

The Relationship of Parent's knowledge about Cervical Cancer with The Giving of The HPV Vaccination to their Daughter

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Abstract

Background: The incidence of cervical cancer in Indonesia ranks second with 10.7% and the death rate ranks third with 10.3% recorded by Globocan in 2018. The HPV virus or Human Papilloma Virus is known as the cause of cervical cancer, especially on viruses types 16 and 18. The Indonesian government is currently planning to add the HPV vaccine to the national immunization program. For Surabaya, HPV vaccination has been running since 2015 in several schools. **Methods:** This study used an observational analytic method with a cross-sectional approach. The number of sample is as many as 74 respondents, with the sampling technique that is total sampling with the determination of inclusion and exclusion criteria. The independent variable is the knowledge of parents about cervical cancer. The dependent variable is the act of giving vaccinations to students. The data taken is primary data in August 2021. Data analysis uses univariate and bivariate analysis. This study used the chi square statistical test ($p < 0.05$). **Results:** The results of this study indicate that 41.9% of respondents who have good knowledge, most of them give HPV vaccination and 10.8% of respondents who have less knowledge, then a small proportion who give HPV vaccination. The results of the chi square test showed a relationship between knowledge and the provision of HPV vaccination ($p = 0.01$). **Conclusion:** It is better to conduct socialization first before vaccinating against HPV for mothers and daughters considering the urgency of this vaccination is different from other vaccines.

Keywords: Knowledge; Cervical Cancer; HPV Vaccine; SDGs

I. Introduction

Cervical cancer is a disease characterized by the spread of abnormal cells and uncontrolled cell growth. Cervical cancer ranks first in developing countries and the second most common cancer in women in the world (Ge'e et al., 2021) (Herlana et al., 2017; Nurlelawati et al., 2018). The HPV virus or Human Papilloma Virus is known as the cause of cervical cancer, especially in viruses types 16 and 18. (Health, Prevention and National, 2019).

The incidence of cervical cancer in Indonesia ranks second with 10.7% and the death rate ranks third with 10.3% recorded by Global Burden Cancer (Globocan) in 2018 (Yulia, 2019). Meanwhile, the number of cervical cancer cases in 2017 in East Java reached 229.084 patients (Ahmad Fahrur Rozi, 2018). With these conditions, the Indonesian government is currently planning to add the HPV vaccine to the national immunization program. The HPV immunization program through the School

Children's Immunization Month (BIAS) program begins with the provision of immunizations in pilot locations that have a high prevalence of cervical cancer.

For Surabaya itself, HPV vaccination has been running in several schools since 2015 which started in the West Surabaya area. Then develop it in all health centers in Surabaya, one of which has received this HPV vaccine program is SDN Ngagel Rejo III and SDN Sidosermo I Surabaya. From this explanation, it is necessary to have this study with the aim of analyzing the relationship between parental knowledge about cervical cancer and giving HPV vaccination to students at SDN Ngagel Rejo III and SDN Sidosermo I Surabaya.

II. Method

This type of research is quantitative research, namely observational analytic with a cross sectional approach. The population and sample in this study were all parents of grade 5 and 6 students at SDN Ngagel Rejo III and SDN Sidosermo I Surabaya in August 2021, totaling 74 respondents using the data collection technique, namely total sampling. The independent variable in this study was the knowledge of parents about cervical cancer and the dependent variable was the act of giving HPV vaccination to female students for cervical cancer prevention.

III. Result

Respondents in this research amounted to 74 respondents. The following table describes the general description of the characteristics of mothers who were respondents in this study:

Table 1. Characteristics and general data of respondents at SDN Ngagel Rejo III and SDN Sidosermo I Surabaya in August 2021.

Characteristics		N	(%)
Age	15 – 20	23	31.1
	21 – 25	37	50.0
	26 – 30	8	10.8
	>30	6	8.1
Education	Primary School	9	12.2
	Junior High School	13	17.6
	Senior High School	41	55.4
	College	11	14.9
Profession	Housewife	44	59.5
	Seller	10	13.5
	Entrepreneur	17	23.0
	Civil Servant / Soldier	3	4.1

Table 2. Frequency distribution of respondents' knowledge at SDN Ngagel Rejo III and SDN Sidosermo I Surabaya in August 2021.

Education	N	%
Good	34	45.9
Enough	29	39.2
Less	11	14.9

Table 3. Distribution of the frequency of respondent actions at SDN Ngagel Rejo III and SDN Sidosermo I Surabaya in August 2021.

Action	N	%
Positive	59	79.7
Negative	15	20.3

Table 4. The relationship between parental knowledge about cervical cancer and the provision of HPV vaccination to female students at SDN Ngagel Rejo III and SDN Sidosermo I Surabaya in August 2021.

Knowledge	Action				Chi-square Test
	Potsitive		Negative		
	N	%	N	%	P value
Good	31	41.9	3	4.0	0.001
Enough	25	33.8	4	5.4	
Less	3	4.1	8	10.8	

IV. Discussion

4.1 Respondent Knowledge

Respondents' knowledge was measured through interviews by giving 10 questions about cervical cancer in general. From the results of interviews conducted with respondents, the results in Table 2 show that most of the 34 (45.9%) respondents in SDN Ngagel Rejo III and SDN Sidosermo I Surabaya have good knowledge.

Knowledge is a result of knowing, occurring after someone has sensed an object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch (Bolisani and Bratianu, 2018). This is in line with the opinion that knowledge and action are interesting relationships, as has been shown, there are conscious and unconscious influences and especially the logical not causal, relationship between knowledge environment, values environment and ecological behavior (good intentions as observed behavior) (Funke, 2017).

In table 1, the respondent's age variable at marriage can be seen that most are aged 21-25 years, namely 37 (50.0%) which means that one's maturity and strength in thinking has increased so that it can provide broad knowledge. Knowledge can occur from several factors such as age. Increasing age will increase a person's maturity and strength in thinking, This is measured in terms of public trust of people who are more mature and more confident than people with maturity who are not yet high enough. This is because it is a result of the experience of the soul (Nursalam, 2011).

While the education variable explained that most of the 41 (55.4%) respondents had education at the high school level. In this study, most of the respondents had a history of high school education, which means that the level of education is high, so they have a lot of knowledge. And there is also a factor from work, which is a need that must be done especially to support daily life about oneself or one's family (According to Thomas 2007, in Nursalam 2011). Then the factor of educational history, the higher the level of human education, the more knowledge that human will have. Likewise, with the opposite, the less a person's education is, the more hampered the development of one's attitude towards the newly introduced values will be (Nursalam, 2011). The work variable explains that most of the 44 (59.5%) respondents are housewives. Work is not only a source of pleasure, but more work can also be a way to substitute a source of information for something new.

4.2 HPV Vaccination Measures

The act of vaccinating HPV is seen through the parents' decision to give permission to vaccinate their daughters, considering that the students do not yet have the right to make their own decisions. In this study, the status of HPV vaccination was known from the results of interviews using questionnaires to respondents. Table 3 explains that most of the 59 (79.7%) respondents have positive actions as an effort to prevent cervical cancer.

All behavior can be explained as an attempt by the individual to bring about some state – either to effect a change from one state to another, or to maintain a current one (Bergner, 2011). Practice or action is a real implementation on the basis of existing theory or the implementation of work. Health practice or health behavior is when a person knows a health stimulus or object, then conducts an assessment or opinion on what is known, implements or practices what is known or addressed (Candraningsih in Novitasari, 2019).

The health actions or behaviors discussed in this study are based on the cervical cancer prevention efforts carried out by the respondents, namely preventing cervical cancer by giving their daughter the HPV vaccination. This is influenced by the knowledge of cervical cancer that respondents already have.

4.3 The Relationship of Knowledge of Cervical Cancer with the Provision of HPV Vaccination

Theoretically, knowledge and action is an interesting relationship. As has been shown, there are conscious and unconscious influences and especially on logical, not causal, which analyzes the relationship between knowledge environment, values environment and ecological behavior (good intentions as observed behavior). Finally, concludes on the basis of the structural equation model that only 40% of the variation in actions requires attributes for knowledge and values, but the action explains 75% of the variation in behavioral differences. From this point of view, it can be concluded that something will not happen without knowledge, but humans can act at least - on a basic level (Funke, 2017).

Knowledge becomes an indirect influence of perception on one's decision making. Based on the results of the tests carried out, it can be concluded that knowledge which is an indirect influence shows significant results in influencing a person's perception in making decisions about decision making with a P value of 0.017. And also in the study it was said that this knowledge factor became the dominant factor influencing decisions (Warsini and Septiawan, 2021). This theory strengthens the results of research which says that there is a relationship between parental knowledge about cervical cancer and the provision of HPV vaccination to students at SDN Ngagel Rejo III and SDN Sidosermo I Surabaya.

This explanation is in line with the results of this study in Table 4 which says that parents with good, sufficient and less knowledge are dominated by parents who give HPV vaccination to their daughters of 59 (79.8%) respondents but a small proportion of respondents were found who did not give HPV vaccination to female students. As many as 15 (20.2%) respondents mostly due to fear, do not want and do not know the information. From these problems, researchers can suggest a solution, namely by providing socialization prior to HPV vaccination to the guardians of students and/or students so that information can be conveyed properly.

V. Conclusion

Based on the results of the analysis and discussion discussed above, regarding the relationship between parental knowledge about cervical cancer and the provision of HPV vaccination to students at SDN Ngagel Rejo III and SDN Sidosermo I Surabaya, the following conclusions can be drawn:

1. Most parents have good knowledge about cervical cancer and a few parents have less knowledge about cervical cancer.
2. Most parents provide HPV vaccination for their students and a small proportion do not provide HPV vaccination for their students.
3. From the results obtained, there is a significant relationship between knowledge and the action of HPV vaccination.

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Nomenclature	
A	radius of
B	position of

C further nomenclature continues down the page inside the text box

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Table 1. An example of a table

An example of a column heading	Column A (t)	Column B (T)
And an entry	1	2
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References should be added at the end of the paper, and its corresponding citation will be added in the order of their appearance in the text. Authors should ensure that every reference in the text appears in the list of references and vice versa. Indicate references by Clark et al., 1962 or Deal and Grove, 2009 or Fachinger, 2006 in the text. The actual authors can be referred to, but the reference citation(s) must always be given.

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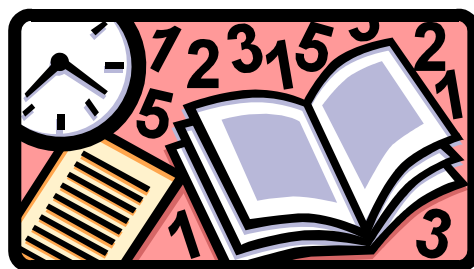


Fig. 1. (a) first picture; (b) second picture

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$$\rho = \frac{\bar{E}}{J_c (T = \text{const.}) \cdot \left(P \cdot \left(\frac{\bar{E}}{E_c} \right)^m + (1 - P) \right)} \quad (1)$$

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Acknowledgements

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