Human papillomavirus in the reality of Brazilian adolescents

Papilomavírus humano na realidade dos adolescentes brasileiros

El virus del papiloma humano en la realidad de los adolescentes brasileños

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RESUMO

Objetivo: analisar a realidade dos adolescentes brasileiros no contexto do papilomavírus humano, bem como dissertar sobre as atuais formas de prevenção encontradas para essa doença e como estas têm sido utilizadas. **Método:** trata-se de uma revisão integrativa, alicerçada em três bases de dados, LILACS, ScIELO e BDENF, buscando priorizar as publicações mais recentes e mais relevantes para o andamento e fundamentação do estudo. **Resultados:** foram escolhidos 9 artigos que estão relacionados com o tema para compor o estudo. De maneira geral, o HPV causa o aparecimento de verrugas em diversas regiões, mas principalmente nas regiões genitais. Tem como meio de transmissão o contato de mucosas, devido a isso é considerada uma enfermidade sexualmente transmissível. **Conclusão:** a grande maioria dos adolescentes não possui conhecimento sobre o que é a doença causada pelo vírus nem o porquê precisa ser vacinado. O estudo demonstrou também que o número de vacinações, de campanhas de conscientização, educação e de conhecimento dos adolescentes, está abaixo do desejado.

Descritores: Papilomavirus Humano; Adolescentes; Vacina.

ABSTRACT

Objective: to analyze the reality of Brazilian adolescents in the context of human papillomavirus, as well as to discuss the current forms of prevention found for this disease and how these have been used. **Method:** this is an integrative review, based on three databases, LILACS, ScIELO and BDENF, seeking to prioritize the most recent publications and most relevant for the progress and rationale of the study. **Results:** 9 articles were chosen that are related to the theme to make up the study. In general, HPV causes the appearance of warts in several regions, but mainly in the genital regions. Its means of transmission is the contact of mucous membranes, due to this is considered a sexually transmitted disease. **Conclusion:** the vast majority of adolescents do not have knowledge about what is the disease caused by the virus or why it needs to be vaccinated. The study also showed that the number of vaccinations, awareness campaigns, education and knowledge of adolescents, is below the desired.

Descriptors: Human papillomavirus; Adolescents; Vaccine.way.

RESUMEN

Objetivo: analizar la realidad de los adolescentes brasileños en el contexto del virus del papiloma humano, así como discutir las formas actuales de prevención encontradas para esta enfermedad y cómo se han utilizado. **Método:** se trata de una revisión integradora, basada en tres bases de datos, LILACS, ScIELO y BDENF, que busca priorizar las publicaciones más recientes y más relevantes para el progreso y la justificación del estudio. **Resultados:** Se eligieron 9 artículos relacionados con la temática para conformar el estudio. En general, el VPH causa la aparición de verrugas en varias regiones, pero principalmente en las regiones genitales. Su medio de transmisión es el contacto de las membranas mucosas, debido a esto se considera una enfermedad de transmisión sexual. **Conclusión:** la gran mayoría de los adolescentes no tienen conocimiento sobre cuál es la enfermedad causada por el virus o por qué necesita ser vacunada. El estudio también mostró que el número de vacunas, campañas de sensibilización, educación y conocimiento de los adolescentes, está por debajo de lo deseado.

Descriptores: Virus del papiloma humano; Adolescentes; Vacuna.

REVIEW

Introduction

The Papillomavirus (HPV) was discovered by Shope and Hurst in 1933, when verruciform skin lesions began to be observed in wild rabbits, leading to a hypothesis that the disease was caused by a virus. This is characterized by having a double helix in its DNA and by infecting the epithelial cells of the skin and also of some mucous membranes.[1]

HPV has often been cited, studied, debated and fought in Brazilian Public Health, as it affects a significant portion of the population. This sample includes adolescents, both male and female, who are contaminated by this virus, making it necessary to consider the reality experienced by this age group of the population.[2]

With sexual initiation at an increasingly early age, the debate about the occurrence of the papillomavirus in this specific age group is paramount. Thus, the quantitative issue and the profile of people who are exposed or infected are contextualized, aiming at a more rational and social detailing about the disease.[3]

In addition, this portion of the population, having, in general, more access to information and education, is a portion essentially sensitive to educational campaigns and prevention and combat programs.[4]

In this way, the words prevention, awareness and education gain importance in the potential of fighting this disease in the adolescent universe. Since this age group is at a favorable moment for the formation and solidification of their intellect and all the information gathered, so that they can develop into citizens. [5]

Given the above, we have the following guiding question: what is the situation of Brazilian adolescents in relation to HPV, with regard to awareness, contamination and prevention?[6]

Therefore, the relevance of this research lies in the need to analyze the epidemiological situation of adolescents in relation to HPV, considering the precocity of their sexual life, the number of cases of HPV infection in this population and also the importance of awareness and education to tackle this problem. [7]

For a better approach to the subject, this work aims to analyze the reality of Brazilian adolescents in the context of the human papillomavirus, as well as to discuss the current forms of prevention found for this disease and how they have been used.

Method

The present work consists of an integrative literature review. This method provides the analysis of the existing literature to provide the broadest and most comprehensive understanding of a certain topic or object of study. It is a review category that can be applied to the most diverse themes and possibilities of study, which directly contributes to the practice of a Nursing based and grounded in scientific evidence.[8]

Data collection took place in February 2022, in the following databases: Latin American and Caribbean Literature on Health Sciences (LILACS), Scientific Electronic Library Online (SciELO) and Nursing Database (BDENF), using the following descriptors: Human Papillomavirus; Teenagers; Vaccine. During the research, the Boolean operator AND was used, which determined the search strategy shown in the table below:

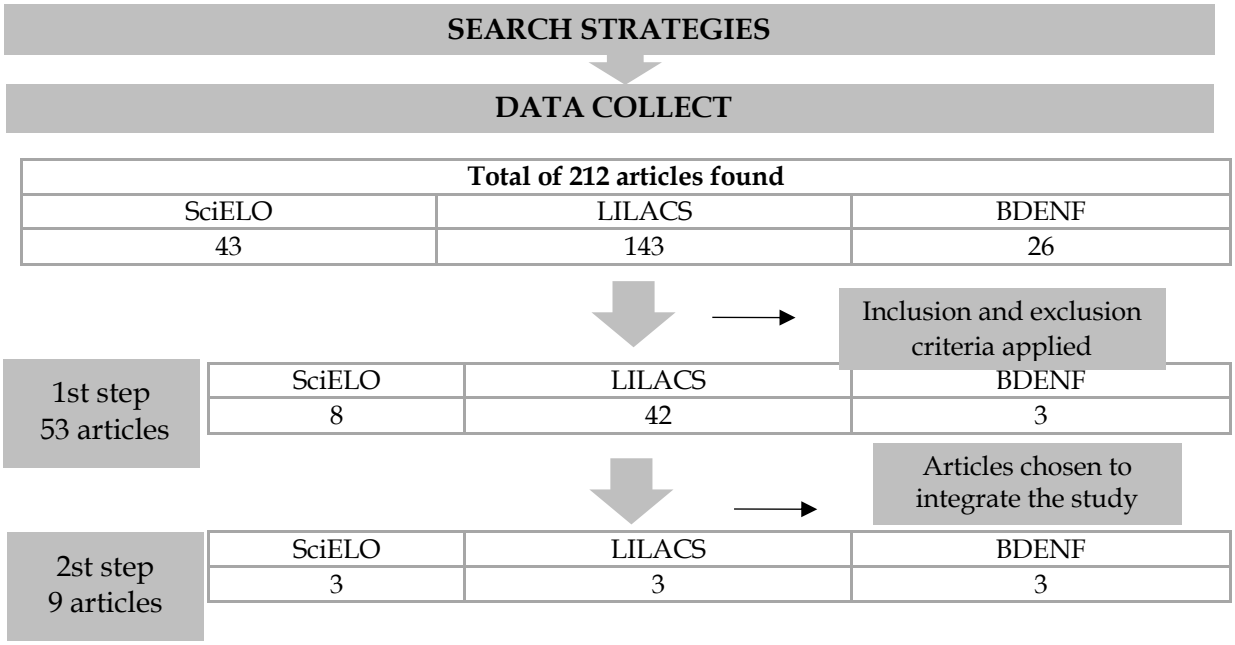
Table 1 – data search strategy. Brasília-DF, 2022.

Data Base	Search Strategy	Result
LILACS	"Human Papillomavirus" AND "Adolescent"	66
	"Human Papillomavirus" AND "vaccine"	77
SCIELO	"Human Papillomavirus" AND "Adolescent"	12
	"Human Papillomavirus" AND "vaccine"	31
BDENF	"Human Papillomavirus" AND "Adolescent"	13
	"Human Papillomavirus" AND "vaccine"	13

The inclusion criteria for the selection of publications were: academic publications from the last five years, applied in Brazil and research that answer the problem question.

Productions that were not directly related to one or more of the central subjects of the present work, publications available in a language other than Portuguese and texts published without full availability were excluded.

The initial data collection generated a total of 212 publications, being reduced, after applying the inclusion and exclusion criteria, to 53 publications, so that it could meet the inclusion criteria requirements, some of which were used for the development and theoretical basis of the present work. From this process, 9 articles were chosen, 3 from Lilacs, 3 from Scielo, 3 from BDENF as described in the flowchart below:



Results and Discussion

The table below shows the synoptic table with the references used, after the full reading of the selected publications, where there is a greater predominance in a qualitative approach study.

Title	Year	Place	Methodological Approach
HPV infection – Screening, diagnosis and management of HPV-induced lesions.	2021	São Paulo, SP	Literature review
Feelings of pre-adolescents and adolescents regarding vaccination against human papillomavirus	2020	Montes Claros, MG	Qualitative
Health education to sensitize school adolescents to human papillomavirus vaccination	2021	Natal,RN	Qualitative
Knowledge, attitudes and practices of adolescents about the human papillomavirus	2022	Teresina, PI	Analytical
Why should girls under 14 be vaccinated against HPV?	2022	São Paulo,SP	SOF second formative opinion
Knowledge of nursing students about the human papillomavirus vaccine	2022	São Paulo, SP	Quantitative
Lack of knowledge about the HPV vaccination campaign among Brazilian students: a multilevel analysis	2021	Santa Cruz, RN	Quantitative
Chatbot development for teenagers about sexually transmitted infections	2021	Brasília , DF	Quantitative
Immunization against human papilloma virus: rate of adherence, abstention and completion of the vaccination schedule	2021	Gama, DF	Quantitative

Considered the most common sexually transmitted disease in the world, HPV infection has more than 200 types of viruses already described and cataloged. Among these types of viruses there is a distinction between themselves in terms of the sequence of Deoxyribonucleic Acid. It is considered the cause of cervical cancer, producer of oncoproteins and capable of altering cellular behavior.[7]

With molecular biology techniques it is possible to study and trace the relationship between HPV infection and cervical cancer, which usually affects genital organs (vulva, vagina, cervix, perianal areas). Although HPV is recognized as a risk factor for the development of this type of cancer, it is wrong to say that it is the only cause for the development of malignant neoplasms.[9]

The types of HPV viruses that affect the genital areas are classified into numerical types and these indicate and classify their degree of risk. Numbers 16, 59, 56, 51, 39, 68, 31, 35, 33, 18, 45, 52, 58, 82 and 82 are considered high risk, with numbers 16 and 18 being the most common among teenagers. As low-risk viruses, type 6, 40, 44, 43,42,70, 72, 81, 61, 11, 40, 54.[10] deserve to be highlighted.

In general, HPV causes the appearance of warts in several regions, but mainly in the genital regions. It has as a means of transmission the contact of

mucous membranes, due to this it is considered a sexually transmitted disease. It is an extremely common disease and is present in all regions of the world, despite the fact that there is already an efficient vaccine and that it is even provided for in Brazil with all supporting regulations and campaigns. [11]

The vast majority of virus types are considered low risk, causing benign warts. HPV types 26, 4, 2 and 1 are among the causes of the most common warts, while types 6 and 11 are the causes of genital warts - candilomaaccuminata. Furthermore, viruses considered to be high risk cause intraepithelial lesions, which progress to invasive squamous carcinomas.[12]

The chance of a person being infected by the HPV virus at least once in a lifetime is about 50% and the persistence of the virus infection is the main cause of cancer in the lower genital tract of the woman, considering itself. as a relevant and dangerous disease. In the United States, for example, it is estimated that about 33,369 cases linked to HPV are diagnosed per year, of which about 21,290 are reported in women. Worldwide, about 600,000 cases of cancer are linked to HPV each year.

Main forms of prevention and treatment of HPV 4

Vaccination and the reality of vaccination in Brazil

In Brazil, the application of the vaccine between 9 (nine) and 26 (twenty-six) years of age is recommended, with vaccination being implemented free of charge in most municipalities, but this reality does not encompass the whole of Brazil, and it would be a mistake to believe that vaccination is carried out and disseminated to encompass the entire country. The two approved vaccines, the quadrivalent and bivalent, were approved respectively in 2006 and 2008, being available until 2013 exclusively in the private health sector in Brazil.[13]

Vaccination at the appropriate age, carried out in a preventive manner, is efficient, since immunization before exposure to HPV is long-lasting and has been shown to be effective in both men and women. However, this age group recommendation is sometimes not well received by parents and/or society, whether for cultural or religious reasons. In addition, vaccinating people in adulthood faces difficulties such as the high cost to vaccinate in more isolated places and less supported by the health system, due to the need for three injectable doses, in addition to disbelief and questions about the need to vaccinate and on the usefulness of vaccination or the need to apply it to men.[13,14]

HPV treatment

Treatments against HPV vary according to the type of virus contracted and consequently according to the disease developed by the patient. In general, treatments can be divided into self-administered treatments, outpatient treatments, cryotherapy and exoresis.[15]

Most of the time they do not present adverse effects and in the rare cases of occurrence it is usually a burning sensation in the area, irritation, burning sensation or hypersensitivity in the region. Among the drugs used, we can

mention Imiquimod, podophyllotoxin, fluorouracil or substances such as trichloroacetic acid, CO2 laser.[16]

Education and awareness about HPV as a form of prevention

When dealing with the level of awareness and education as a way of preventing HPV, it is worth mentioning the lack that general levels of mastery and knowledge about HPV in general are low anywhere in the world, especially with regard to cytology. oncology, cervical cancer and genital warts. In academia, there are also few publications that address the level of knowledge and awareness of the Brazilian population about HPV.[17]

The process of education and awareness in relation to health, whether private or collective, starts from the person as an individual and considers a whole range of variables such as the environment in which he grew up, the formal education he received, the culture to which he belongs, among others. In view of this, it is still observed in Brazil in general a strong precariousness in public policies of information and awareness of the population in relation to diseases, and on the part of individual people in seeking help, knowledge and information. Thus, the understanding of HPV is very incipient in the reality of the vast majority of the Brazilian population, which makes its combat, confrontation and, above all, its prevention more difficult. Education and awareness in this aspect represents a great resource that is not used to reduce the occurrence of the disease.[18]

Adolescents' reality about hpv in Brazil

Overview of vaccination in this age group

The situation of adolescents with regard to HPV is largely due to what happens in the entire vaccination context, from distribution, form of administration, availability, quantity, ideal age and the entire communicative medium that disseminates it. this information, directly affecting the number of cases of the disease in this age group.[19-22]

Although vaccines are available in the Brazilian public network, adolescents who have never been vaccinated against the disease are common. The reasons are diverse and vary according to the social context and region of the country.[14, 23,24]

The option not to be vaccinated made by the adolescent, whether for one reason or another, must always be preponderated and interpreted within a contextual and social bias in which this individual is inserted. In view of this, the importance of communication and dissemination of correct information is highlighted, especially by primary health care professionals about the importance of vaccinating. Since they are considered a reliable, safe and reliable source of technical knowledge, the effectiveness of dialogue on the part of these professionals has a greater chance of success. [14,25,26]

Doubts and the attitude of adolescents in relation to HPV

The fear regarding the administration of a drug is something natural and real in any person, which increases the greater the level of misinformation about that person, so it is natural for adolescents to have doubts, apprehension and fear about getting vaccinated. In this way, it is mainly up to the school and the health units, preferably in partnership, to provide the information and awareness service for adolescents and their families, so that they can guide them that vaccination is indeed beneficial.[13,27]

The doubts of adolescents and their families are the most diverse and range from insecurities regarding reactions and possible side effects or damage to health that vaccination can cause, as well as the difficulty of understanding why their daughters and sons need to take a vaccine so early in their lives to protect against a sexually transmitted disease, when in the vast majority of cases their sexual life has not yet started. It is in this context that the action of the school and the health units becomes decisive for the success or failure of vaccination.[12,28,29]

Final considerations

The HPV virus - Human Papillomavirus, because it is very common and has several types, presents a rich academic literature about it. Among such publications and all the topics that can be addressed, the reality of adolescents in the face of the virus was chosen and addressed in this study, aiming to foster the need for reliable and impartial information about the social and environmental context of this specific population.

With the entire network of exposure on the subject and the discussion of these publications, we sought to clarify the real social, statistical and health situation of adolescents when it comes to HPV. It has been shown that the vast majority do not have knowledge or understanding of what the disease caused by the virus is or why they need to be vaccinated. The study also showed that the number of vaccinations, awareness campaigns, education and knowledge of adolescents is below the desired level.

Thus, it is clear that there should be changes with regard to the dissemination of information regarding HPV, in addition to awareness campaigns for adolescents in schools and homes so that there is an understanding of the importance of vaccination in the medium and long term, with the objective of improving this scenario.

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