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Research Article

A Qualitative Study of Information Needs about Human papillomavirus (HPV) Among Elementary School Students

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Abstract

Aims: This research aims to identify the information requirements of elementary school children toward human papillomavirus (HPV).

Methods: The researcher employed a qualitative method utilizing the focus group discussion technique to gather data on several predetermined topics. A total of 20 female students who met the criteria were divided into several groups, and the discussions were recorded and documented.

Result: Most of elementary school children have no background knowledge of HPV. Many of them have limited understanding of sexual health education. Although children aged 9-14 have received the HPV vaccine, most of them do not know about HPV. Further information is needed regarding the definition of HPV, the virus transmission process, potential symptoms, diseases caused by the virus, and complications arising from inadequate attention to prevention.

Conclusion: Providing comprehensive and child-friendly information about the HPV virus is essential to enhance the knowledge of elementary school students. It also contributes to increasing the acceptance of the HPV vaccine and maximizing preventive measures.

Keywords:

Elementary School Students, Human Papilomavirus, HPV, Information Needs

INTRODUCTION

Human papillomavirus (HPV) is one of the most frequently encountered viral infections in the reproductive systems of both women and men, recognized as a sexually transmitted infection. HPV is transmissible through skin, oral, and genital contact (1,2). Approximately 75% of sexually active individuals, encompassing both males and females, have experienced HPV exposure at some point in their lifetimes (3). Infections involving HPV types 16 and 18 contribute to 70% of cervical cancer cases and precancerous lesions (3). The recorded number of cervical cancer cases in Indonesia stands at 32,469, with HPV infection being the cause of nine out of ten cases (4). In contrast to many other forms of cancer, cervical cancer is preventable. The World

Health Organization (WHO)(5), advocates a comprehensive approach for the prevention and control of cervical cancer. One primary measure for cervical cancer prevention involves HPV vaccination for girls aged 9-14 who have not yet initiated sexual activity.

In Indonesia, HPV vaccination or HPV immunization has been administered to female students in the 5th and 6th grades of elementary school or equivalent levels, both in public and private schools, since 2016. The administration of this immunization is carried out through the School Children Immunization Month (BIAS) program. In recent years, HPV immunization has been expanded to 112 regencies/cities in Central Java, East Java, Bali, North Sulawesi, Gorontalo, and Southeast Sulawesi. In 2023,

the HPV immunization program is slated for further expansion as a national initiative (6).

Despite the government's efforts to execute the HPV vaccination program optimally, the uptake of the vaccine among children aged 9-14 years in Indonesia remains very low. According to data from WHO in 2021, the coverage of the recommended doses of HPV vaccination for 15-year-old girls in Indonesia has only reached 5 percent, with the highest at 7 percent in 2020, while the global target set by WHO is 90 percent (7). The Indonesia government's commitment to expanding the HPV immunization program nationally and UNICEF's support in providing free access to the HPV vaccine for elementary school-aged girls are positive steps towards increasing the uptake of the vaccine (8).

The low uptake of HPV vaccination among children aged 9-14 years in Indonesia can be attributed to several factors. Firstly, the cost of the HPV vaccine, which is available in the private market at a relatively high price, has been identified as a significant barrier to its adoption, limiting access for many families (9). Secondly, limited knowledge and awareness about HPV and the vaccine have been associated with low vaccination uptake. Studies have shown that poor knowledge of HPV and the vaccine has been reflected in the low vaccination uptake in Indonesia (10,11). Additionally, access and availability of the vaccine, as well as the limited reach of the vaccination program, particularly in rural areas, have also impacted the uptake (12). Furthermore, cultural factors and perceptions of the risks associated with the vaccine, including concerns about its safety and halal status, have influenced public acceptance and uptake (9).

The current research gaps in understanding knowledge and attitudes towards HPV in elementary school students are confirmed to have insufficiently explored the subject in depth. The majority of research on HPV has focused on adult women, with limited attention to children (13,14). Previous

studies have predominantly concentrated on HPV vaccination within the same population. (15). Additionally, research has primarily centered on the attitudes and uptake of the HPV vaccination program among parents, with a focus on female students in years 5-6 (16). Therefore, further research is needed that encompasses the age group of elementary school children to gain a more comprehensive understanding of the impact of HPV and the effectiveness of vaccination programs in this population. This research deficit underscores the necessity for additional investigations that intricately examine the facets of knowledge and attitudes regarding HPV in elementary school-aged children, aiming to comprehend its potential impact on early disease prevention initiatives.

Currently, there is a lack of comprehensive studies that thoroughly investigate the knowledge of elementary school children, particularly in relation to their understanding of HPV. Meanwhile, early sexual health education is important for early prevention in elementary school children, and it can have a significant impact on the child's development and understanding of sexuality (Kurtuncu et al., (17). The factors impacting their awareness and understanding involve the educational curriculum, societal consciousness, health education within the family, access to information through different media platforms, and the cognitive capacity of children to comprehend complex concepts related to reproductive health.

Therefore, this research is conducted to assess the information needs of elementary school children regarding HPV, as well as to provide easy and understandable access for children aged 9 to 14 through short interviews and the evaluation of each information requirement that can be utilized and disseminated.

PURPOSE

The aim of this research is to assess the information requirements of elementary

school students concerning *human papillomavirus* (HPV).

METHODS

Participant

The study population comprises female students. The inclusion criteria encompass fifth or sixth-grade elementary school students aged 9 to 14 years who possess fluent reading abilities. Exclusion criteria apply to students experiencing communication disorders. The sampling method employed was convenience sampling, and the study included a total of 20 selected participants.

Data collection

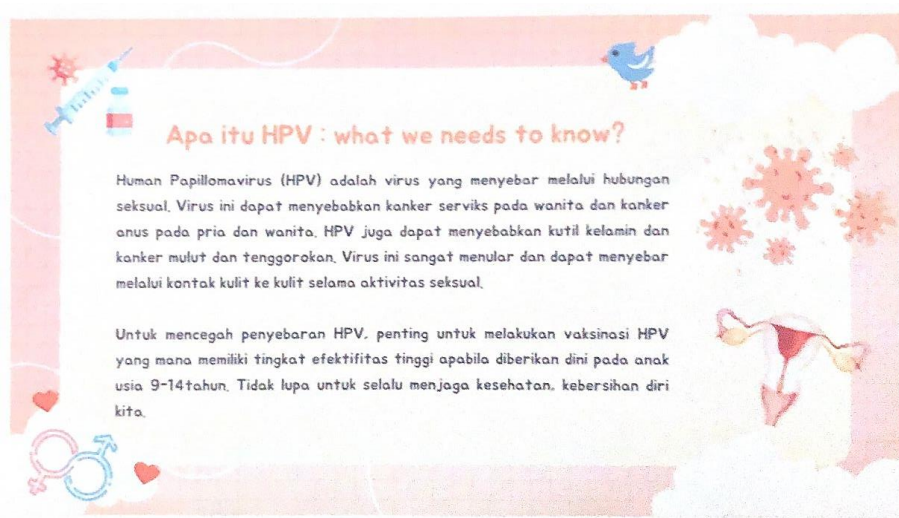
The proses of data collection begin with contacting the school authorities to initiate the data retrieval process for the research. Following this, the sample is selected based on specified criteria. Data collection involves conducting a focus group discussion with children regarding their information needs related to HPV. The discussions are held with a maximum of 5 children per session, lasting approximately 30 minutes. The outcomes of the discussions are recorded and subsequently analyzed to integrate each argument from the samples, processed to form the research results.

Measure

A semistructured topic guide was developed (List Topic). During each focus group, an informatin of HPV handout was distributed (Hand-out). A space for an open response was provided. Free- text responses to this question constituted the primary data for analyses. At the end of the baseline questionnaire there was also a space provided for 'any other comments'. The focus groupdiscussions were tape-recorded and transcribed verbatim.

Data Analysis

The researcher employed a qualitative research design using the data collection technique of focus group discussions to explore participants' perceptions and knowledge regarding HPV. The data were analyzed using thematic analysis, involving the identification and organization of themes and patterns in the data. The analysis was conducted independently by the researchers, and the results were compared by coding the data, then clarifying the summary contents or discussing to ensure consistency, scale, or intensity for data collection. It also involved interpreting the acquired data based on the theory used and the hypotheses of thinking.



List topic

1. Background knowledge and understanding of sexual health education
2. Awareness of sexual education
3. Opinions on providing HPV immunization in elementary schools.
4. Information needs about HPV (what is it, how, when where who)
5. Understanding of HPV prevention

Hand-out

what is HPV? : what we needs to know

RESULTS

From a sample group of 20 selected female children, they are elementary school students who meet the research criteria. Eleven of them are aged 12, while the remaining nine are aged 11. They are all sixth-grade students with proficient and fluent reading abilities. After conducting data collection through the focus group discussion technique, findings were obtained on several topics that constitute six primary focus domains.

Elementary school students background knowlege of sexual health education limited in puberty.

The opening subject delves into the basic understanding of elementary school children regarding sexual health education. The majority of them possess restricted knowledge in this area, predominantly centering on the definition of puberty and the accompanying physical changes. Information sources usually originate from educational guidance in school or education provided by parents. This is reflected in the quotes, indicating that their sexual background knowledge tends to be confined to specific aspects of physical development.

...Puberty, changes from children to adults, the changes can be physical, also in voice?. C5:12 years, the definition of puberty

... If puberty for girls can be like changes in breast shape. C4: 12 years, the sign of physical growth.

The prohibition is only within the awareness recognized by children.

Their recognized awareness of sexual education seems to be more focused on setting boundaries to maintain distance from the opposite gender. They indicate that the information or teachings they receive highlight restrictions in interpersonal interactions with the opposite gender. This may reflect an approach to sexual education that emphasizes prevention or an understanding of the prohibitions that need to be observed.

...Don't get too close to boys and don't play with boys too often.C15: 11 years. prohibition of getting closer to the opposite gender.

Their complaints are reinforced by the desire to protect themselves, namely by not allowing anyone to touch their sexual body parts. This indicates an understanding that they feel the need to safeguard themselves from inappropriate or invasive interactions with others, particularly concerning areas of the body that are private and sensitive. This may reflect an awareness of boundaries in interpersonal relationships, especially those involving touching intimate parts of the body.

.... Parts that should not be touched indiscriminately. C4: 12 years. sexual parts that should not be touched arbitrarily.

... It is not allowed to touch the chest, buttocks, and genitals. C20: 11 year. sexual parts that should not be touched arbitrarily.

They are also aware that children of their age group should not engage in prohibited actions unless they have reached adulthood and marriage.

... If, for example, one is already an adult and married, is it permissible to sleep together? As of now, it's not allowed, right?; we are still young. C1:12 years. prohibition of getting closer to the opposite gender.

Have taken a vaccine without knowing what it is.

The implementation of HPV immunization has been conducted in this elementary school as part of the monthly school immunization program. While they have received complete immunization, the majority are not fully aware of the specific vaccinations they have received.

...If I'm not mistaken, at that time, we were told that we would be given a vaccine. C6: 12 years. have taken a hpv vaccine without knowing what it is.

...Already immunized but don't know what was given. C9: 12 years. have taken a hpv vaccine without knowing what it is.

The importance of information availability about HPV that is easily understand.

The emergence of curiosity occurred among several children after reading the material. Among the numerous questions asked, one of the predominant inquiries was a request for an explanation of the general definition of HPV that they could easily understand.

...What kind of virus is HPV? Oh, how does the virus enter? And what causes it? C16: 12 years. The definition of hpv, transmission process, and the patofisiology.

They also had numerous questions about how the symptoms appear in someone who has contracted the HPV virus.

...What are the signs like? C6: 12years. sign and symptoms of hpv

Comprehending the disease caused by containing the hpv virus.

The children express concerns about diseases caused by the HPV virus, leading them to wonder what kind of serious illnesses may result and what the worst-case scenario is if one contracts the HPV virus.

...cervical cancer, what is it?. C19: 12 years. Diseases caused by HPV

...why does it cause mouth and throat cancer?. C13: 12 years. Diseases caused by HPV

...if you get cervical cancer, will you die?. C7: 11 years. The complication of HPV

Understanding disease prevention through vaccination and maintaining health.

Upon learning about potential worst-case scenarios resulting from the HPV virus, the children are curious about preventive measures they can take to combat the virus, with vaccination being a viable option.

...Virus that can attack, prevented with vaccine. C3: 12 years. how to prevent HPV.

In addition, their curiosity extends to the process of administering the vaccine, the benefits of HPV vaccination, and how effective the given vaccine is.

...What are the benefits of the vaccine?C10: 12 years. The process of administering HPV vaccine.

...Where is the vaccine, like how does it work?C18: 11 tahun. the process of administering HPV vaccine.

Moreover, the concern among them needs to highlight the reasons for administering the vaccine as early as possible.

...Why is the vaccine given at the age of 9-14 years?C13: 12 years. wondering the population targets.

DISCUSSION

The knowledge of elementary school children regarding health sex education is currently limited. Several journals mention that elementary school-aged children have not received adequate information about reproductive health education and therefore needs improvement (18,19). The understanding of elementary school children about sex education is still minimal at present. This is due to the fact that the education curriculum in Indonesia has not included sex education as part of the structured subjects (20). From the research results, it is known that the knowledge of elementary school children is focused on understanding puberty and physical changes. Reproductive health education also involves introducing reproductive organs, understanding puberty, and other aspects related to reproductive health (20). Therefore, it needs to be acknowledged that

there is an urgent need to improve sexual education at the elementary level so that children can have a better understanding of reproduction and sexual health in general.

Furthermore, basic knowledge related to how to protect oneself within limits with the opposite gender has been understood by elementary school children, but this knowledge is not complete, leading to the emergence of negative attitudes and numerous questions (21). Sexual education is still considered a taboo topic until now. Many parents and educational institutions are reluctant to provide sexual education to children. This is reflected in the fact that most elementary school students do not receive comprehensive sexuality education (22). However, accurate and comprehensive sexual education is crucial to help children understand their responsibilities regarding their sexuality, as well as to prevent the transmission of HIV/AIDS and other sexually transmitted diseases, as discussed in the current context of the HPV virus.

From previous research, it is apparent that the lack of knowledge among children about receiving the HPV vaccine is limited, and their acceptance is high because they are unaware (23). This lack of knowledge may be related to decision-making. Even though they may not be able to make decisions yet, they still need to have information.(23)

Based on the research results, children display eagerness in searching for easily accessible and comprehensible information about HPV. The information they are interested in covers the definition of HPV, the virus transmission process, potential symptoms, diseases resulting from the virus, and complications arising due to inadequate attention to prevention. They also express curiosity about the procedure of administering the HPV vaccine, its effective functioning, and the contraindications associated with the vaccine. The limited knowledge among children regarding the HPV vaccine, as indicated by prior studies, may stem from the insufficient information provided to them. Research suggests that a

mother's perspective on HPV immunization significantly impacts the motivation to undergo the immunization process (24).

Furthermore, noticeable disparities exist in the awareness of girls about HPV immunization both before and after receiving guidance (25) This underscores the pivotal role of proper education and guidance in enhancing children's comprehension and willingness to accept the HPV vaccine. Consequently, endeavors are required to augment public awareness of the pivotal role of the HPV vaccine in preventing cervical cancer, especially among children (26).

The thinking of today's children is indeed more critical than we might think. They quickly understand situations and can recognize things well (27). This is evident from the numerous questions and curiosity of children regarding information about HPV, which has been provided to them from an early age. By providing education about HPV and HPV vaccination from an early age, it is expected that children can understand the importance of HPV vaccination in preventing cervical cancer and other sexually transmitted diseases. This is also intended to increase their willingness to receive the HPV vaccine and to maintain better overall health.

CONCLUSIONS

Based on the results of the analysis and discussion of the research study, it can be concluded that the knowledge of elementary school children regarding sexual health education is still limited. The majority of them have not received adequate information related to reproduction and sexuality. This is indicated by the number of children's curiosity regarding comprehensive information about the HPV Virus. Although they have had HPV immunization, many of them do not know information about HPV itself. The information children are eager to acquire includes the definition of HPV, the virus transmission process, potential symptoms,

diseases caused by the virus, and complications arising from inadequate attention to prevention. Their interest also extends to the procedure of administering the HPV vaccine, its effectiveness, and the associated contraindications. Delivering comprehensive and child-friendly information about the HPV virus is essential to enhance understanding, increase acceptance of HPV vaccination, and maximize preventive efforts.

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