 types. The high oncogenic index viruses, when associated with other co-factors such as multiparity, early sexual activity, history of sexually transmitted diseases (STDs) and the known virus types, such as 16, 18, 31, 33, 35, 39, 45, 46, 51, 52, 58, 59 and 68, present in the body, are related to the development of intraepithelial neoplasia and of invasive cervical cancer[3].

The prevalence of this virus is high and it is closely related to the development of cervical cancer, given that over 90% of women with cervical cancer have HPV. HPV infection strikes at young onset of sexual activity, and in 80% of cases this is transitory and there is a higher prevalence in women aged less than 25 years[4].

During adolescence, some events such as menarche and other biological changes, responsible for a series of psychological events that culminate in the acquisition of the sexual identity, have been occurring earlier. The misinformation in terms of these biological events leads to adolescent exposure to numerous physical, psychological and social risks and, consequently, to infections caused by STDs, as a result of their ignorance in terms of their reproductive system and forms of transmission[5].

The relationship between knowledge and the risk of HPV infection in adolescence considers the beginning and the history of sexual activity as the most influential factors in the frequency of infection by this virus. Female ignorance with regard to the forms of transmission, signs and symptoms caused by HPV may suggest gaps in preventive strategies of health services[6-7].

Among the factors that facilitate HPV infection in women we can highlight the non-use of condoms during sex, which makes pregnant women susceptible to the opportunity of acquiring the infection[7]. In Brazil, condoms are still underutilized, especially among teenagers. Ministry of Health data show condom use rates as around 0.2 to 1.4 percent by the age group 15-19 years[4].

Adolescence is a stage where the cervical biological activity is at its maximum level; cell replication and other substances present in the cervical environment facilitate HPV infection[5]. It is a phase of intense physical, sexual, psychological and social changes arising from the discharge of sexual hormones accompanied by the discovery of the body, the sexual organs and, consequently, sexuality. Coupled to this it is estimated that one million live births are children born to mothers aged 10 to 19 years in Brazil, which corresponds to 20

percent of the total[8]. Thus, the number of pregnant adolescents is significant.

Taking into account that condom use is low during pregnancy and adolescence and the fact that it is essential for preventing HPV and STD, an effective information strategy is to carry out preventive activities aimed at health promotion by means of educative actions in health care: clarification regarding the modes of transmission, diagnosis, treatment, what the disease is and the possible reasons for infection in the bodies of women and children[9].

From this perspective, the partnership between the Ministry of Health and the Ministry of Education, by means of the Health and Prevention Program in Schools, provides a set of actions in the school environment aimed at reducing the vulnerability of adolescents to STDs, HIV infection and early pregnancy, with an emphasis on health promotion through preventive education and increased access to condoms in this population. Thus, we need to rethink how these actions are being implemented in schools, as the continuity of these actions by health professionals contribute significantly, so that the adolescent population becomes enlightened with regard to HPV and possibly inclined to adopt safer and healthier sexual behaviors[10].

This approach is crucial in the face of the evidence of the delicate relationship between the knowledge in terms of HPV and the health of pregnant teenagers; and of the world watch in terms of the magnitude of HPV and the restrictions of nursing researches involving this subject. Moreover, up to this moment there is no record of published studies that have sought to discover the perceptions of pregnant adolescents concerning HPV and its gestational repercussions in the city of Imperatriz, which is the second largest in the state of Maranhão. In addition, the studies found with this theme are essentially quantitative.

The relevance of researches like the present one is grounded on the importance of prevention of the HPV infection for gestational health and the lack of studies in specific populations, such as pregnant adolescents. Thus, the study aims to analyze the perception of pregnant teenagers in relation to human papillomavirus.

METHOD

This is an exploratory study that uses a qualitative approach, conducted between April and May 2012 in an area linked to a Basic Health Unit (BHU) of the Family Health Strategy (FHS) of the Municipality of Imperatriz.

Initially 15 pregnant adolescents enrolled in the FHS study were going to be interviewed. However, following the refusal of four teenage girls and the fact that two went into labor during the study period, we were forced to exclude them from the study. Thus, the interviews were conducted with only nine adolescents, aged 10-19 years of age, pregnant, and registered in the FHS of the BHU participating in the study. To define the age group we used the concept provided by the World Health Organization[11], which considers adolescence the eligible age of this study.

We used the semi-structured interview technique performed in the home of adolescents and conducted by the first author, through the use of open questions concerning the objective of the research proposed. On average, the previously scheduled interviews lasted from 45 minutes to 1 hour and were recorded on an MP3 voice recorder after the consent of the participants and the legal guardians of minors. The scheduling of home

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visits was up to the teenagers.

During the first visit, the study objectives and methodology were explained, followed by the reading and signing of the free and informed consent form (ICF) for the development of the study. Afterwards, the socio-demographic, obstetric and sexual data, among others, were recorded. In the other three visits, questions from the interviews and the interaction between researcher and researched converged, in order to better understand the perceptions of pregnant adolescents with regard to HPV.

For data analysis, we considered the framework of qualitative content analysis[12], following the steps of identification, coding and categorization. This implies that the researcher must search for the meaning of specific passages and allocate them into appropriate categories.

Thus, first there was the description provided by the adolescents, followed by transcription of the collected data, and then a careful reading and the organization of the statements that were made. In this last step we observed compliance and likeness of the statements, which finally were divided into thematic categories.

As a global ethical principle, the research was approved by the Research Ethics Committee of the University Hospital, Federal University of Maranhão (CEP-HUUFMA) under the Protocol 4545/10.

RESULTS

The results are presented in two stages: the first was established by the characterization of the study participants and the second by the description of the statements resulting from the full interview, from which two themes were selected: "What is the human papillomavirus (HPV)?" and "HPV and pregnancy". In the first and second themes the knowledge of the interviewees in terms of HPV and its relationship with pregnancy were respectively investigated.

Characterization of the study participants

The nine study participants are aged 13 to 19 years. Regarding the level of education, one of them has incomplete elementary education, two have completed elementary school, four have not completed high school and two have completed high school. It should be noted that the three teenagers with incomplete and complete primary education are primiparous. Regarding marital status, two said they were married, one is single but with a steady boyfriend, and six reported a stable union. Of the nine participants, only one works, and the others are students.

When asked about their sexual lives, they all reported having had their first sexual intercourse when aged around 13 to 16 years. Regarding the number of partners in sexual intercourse, six said they had only one so far; however three reported having had two to four partners.

With regard to the use of contraceptives, four said they had never made use of any contraceptive, three had already made use of oral contraceptives and two said they had used emergency contraception. Concerning the use of condoms, six said they used condoms and three said they had not used them in their previous sexual relations. Among those who did not use them, only one said she had adopted the use of condoms in any sexual intercourse; and among those who used them, two reported using them in all sexual relations and six had used them in half

of them. During the study, as reported by the adolescents, it is observed that some of these teenagers have a preference for oral contraceptive use at the expense of regular condom use during sex, because they have the belief that using an oral contraceptive alone allows them to be autoimmune to the risks of STDs, particularly HPV. Please note that the teenager who reported not using condoms during sexual intercourse has a stable relationship.

In the case of STD, all teenagers have a simplified knowledge about it; five reported having observed changes in the genitals and four had never noticed any changes; all said they had never noticed any change in the partner's genitals. As to undergoing a previous treatment related to any DST, only one reported having undergone a treatment for trichomoniasis once.

With respect to pregnancy, two are in the first trimester of pregnancy, five in the second quarter and two in the third. Of these, five are primiparous, four had one or more previous pregnancies, two suffered abortions and two have living children.

Regarding the Pap smear examination, six young women reported having undergone it and three said they had never done it. Of the six teenagers who underwent it, four took it in the last three months, and two in the last eight months. Only two did not return to fetch the result, and four returned to the health service to submit the results. As to the frequency of this examination, only one said she takes this examination with an interval greater than 12 months, one reported taking it for the first time and four adolescents reported taking it in an interval of between six and twelve months.

What is HPV?

When conducting the interviews, it was observed that the perception of pregnant adolescents in terms of HPV is varied. They characterize these diseases as being included in the HPV group in general, showing ignorance in terms of what the virus is in reality. HPV is an infection rarely discussed among teenage groups, since they focus mainly on other STDs, as can be seen in the three lines below:

> I know this is a disease of the human body, which affects women and men, that it is necessary to take the exam to prevent this type of infection. (Adolescent 1)

> For me, this disease is not difficult to treat. It is not a dangerous disease, because if I do the treatment, I'll get cured, but if I do not treat it, it becomes a cancer [...] (Adolescent 2)

> I've heard about it in school. I know that STD is transmitted through sexual intercourse and can cause sores and warts in the uterus. (Adolescent 3)

> I think HPV is some kind of STD [...] (Adolescent 4)

In some reports it is also apparent that perceptions about HPV are disconnected and have different meanings in relation to the real definition, as can be seen below:

> HPV must be itching and vaginal discharge. I think it must hurt the vagina. (Adolescent 5)

> I don't know what HPV is. It causes some disease, doesn't it? (Adoles-

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cent 6)

> I know we catch HPV through blood [...] (Adolescent 7)

From the speeches of these adolescents, it is observed that their perceptions in terms of HPV are still wrong because they attribute characteristics which are common to STDs to HPV, and they cannot define what characteristics are specific to the virus.

HPV and pregnancy

The implications that HPV can bring during pregnancy, in case the adolescents are pregnant, have also been investigated. We emphasize again that the total ignorance of pregnant teenagers in terms of the implications for the mother and the fetus when infected with HPV was observed. This can be verified in the statements below:

> I didn't know that children could catch it. (Adolescent 1)

> This disease, I don't know anything about it. Nobody ever told me anything about it. What does it cause? I thought it only impacted women, not the baby. (Adolescent 2).

> I thought that, because of the baby, I wouldn't catch this disease. (Adolescent 9)

Among the contraceptive methods used by interviewees, condoms were mentioned a few times as a way to prevent HPV. According to the adolescents, the use is limited only to the prevention of pregnancy, leading them to report beliefs that it is unnecessary during pregnancy, as a preventive method against STDs. This assertion can be seen in the statements below:

I don't use it, because we use condoms only to prevent pregnancy; after I got pregnant, it didn't prevent it anymore. I used it basically to prevent pregnancy. Most people don't care about the disease. (Adolescent 8)

> I used it a few times. It's because sometimes we trust the partner and sometimes we don't [...] and if I'm pregnant, why to use it? (Adolescent 7)

> I used it because I was afraid of getting pregnant, but after I got pregnant I never used it again. (Adolescent 5)

The interviewees also talked about the reasons that prevented them from using condoms in all sexual relations, revealing the absence of protection against STDs and pregnancy. They used as justifications of marital trust of their partners, dissatisfaction in relationships with condoms or oblivion. This situation was observed as follows:

> Many times we did not have a condom at the time, and in other moments we forgot to use it. (Adolescent 5)

> I wasn't used to use condoms because so far I've only had sex with two people, and both were my boyfriends. (Adolescent 6)

> Sometimes I did not use condoms because without it the relationship is better, and because I trust in my

husband. (Adolescent 2)

From this perspective, it is observed that the attitude of pregnant teenagers, when choosing not to use a condom, suggests a certain nonchalance as to the imminent risk of acquiring infections during sex.

DISCUSSION

Studies involving pregnant teenagers found that 53 percent of adolescents who become pregnant complete high school; however, these figures should be compared to 95% of adolescents who do not get pregnant. An improved education is considered a contributing factor to a more accurate level of knowledge and a more solid family structure, in which parents actively participate in the growth and development of their children and foster discussions on topics such as pregnancy and STDs[11]. This differs from the situation found among most pregnant adolescents in the present study.

The information reported by participants regarding their marital status reflects a little about their sexual initiation. According to the Ministry of Health, Brazilian adolescents start sexual life precociously and maintain a greater number of partners; 36% of young people between 15 and 24 say they had their first sexual intercourse before the age of 15, while only 21% of young people aged 25-29 years had the first relationship in that age group[12].

Adolescence is a stage where the individual goes through changes, especially related to sexual maturation, in which there is experimentation and partner variability. When adolescence is accompanied by factors such as low socio-economic status, low education and low knowledge, it indicates a greater probability of having early sexual activity[8,12].

As observed in this study, we also highlight the rise of a new relationship setting among adolescents, such as a stable union. Based on Law 9,278 of May 10, 1996, the common-law marriage is recognized as a family unit between a man and a woman, exercised continuously and publicly, similar to a marriage when the partners live together permanently, with the objective of setting up a family and posing as husband and wife[13].

Even when faced with stable relationships, usually at the beginning of sexual life, teenagers almost never use contraception. These methods would protect them from an unplanned pregnancy; however, not using contraceptive methods may also become a triggering factor for HPV infection and STDs[14].

Studies highlight that STDs are diseases that present few symptoms or are initially asymptomatic, making them difficult to detect. However, they may bring severe secondary consequences that could harm women's reproductive health and well-being and could cause sexual dysfunction, infertility, miscarriage, birth defects, birth of premature babies and death if not properly treated[2,7].

Therefore, issues such as the early onset of sexual life, multiple sexual partners, and non-use of contraceptives, among other factors, make adolescents susceptible to pregnancy, STD and HPV[15]. In addition, it is emphasized that a significant percentage of adolescents are not covered by health services, contributing even more to the lack of knowledge about STDs[16].

Literature shows that the increase in teenage pregnancy in developing countries is closely related to the low educational level of teenagers, in addition to other factors, such as poverty, family disintegration and lack of knowledge[17]. In this study, it was found that

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nearly half of the respondents had had more than one pregnancy, showing the early sexual initiation in adolescence.

Other analyses[5.13] show that women who had sex around 16 years of age had a doubled risk of having acquired HPV and cervical cancer, compared to women who had sex after the age of 20. The rapid change of the cervical epithelium during puberty is reflected in areas where the neoplastic transformation process starts. The metaplastic and columnar cells in the ectocervix have higher prevalence in this age group, making adolescents vulnerable to HPV. In addition to this information, the proliferation of the columnar squamous epithelium of the ectocervix is visible in adolescence, facilitating more HPV infection in adolescents than the squamous epithelium of the uterine cervix present in adult women[18].

This research shows that more than half of adolescents considered a Pap smear important in order to visualize the conditions of the cervix. It allows the identification of the presence or absence of a change in the female genital organs such as genital wounds and/or warts that indicate HPV; thus, having this examination is essential.

Since 1998, the Ministry of Health recommends the utilization of the Pap smear in an attempt to detect early cervical cancer in women who have already had sexual initiation[4]. It consists of a smear or scraping of the exfoliated cells of the cervical and vaginal epithelium, and it is important for secondary prevention and for diagnosis, since it allows the discovery of precancerous lesions and of the disease in its early stages. Despite being a low-cost procedure, it is not incorporated into all health services, which means that its use is limited and not available to the whole female population[15].

Estimates indicate that around 40% of sexually active Brazilian women have never undergone the Pap smear. The main reasons are the shame of exposure of the genitalia, emotional distress, difficulties in access to health services and the lack of knowledge about the exam objectives and about STDs[4].

Data from the STD National Program of the Health Ministry affirm that, among the viral STDs, the highest prevalence in pregnant women suffering from HPV corresponds to 40.4 percent[9]. Pregnancy is a facilitating factor in the emergence process, growth or recurrence of condyloma lesions caused by HPV. In infected pregnant women, there is a higher frequency of obstetric complications[18].

Genital HPV, called condylomata acuminata, features vegetative, humid, isolated or grouped lesions, or sessile papules that resemble the a common wart, and it may acquire the aspect of a "cauliflower" and may arise both internally and externally in the female genitalia[13].

The DNA of high-risk HPV virus is detected in most specimens of cervical cancer, and about forty types of virus infections have been found in the anogenital mucosa. These virus types are considered carcinogenic to the uterine cervix, thus affecting women's health and becoming one of the highest female mortality factors[6.13].

HPV has a prevalence of 15% to 40% in the general population, and cervical HPV infection currently represents the most common isolated STD in the world, being extremely common in young individuals[19].

In pregnancy there is a higher incidence of HPV, and it thus leads to infection in the fetus, transmitted vertically from mother to child, a fact that makes it relevant to discuss HPV during pregnancy, especially in adolescence. Vertical transmission can occur via blood, by contamination via ascending or via

the birth canal, and can result in laryngeal papillomatosis in the fetus or newborn[15]. HPV infection is found especially in the second trimester of pregnancy. This occurs because of the decreased function of the immune defense system due to high levels of estrogen and progesterone that can interfere in the regulatory system of the viral replication[12].

Corroborating the study mentioned above, the vulnerability of adolescents to HPV is attributed to a greater exposure of the transformation zone of the cervix during adolescence than in adulthood. It is therefore essential to use condoms in all sexual relations, whether pregnant or not[5].

The prevention of pregnancy is considered by adolescents as the main purpose of condom use in sexual relations. Therefore, troubling questions arise as to the prevention of HPV and STD, as condom use is waived in sexual relations among pregnant teenagers. Thus, the sporadic use and/or waiver of condoms during pregnancy is directly related to low or no knowledge that adolescents have concerning the condoms' purpose also to prevent STDs, especially in pregnancy[13,21].

The perceptions of adolescents featured in this study show that the discontinuous use of condoms during sexual intercourse is considered a serious problem, since this attitude contributes to the exposure to HPV. In addition, adolescents do not feel vulnerable and have a higher risk for becoming infected, especially if they do not have enough knowledge. In their interviews, the young women revealed their experiences and expressed their perceptions on the subject.

Adolescence is a stage that needs special attention, because in addition to early sexual initiation, the low knowledge they have about STDs contributes to misperceptions in terms of the personal risk of acquiring them, considering the lack of protection practices such as the nonuse of condoms[8.16].

Moreover, upon the occurrence of infections caused by STDs in adolescence, the late manifestation of these diseases affects the degree of vulnerability of possible contacts, showing a worrying situation and putting adolescents as a priority for studies of STD / HIV in Brazil and in the rest of the world[20,22].

CONCLUSION

The study revealed that, in relation to a possible contamination by HPV, the knowledge of pregnant adolescents is deficient. Moreover, only a few of them said that they used condoms and, among those who did not, some justified their behavior by male fidelity, being oblivious even in discomfort. In addition, the respondents reported not knowing about the effects of the HPV virus in the fetus and child.

Based on these results, one can conclude that HPV is a little-known disease that is embedded in a variety of settings. This causes adolescents to become a susceptible public because they have low knowledge about the characteristics that make up the virus and the cultural nuances that support their vulnerability. Therefore, care directed to the development of health education through a continuous educational process that is adequate to the needs of pregnant adolescents, making them aware of the truths and untruths in relation to health and disease, especially HPV infection is needed.

REFERENCES

1. Costa LA, Goldenberg P. Human papillomavirus

(HPV) among youth: a warning sign. Saúde Soc. 2013;22(1):249-61.
2. Brasil. Ministério da Saúde. Manual técnico: pré-natal e puerpério. Série direitos sexuais e direitos reprodutivos. Caderno n. 5. Secretaria de Atenção à Saúde. Brasília; 2006.
3. Yinfeng J, Huan G, FeifeiL L, Guangqi Z, Haixin D, Ling B, et al. Characterization of the high--risk human papillomavirus infection in Jining, China. Braz J Infect Dis. 2013;17(2):275-76.
4. Brandão VCRAB, Lacerda HR, Ximenes RAA. Frequência de Papilomavírus Humano (HPV) e Chlamydia trachomatis em gestantes. Epidemiol Serv Saúde. 2010;19(1):43-50.
5. Ministério da Saúde (Br). Instituto Nacional de Câncer (INCA). Câncer de colo do útero. Rio de Janeiro: INCA; 2008.
6. Cirino FMSB, Nichiata LYI, Borges ALV. Knowledge, attitude and practice in the prevention of cervical cancer and HPV in adolescents. Esc Anna Nery Enferm. 2010;14(1):126-34.
7. Doerfler D, Bernhaus A, Kottmel A, Sam C, Koelle D, Joura EA. Human papillomavirus infection prior to coitarche. Americ J Obstet Gynecology. 2009;200(5):487.
8. Perrotte N, Gomez A, Mason G, Stroup D. An assessment of knowledge, attitudes and behaviour regarding the human papillomavirus. West Indian Med J. 2012;61(1):58-63.
9. Eleutério RMN, Oliveira MAP, Jacyntho CM, Eleutério Jr J, Freitas JR. Identificação de DNA--HPV em Adolescentes e Mulheres Jovens sem Coito Vaginal. J brasil Doenças Sex Transmissíveis. 2011;23(2):66-8.
10. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Área Técnica de Saúde da Mulher. Direitos Sexuais e Direitos Reprodutivos: uma prioridade do governo/ Ministério da Saúde, Secretaria de Atenção à Saúde, Departamento de Ações Programáticas Estratégicas – Brasília: Ministério da Saúde, 2005.
11. Organização Mundial de Saúde. La Salud de los Jóvenes: Un Reto y una Esperanza. Geneva: OMS; 1995.
12. Fernandes JV, Meissner RV, Carvalho MGF, Fernandes TAAM, Azevedo PRM, Villa LL. Prevalence of HPV infection by cervical cytologic status in Brazil. Internat J Gynaecol Obstetrics. 2009;105(1):21-4.
13. Polit DF, Beck CT. Fundamentos de Pesquisa em Enfermagem: avaliação de evidências para a prática de enfermagem. 7 ed. São Paulo: Artmed;2011.
14. Urrutia MT, Concha X, Riquelme G, Padilla O. Knowledge and preventive behaviors related to cervical cancer and human papiloma virus in a group of Chilean adolescents. Rev chil Infectol. 2012;29(6):600-06.
15. Ferreira MLSM. Influence reasons that inhibit women from doing papanicolaou test. Esc Anna Nery Enferm. 2009;13(2):378-84.
16. Oliveira WMA, Barbosa MA, Mendonça BOM, Silva AA, Santos LCF, Nascimento LCD. Adherence of women aged 18 to 50 years to a cervical smear test in the Family Health Strategy. Rev Enf Referência. 2012;3(7):15-22.
17. Panobianco MS, Lima ADF, Oliveira ISB, Gozzo TO. Knowledge concerning hpv among adolescent Undergraduate nursing students. Texto e contexto enferm. 2013;22(1):201-07.
18. Badano I, Pedrozo RW, Ruíz Díaz LS, Galuppo JA, Picconi MA, Campos RH, et al. Human papillomavirus (HPV) detection and Papanicolaou cytology in low-resource women in Posadas city, Misiones, Argentina. Rev argent microbiol. 2011;43(4):263-67.
19. Calabres MSO, Rivas HG, Leonett EH, Rojas KJ, Castellano RC, Pilimur KS. Knowledge of nursing students about human papillomavirus. Rev obstet ginecol Venezuela. 2009;69(3):179-85.
20. Reis AAS, Monteiro CD, Paula LB, Santos RS, Saddi VA, Cruz AD. Human papillomavirus and public health: cervical cancer prevention.

Ciênc saúde coletiva. 2010;15(supl.1):1055-60.
21. Parra WP. Human papilloma virus in adolescents: characteristics and management. Rev Soc Chil Obstet Ginecol Infant Adolesc. 2009;16(1):11-6.
22. Brandão VCRAB, Lacerda HR, Ximenes RAA. Frequency of Human Papillomavirus (HPV) and Chlamydia trachomatis in Pregnant Women. Epidemiol Serv saúde. 2010;19(1):43-50.

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