

## **KNOWLEDGE AND ATTITUDES ABOUT HPV VACCINATION**

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### **ABSTRACT**

*HPV vaccination was one of the primary prevention efforts for cervical cancer. In 2016 of the four regencies in Yogyakarta, Kulon Progo Regency had the highest number of cervical cancer patients, which were 42 people. Especially in the Wates Public Health Center, which contributes was 8 people. Gadingan Public Elementary School and Bendungan 6 Public Elementary School have experienced a decrease in DT immunization visits, which was 3.4%. While Bendungan 4 Public Elementary School had a fairly low percentage of HPV vaccination coverage compared to other Public Elementary Schools, which was 96.6%. This study aims to determine the level of knowledge and attitudes of respondents to HPV vaccination in 2018. This type of research was descriptive observational with a cross-sectional design. Research location in the Public Elementary School of Wates Public Health Center working area. The subject of the research was the parents of fifth-grade female students in the Public Elementary School in the Wates Public Elementary School of Wates Public Health Center working area in 2018. The results showed that the parent's knowledge level was mostly enough at 66%. The results of the research on attitudes showed that most parents had a positive attitude that was 63%. The conclusion of this study was that there was a relationship between education and work to the level of knowledge. And there was a relationship between education and parent's attitudes toward HPV vaccination, but there was no relationship between work and parent's attitudes.*

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### **INTRODUCTION**

In Indonesia, the prevalence of cervical cancer is in the ratio of 1.3 from 1,000 populations or around 840 people. Yogyakarta Special Region is the region that has the highest cancer cases compared to other provinces in Indonesia, namely 4.1% of the population or around 330,000 people. In 2016, Kulon Progo Regency contributed the highest number of cervical cancer patients, namely 42 people, especially in the Wates Public Health Center working area, which was 8 people.<sup>1, 2,3.</sup>

According to the Ministry of Health of the Republic of Indonesia in 2009, almost all cervical cancers were caused by infection from the Human Papilloma Virus (HPV). It is

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known that HPV DNA can be found in 99% of cervical cancer cases worldwide. One way to prevent HPV infection is to do HPV vaccination.<sup>4,5,6</sup>

In October 2017 in Kulon Progo District, free HPV vaccination was carried out for female students in grade 5<sup>th</sup> of Elementary School through the School Children Immunization Month program (*Bulan Imunisasi Anak Sekolah (BIAS)*).<sup>9</sup> The government policy is only aimed at female students who go to public elementary schools, while female students attending private elementary schools have not been included in the program.

According to the Kulon Progo District Health Office, Bendungan 6 Public Elementary School and Gadingan Public Elementary School experienced a decrease in DT immunization visits by 3.4%. As for HPV vaccination coverage in Bendungan 4 Public Elementary School, the percentage of coverage is quite low at 96.6%.<sup>9</sup> Based on that, the researchers took the area for research at Bendungan 6 Public Elementary School, State Bendungan 4 Public Elementary School, and Gadingan Public Elementary School.

The general purpose of this study was to determine the level of knowledge and attitudes of parent's of 5<sup>th</sup>-grade female students about HPV vaccination in the Public Elementary School of Wates Public Health Center working area. Whereas for its specific purpose is to find out the characteristics of parents consisting of education and work. As well as knowing the frequency distribution between characteristics with the level of knowledge and attitude.

## **METHODS**

This research using a cross-sectional approach carried out in Wates Public Elementary School. The population in this study was all parents of female students of 5<sup>th</sup> grade in Wates (Bendungan 6 Public Elementary School, Bendungan 4 Public Elementary School, and Gadingan Public Elementary School) as many as 37 respondents. This research was carried out on 13-18 July 2018. The variables of this study were the knowledge and attitudes about HPV vaccination.

## **RESULTS**

### **Characteristics of Respondents**

The results show that the majority of parents have a secondary education level of 62.16%. Based on job characteristics, it can be seen that most parents have a non-working status, which is 54.05%.

Table 1. Characteristics of Respondents

No	Characteristics of Respondents	Parents	
		n	%
1	<b>Level of Education</b>		
	Primary Education (SD/SMP)	11	29,73
	Secondary of Education (SMA/SMK)	23	62,16
	Universities (DI, DII, DIII, S1, S2, S3)	3	8,11
	$\Sigma$	37	100
2	<b>Occupation</b>		
	Works	17	45,95
	Not Working	20	54,05
	$\Sigma$	37	100

### Level of Knowledge about HPV Vaccination

The level of parent's knowledge is mostly enough that is 27 respondents (66%).



Figure 1. Percentage of Knowledge Levels of 5<sup>th</sup> Grade Female Student Parent's about HPV Vaccination in Public Elementary School of Wates Public Health Center Working Area

### Attitudes toward HPV Vaccination

The parent's attitude was mostly positive, as many as 20 respondents (63%).

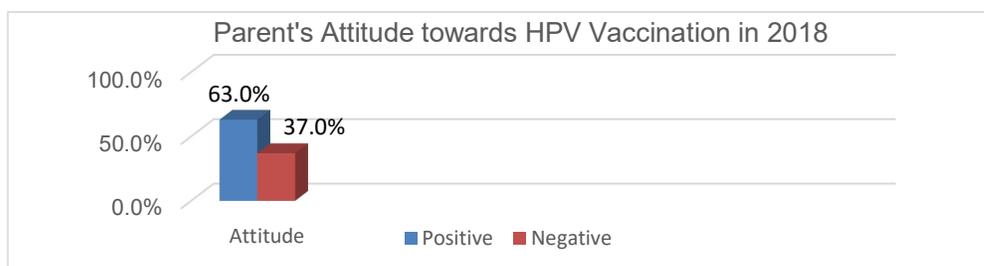


Figure 2. Percentage of Attitudes of 5<sup>th</sup> Grade Female Student Parent's against HPV Vaccination in Public Elementary School of Wates Public Health Center Working Area

### Characteristics with a Level of Parent's Knowledge of HPV Vaccination

Table 2. Respondent Characteristic and Knowledge Level about HPV Vaccination

No	Characteristic	Knowledge Level						$\Sigma$		p
		Good		Enough		Less		n	%	
		n	%	N	%	N	%			
1	<b>Level of Education</b>								0,017	
	Primary Education (SD/SMP)	0	0	9	81,8	2	18,18	11	100	
					2					

No	Characteristic	Knowledge Level						$\Sigma$		$\rho$
		Good		Enough		Less				
		n	%	N	%	N	%	n	%	
	Secondary of Education (SMA/SMK)	3	13,0	17	73,9	3	13,04	23	100	
	Universities (DI, DII, DIII, S1, S2, S3)	2	66,6	1	33,3	0	0	3	100	
<b>2</b>	<b>Job</b>									0,046
	Works	3	17,6	11	64,7	3	17,6	17	100	
	Not Working	0	0	16	80	4	20	20	100	

Based on table 2, most of the parent's respondents had secondary education level and had enough level of knowledge that was 73.92%. Based on the characteristics of the work status, most of the mother respondents have a status of not working with enough level of knowledge that is 80%. The test results show that there is a relationship between knowledge with education ( $\rho=0.017$ ) and work ( $\rho=0,046$ ).

Table 3. Respondent Characteristic and Attitude towards HPV Vaccination

No	Characteristics of Respondents	Attitude				$\Sigma$		$\rho$
		Positive		Negative				
		N	%	n	%	n	%	
<b>1</b>	<b>Level of Education</b>							0,038
	Primary Education (SD/SMP)	2	18,2	9	81,8	11	100	
	Secondary of Education (SMA/SMK)	16	69,6	7	30,4	23	100	
	Universities (DI, DII, DIII, S1, S2, S3)	2	66,7	1	33,3	3	100	
<b>2</b>	<b>Job</b>							0,169
	Works	9	52,9	8	47,1	17	100	
	Not Working	11	55	9	45	20	100	

Based on table 3 shows that the majority of the parent's education level is secondary education with a positive attitude that is equal to 69.6%. Based on the employment status, most of the respondents (mothers) have a non-working status with a positive attitude of 55%. The test results show that there is a relationship between attitudes with education ( $\rho = 0.038$ ) and there is no relationship with work ( $\rho = 0.073$ ).

## DISCUSSION

### Level of Parent's Knowledge of HPV Vaccination

The results showed that the majority of 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area had a sufficient level of knowledge about HPV vaccination, which was 66%.

According to Riyanto (2013) the factors that influence knowledge are social, cultural, and economic.<sup>4</sup> As stated by Erfandi's theory (2011) in Kusumawati's research

(2016) which states that work can make a person gain experience and knowledge both directly and indirectly.<sup>11</sup>

The theory is in accordance with the results of the study that found that the majority of parents who have a sufficient level of knowledge are parents who do not work.

### **Parent's Attitude toward HPV Vaccination**

The results showed that the majority of 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area had a positive attitude towards HPV vaccination, which was 63%.

According to research Lee, et al (2017) stated that the higher the level of knowledge of a person, the higher the negative attitude given to HPV vaccination.<sup>11</sup> This can occur due to parental fear of the side effects of acquired HPV vaccinations.<sup>11</sup> This statement is in accordance with the results of the research that the author has obtained, the majority of mothers respondents only have a sufficient level of knowledge but have a positive attitude towards HPV vaccination.

### **Frequency Distribution Characteristics with Knowledge Level**

#### **Education**

The results showed that most of the 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area in the study had secondary education status with enough level of knowledge about HPV vaccination of 73.92%. Test results from knowledge variables with respondents' education about HPV vaccination illustrate that there is a relationship between the two variables ( $p = 0.017$ ).

This research is in accordance with the theory of Notoatmodjo (2012) which argues that education is an attempt to develop one's personality and abilities, and can be obtained inside and outside of school and lasts a lifetime.<sup>13</sup>

In this study, could be concluded that respondents who have higher education have a good knowledge of the provision of HPV vaccination, and vice versa, the majority of respondents who have secondary education level only have a sufficient level of knowledge. Because knowledge can be obtained in schools.

#### **Work**

The results showed that the majority of 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area had a non-working status with a sufficient level of knowledge that was 64.7%. The test results from the

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knowledge variable with the respondent's work about HPV vaccination illustrate that there is a relationship between the two variables ( $p = 0.046$ ).

According to Riyanto (2013) the factors that influence knowledge are social, cultural, and economic.<sup>4</sup> A person's economic status will also determine the availability of a facility needed for certain activities so that the socioeconomic status will affect one's knowledge.

According to Erfandi's theory (2011) in Kusumawati's research (2016) states that work can make a person gain experience and knowledge both directly and indirectly.<sup>11</sup> This theory is in accordance with the results of a study of maternal respondents who stated that the majority of respondents who had a non-working status only had a sufficient level of knowledge about HPV vaccination.

### **Respondent Characteristic and Attitude of HPV Vaccination**

The results showed that the majority of 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area had a secondary education level with a positive attitude towards HPV vaccination at 69.6%. The test results of the attitude variables with the respondent's work about HPV vaccination illustrate the existence of a relationship ( $p = 0.038$ ).

According to the theory presented by Azwar (2009) states that educational institutions are systems that have an influence on attitude formation because they both lay the basis of understanding and moral concepts in individual.<sup>2</sup>

The above theory is not in accordance with the results of the research that the researchers obtained, the majority of the respondent who only had secondary education had a positive attitude towards HPV vaccination. However, this theory is in accordance with the results of a study of the relationship between educations of 5<sup>th</sup>-grade female student parent's with knowledge of HPV vaccination which states that there is a relationship between the two variables.

The positive attitude that the parent has can occur because the child of the parent that I studied previously had received free HPV vaccination from the Wates Public Health Center in the BIAS program.

The results showed that the majority of 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area had a non-working status with a positive attitude towards HPV vaccination of 52.9%. Test results of knowledge variables with the work of respondents about HPV vaccination illustrate that there is no relationship ( $p = 0.169$ ).

According to research conducted by Dethan, et al (2017) states that the cost of HPV vaccination is one of the factors that influence the attitude of respondents to HPV vaccination. That research also concluded that working parents was very influential on the ability to pay for HPV vaccination. This was supported by research by Boenher et al (2008) which states that parents will be easier to allow their children to take HPV vaccinations if the costs incurred are relatively cheap.<sup>3</sup>

So, the research results that the researchers obtained were not in accordance with the theory, which stated that the majority of respondents had a non-working status having a positive attitude towards HPV vaccination. This can happen because most of the respondents who were given questionnaires were respondents whose children had received free HPV vaccination through the government's BIAS program so that respondents had a positive attitude towards HPV vaccination. This is consistent with the results of Dethan's (2017) study which said that the government's program of giving vaccinations for free to students was one of the factors that motivated students to carry out HPV vaccinations.<sup>6,7,8,9</sup>

## CONCLUSION

Based on the results of the study, it was found that the 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area had the most knowledge level and had a non-working status. The 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area are most knowledgeable about HPV vaccination and have an attitude towards HPV vaccination

The 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area with a majority of secondary education and non-working status with most knowledgeable about HPV vaccination. The 5<sup>th</sup>-grade female student parent's in the Public Elementary School of Wates Public Health Center working area with a majority of secondary education and non-working status with most having a positive attitude towards HPV vaccination.

Based on the research that has been done, it can be concluded that the level of education and employment status of the parents influence the level of parent knowledge about HPV vaccination. The parent's attitude towards HPV vaccination is influenced by the level of parent's education but is not influenced by the parent's work.

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## SUGGESTION

### For Elementary School Principals

Plan and compile a joint program with the Public Health Care to conduct socialization about HPV vaccination to parents of students and female students so that parents' knowledge of HPV vaccination is increasing.

### For Midwives Responsible for Wates Health Center Reproductive Health

Midwives can optimize, carry out the services and coaching of reproductive health for adolescents, especially early adolescent parents regarding HPV vaccination by conducting socialization to the community, especially parents of early adolescents and teachers at the Elementary School level, so that parents and teachers can motivate their children and students to be able to HPV vaccination.

### For further researchers

The results of this study can help to do further research, namely to make methods or media in improving knowledge and attitudes towards HPV vaccination.

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