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Analysis of Health Belief Model regarding Human Papillomavirus Vaccination among Female Employees at Sukabumi Regency Government

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A B S T R A C T

The high rate of cervical cancer case confirms it as the second most common cancer in Indonesia which required specific management and primary prevention efforts for everyone. The appeal issued by the Ministry of Health regarding HPV vaccination which will be mandatory as an effort to reduce cervical cancer rates in Indonesia. This study aims to analyze the health belief model as the influential factor for the willingness to get HPV vaccination as an effort to prevent cervical cancer among female employees in Sukabumi Regency government in 2022. This was a quantitative study with cross-sectional design. Data were collected among 213 respondents who were selected using purposive sampling technique. The results showed that 50.7% of respondents were willing to get HPV vaccination. Meanwhile, 49,3% of respondents were not willing to get HPV vaccination. There was a relationship between perceived susceptibility, benefit, obstacle, cues to action, and self-efficacy with the willingness to get HPV vaccination. Meanwhile, the perceived severity was not related to the willingness to get HPV vaccination. In the multivariate analysis, it was found that cues to action (POR=5,477; 95% CI=2,6-11,2) had the most significant effect on willingness to get HPV vaccination. It is expected that the current study can be used as an input for the government of Sukabumi Regency to plan for health promotion programs for every agency regarding cervical cancer, especially HPV vaccination.

Tingginya kasus kanker serviks sebagai kanker terbanyak kedua yang terjadi di Indonesia membutuhkan perhatian dan upaya pencegahan primer bagi semua orang. Mengingat himbauan dari Kementerian Kesehatan terkait vaksinasi HPV yang akan diwajibkan sebagai upaya menurunkan angka kanker serviks di Indonesia. Penelitian ini bertujuan untuk menganalisis faktor health belief model yang memengaruhi kesediaan melakukan vaksinasi HPV sebagai upaya pencegahan kanker serviks pada pegawai wanita di lingkungan pemerintahan Kabupaten Sukabumi tahun 2022. Penelitian ini menggunakan metode kuantitatif dengan desain cross-sectional. Pengumpulan data dilakukan melalui pengisian kuesioner oleh 213 responden dengan teknik purposive sampling. Hasilnya 50,7% responden bersedia melakukan vaksinasi HPV sebagai upaya pencegahan kanker serviks. Sedangkan 49,3% lainnya tidak bersedia untuk melakukan vaksinasi HPV. Terdapat hubungan antara persepsi kerentanan, manfaat, hambatan, isyarat bertindak, dan keyakinan diri dengan kesediaan melakukan vaksinasi HPV pada pegawai wanita di lingkungan pemerintahan Kabupaten Sukabumi. Sedangkan persepsi keseriusan tidak berhubungan dengan kesediaan melakukan vaksinasi HPV. Pada analisis multivariat diketahui bahwa isyarakat bertindak (POR=5,477; 95% CI=2,6-11,2) yang paling memengaruhi kesediaan melakukan vaksinasi HPV. Diharapkan kepada pemerintah Kabupaten Sukabumi menjadikan penelitian ini masukan untuk diadakannya program promosi kesehatan kepada setiap instansi mengenai kanker serviks khususnya vaksinasi HPV.

Introduction

Health problems initially caused by infectious diseases has been replaced by non-infectious diseases due to an epidemiological transition. Cancer caused by abnormal cells in the body is one of the non-infectious diseases which is considered as a significant health problem today. Due to the malignant spread of these abnormal cells, WHO or the world health organization mentions that cancer is one of

the death main causes globally. Cancer is ine of the death main causes worldwide in 2020 by causing 10 million deaths or claiming 1 in 6 deaths. Infections which cause cancer such as Human Papillomavirus (HPV) and hepatitis contribute for 30% of cancer cases which occur in low- and middle-income countries (WHO, 2022). Based on Basic Health Research data in 2013 and 2018, the prevalence of cancer in Indonesia has increased from 1.4% to 1.49%. Cervical cancer is the second leading case of cancer of the 10 types of cancer that occur in Indonesia. Based on data derived from Globocan 2020, it was stated that there were 36,633 cervical cancer incidents in Indonesia or around 9.2% compared to all types of cancer and 9% of deaths due to cervical cancer (The Global Cancer Observatory, 2020). The second largest number of cervical cancer patients in Indonesia is in West Java region. Data derived from Hasan Sadikin Hospital (RSHS) reported that, on average, the number of cervical cancer patients who came every year were 400 people and 75% of them were at late stage (Hadisiwi & Arifin, 2018). Based on data obtained from Open Data Jabar (2019), in Sukabumi, there were 55 examinations with Positive IVA test results conducted on women aged 30-50 years in 2019.

Preventive behavior due to the incidence of cervical cancer can be performed through early detection and Human Papillomavirus (HPV) vaccination. According to dr. Venita as the Head of Social Services Division of the Indonesian Cancer Foundation, the scope of HPV vaccination conducted in Indonesia was still very low at 1.1%. The main cause of the low HPV vaccination scope is due to the relatively expensive vaccine, despite the cost of treatment if exposed to cervical cancer will be much more expensive (Kartinah, 2019). HPV vaccination is conducted not only for individual health, but also for the Indonesia society welfare. This is also in line with the statement of the Indonesian Health Minister, Budi Gunadi Sadikin, who said that HPV vaccination would be compelled as an effort to prevent cervical cancer. According to him, free HPV vaccination will only be given to the target of the national immunization program, namely girls in elementary school. Meanwhile, for adult women, to get the HPV vaccination, they have to spend quite a lot of money (CNN Indonesia, 2022). Based on a study conducted by Mulyati (2019), 68.8% of respondents did not take benefit of the HPV vaccination. On another occasion, a study conducted by Fitriani et al. (2018) also revealed that 50% of study subjects did not get HPV vaccination despite the majority of subjects had a good perception.

One of the health behavior domains in the form of closed reactions which determine decision making in behavior is influenced by perception or beliefs of individuals. The Health belief model theory explains the preventive behavior regarding health problems which is strongly influenced by the beliefs owned by the individual (Setiyaningsih et al., 2016). This theory explains individual behavior in preventing and responding to a disease. In this theory, it is emphasized that the individual's decision to perform health behavior is strongly influenced by the individual's perceived susceptibility and perceived benefits (Setiyaningsih et al., 2016). Thus, based on this health belief model, it can be concluded that the concept of using health services as an effort to prevent a disease (preventive behavior) is developed based on individual beliefs and convictions in maintaining their health. The existence of self-efficacy will foster an action plan which will be taken by the individual. These beliefs and convictions are also strongly influenced by perception. Good and bad perception possessed by individuals are influenced by

several things such as knowledge, experience, and information obtained which will later help the individual in viewing and assessing something. There are several components in the health belief model theory, including perceived susceptibility to a health condition, perceived severity of the consequences, perceived benefits, and perceived obstacles in implementing health behaviors. In addition, other variables consist of demographic, socio-psychological and structural variables, cues to action which triggers individuals to perform health behavior, and self-efficacy to successfully perform health behavior (Irwan, 2017).

Based on the Regulation of Minister of Health of the Republic of Indonesia Number 34 of 2015 concerning the Management of Breast Cancer and Cervical Cancer, it is explained that cancer primary prevention is conducted with the aim of reducing cancer exposure and risk factors, thus minimizing individual susceptibility to cancer. Primary prevention for cervical cancer can be implemented through HPV vaccination. The high rate of cervical cancer case confirms it as the second most common cancer in Indonesia which required specific management and primary prevention efforts for everyone. Otherwise, the implementation is still obstructed by various individual obstacles in getting such vaccination. Considering the importance of HPV vaccination and the government's effort regarding HPV vaccination which will be implemented in Indonesia as an effort to prevent cervical cancer and as a means of advocacy to the Sukabumi Regency Government regarding the HPV vaccination program to be conducted, this study is important to be conducted with the aim of determining HPV vaccination implementation and the effect of health belief model on the willingness to get HPV vaccination among female employees at Sukabumi Regency Government.

Methods

This was a quantitative study with cross sectional approach which aims to analyze health belief model as the influential factor for the willingness to get HPV vaccination as an effort to prevent cervical cancer among female employees in Sukabumi Regency government in 2022. The population in this study involved female employees at government offices and non-governmental organizations. There were 479 health workers within the Sukabumi Regency Government with a total sample of 213 respondents with the inclusion criteria of female employees who had a maximum age of 55, had not got HPV vaccination, and did not have cervical cancer. The samples were selected using purposive sampling technique based on the respondents' affordability. Data were collected through a questionnaire containing respondent characteristics, perceptions and willingness to get HPV vaccination. The respondent's characteristic section consisted of name, age, education level, marital status, monthly income, cervical cancer status, and knowledge about HPV vaccination. Later, the perception section consisted of statements based on the concept of the Health Belief Model namely perceived susceptibility, severity, benefits, obstacles, cues to action, and self-efficacy with a total of 32 statements. Finally, the willingness section included 4 statements regarding the willingness to get HPV vaccination in preventing cervical cancer. Validity and reliability tests were conducted on questionnaires in a group with the same characteristics as the study samples with a total of 30 respondents. The validity test result showed that each statement used in the variable with a total of 36 statements was declared valid with an

r value that was higher than the r table. In addition, the reliability test result showed that all statements on the variables were reliable. Data processing was conducted through several stages, namely editing, coding, data entry, and data cleaning. Data analysis was performed using univariate analysis, bivariate analysis through chi-square test, and multivariate analysis through multiple logistic regression test. The study had obtained an ethical approval issued by the Health Research Ethics Commission (KEPK) of the Veteran National Development University of Jakarta with the Ethical Approval number: 151/V/2022/KEPK.

Results

The current study was conducted in the second largest district on the Java island, namely Sukabumi Regency, West Java in 17 existing offices. The following table presents the distribution and frequency of 213 respondents. The dependent variable was willingness to get HPV vaccination to prevent cervical cancer which was divided into willing and unwilling. Meanwhile, the independent variables consisted of perceived susceptibility, severity, benefits, obstacles, cues to action, and self-efficacy. Furthermore, there was also a frequency distribution of respondents' characteristics including age, level of education, income, marital status and knowledge on HPV vaccination.

Table 1. Frequency Distribution of respondents' characteristics, willingness to get HPV vaccination, and the concept of Health Belief Model

Variable	Frequency (n=213)	Percentage (%)
Age (years)		
18-25	36	16.9
26-35	55	25.8
36-45	72	33.8
46-55	50	23.5
Level of Education		
High School	41	19.2
Diploma	16	7.5
Bachelor	136	63.8
Master	20	9.4
Monthly Income		
> Rp.3.125.000	128	60.1
≤ Rp.3.125.000	85	39.9
Marital Status		
Not Married Yet	50	23.5
Married	150	70.4
Widowed	6	2.8
Divorced	7	3.3
Knowledge on HPV Vaccination		
Good	100	46.9
Poor	113	53.1
Willingness to get HPV Vaccination		
Not Willing	105	49.3
Willing	108	50.7
Perceived Susceptibility		
Low	109	51.2
High	104	48.8
Perceived Severity		
Low	107	50.2
High	106	49.8
Perceived Benefits		
Low	142	66.7
High	71	33.3
Perceived Obstacles		

Variable	Frequency (n=213)	Percentage (%)
Low	137	64.3
High	76	35.7
Cues to Action		
Low	114	53.5
High	99	46.5
Self-efficacy		
Low	97	45.5
High	116	54.5

Source: Primary Data, 2022

Based on the table above, it was shown that most of respondents were in the 36-45 age group (33.8%). The majority of respondents had the level of education level of Bachelor (63.8%). Furthermore, the majority of respondents were married (70.4%). A total of 128 respondents (60.1%) had a monthly income exceeding the Regional Minimum Wage of Sukabumi Regency of IDR 3.125.000,-. Nevertheless, there were still many respondents who had poor knowledge on HPV vaccination (53.1%). Furthermore, 49.3% of respondents were not willing to get HPV vaccination. The majority of respondents (51.2%) had a low perceived susceptibility. Equivalently, the majority of respondents had a low level of perceived severity (50.2%) and perceived benefits (66.7%). 76 respondents (35.7%) had a high level of perceived obtacles in getting HPV vaccination. The majority of respondents (53.5%) had a low level of cues to action in conducting HPV vaccination. On the other hand, 97 respondents (45.5%) had low self-efficacy to be able to conduct HPV vaccination as self-protection from cervical cancer.

Table 2. Distribution of Questionnaire on Willingness to get HPV Vaccination

The Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I will set aside a portion of my income for HPV vaccination	6.6%	43.7%	40.8%	8%	0.9%
2. I will take my time to get HPV vaccination	10.8%	55.9%	28.2%	4.7%	0.5%
3. I will refuse the suggestion of healthcare worker offers for HPV vaccination	2.3%	7.5%	25.8%	47.4%	16.9%
4. I feel that HPV vaccination is not necessary	2.3%	7.5%	33.3%	40.4%	16.4%

Source: Primary Data, 2022

Based on table 2 on the statements included in the questionnaire regarding willingness to get HPV vaccination, it was revealed that willingness was influenced by the cost, time, attitude towards suggestion given by healthcare workers for HPV vaccination, as well as feelings related to whether or not the HPV vaccination is necessary. In the statement regarding the cost of HPV vaccination, 40.8% of respondents answered that they were hesitant to set aside some of their income as funds for HPV vaccination. Furthermore, 33.3% of respondents still had doubts regarding the importance of HPV vaccination.

Table 3. Results of Bivariate Analysis

Variable	Willingness to get HPV Vaccination						P value	POR
	Not Willing		Willing		Total			
	n	%	n	%	n	%		
Perceived Susceptibility								
Low	65	59,6	44	40.4	109	100	0.003	2.364
High	40	38,5	64	61.5	104	100		
Perceived Severity								
Low	55	51,4	52	48.6	107	100	0.631	1.185
High	50	47,2	56	52.8	106	100		
Perceived Benefits								
Low	79	55,6	63	44.4	142	100	0.013	2.170

Variable	Willingness to get HPV Vaccination						P value	POR
	Not Willing		Willing		Total			
	n	%	n	%	n	%		
High	26	36.6	45	63.4	71	100		
Perceived Obstacles								
Low	57	41.6	80	58.4	137	100	0.004	0.416
High	48	63.2	28	36.8	76	100		
Cues to Action								
Low	80	70.2	34	29.8	114	100	0.000	6.965
High	25	25.3	74	74.7	99	100		
Self-efficacy								
Low	71	73.2	26	26.8	97	100	0.000	6.586
High	34	29.3	82	70.7	116	100		

Source: Primary Data, 2022

Based on table 3, it was revealed that among respondents with a low level of perceived susceptibility 59.6% of them were not willing to get HPV vaccination. Meanwhile, 61.5% of respondents with a high level of perceived susceptibility were willing to get HPV vaccination. The chi-square test obtained a p-value of $0.003 \leq 0.05$, meaning that there was a relationship between the perceived susceptibility and willingness to get HPV vaccination. 51.4% of respondents with a low level of perceived severity were not willing to get HPV vaccination in preventing cervical cancer. Meanwhile, 52.8% of respondents with a high level of perceived severity were willing to get HPV vaccination. Based on data analysis, it was obtained a p-value of $0.631 > 0.05$, meaning that there was no relationship between perceived severity and willingness to get HPV vaccination. Furthermore, 55.6% of respondents with low level of perceived benefits were not willing to get HPV vaccination. Meanwhile, 63.4% of respondents with a high level of perceived benefits were willing to get HPV vaccination. Based on the analysis, it was obtained a p-value of $0.013 \leq 0.05$, which meant that there was a relationship between perceived benefits and willingness to get HPV vaccination. 41.6% of respondents with low level of perceived obstacles were not willing to get HPV vaccination. Meanwhile, 36.8% of respondents with a high level of perceived obstacles were willing to get HPV vaccination. The p value obtained was 0.004 which meant that there was a relationship between perceived obstacles and willingness to get HPV vaccination. Furthermore, 70.2% of respondents with low level of cues to action were not willing to get HPV vaccination. Meanwhile, 74.7% of respondents with high level of cues to action were willing to get HPV vaccination. Based on data analysis, it was obtained a p-value of $0.000 \leq 0.05$, which meant that there was a relationship between the cues to action variable and the willingness to get HPV vaccination. 73.2% of respondents with low level of self-efficacy were not willing to get HPV vaccination. Meanwhile, 70.7% of respondents with high level of self-efficacy were willing to get HPV vaccination. Based on data analysis, it was obtained a p-value of $0.000 \leq 0.05$, which meant that there was a relationship between self-efficacy and willingness to get HPV vaccination.

Table 4. Results of Multivariate Analysis on Final Modeling

Variable	B	P Value	Exp (B)	95% CI	
				Lower	Upper
Perceived Obstacles	-1.125	0.002	0.325	0.157	0.670
Cues to Action	1.701	0.000	5.477	2.657	11.290
Self-efficacy	1.139	0.001	3.125	1.575	6.199

Source: Primary Data, 2022

Furthermore, in the final modeling of the multivariate analysis, it was revealed that the dominant variable related to willingness to get HPV vaccination was the cued to action variable. The cues to action variable had the highest OR value of 5.477 (95% CI 2.657-11.290) which meant that respondents with high level of cues to action had a 5.4 times probability of being willing to get HPV vaccination compared to respondents with low level of cues to action.

Discussion

Practically, HPV vaccination is influenced by various things, especially perception. According to Salito, a person will develop a perception when they are exposed to a stimulus which is then recorded by their organs and translated into meaning by their senses. Such perceiving process will determine the impression of something occurs in the surrounding environment (Listyana & Hartono, 2015). Perceived susceptibility is the perception of individuals regarding the risk factors they have for being exposed to a health condition (Irwan, 2017). A study conducted by Fitriani et al. (2018) found that there was a statistical relationship between perceived susceptibility and the HPV vaccination behavior. According to him, a strong perceived susceptibility will encourage the individual to adopt health behaviors, for example HPV vaccination. A high level of perceived susceptibility to cervical cancer will encourage the individual to get the HPV vaccination. Similarly, in the study conducted by Permatasari et al. (2020) found that when someone did not have any perception regarding the possibility of being exposed to Covid-19, then this would affect decision making in taking preventive actions related to a disease. In this case, when a person does not have a perception that she is at risk for cervical cancer, it will influence her decision to take preventive actions such as getting the HPV vaccination. This was also similar with the result of the current study based on the statements on the questionnaire submitted, that the majority of respondents had concerns if they had cervical cancer.

Based on this study, it was found that there was no relationship between perceived severity and willingness to get HPV vaccination. Regarding the study finding, although the majority of respondents agreed that cervical cancer was a deadly disease, they were afraid of getting cervical cancer, agreed that cervical cancer would change their lives which include finances, work, enthusiasm for life, but it had nothing to do with their willingness to get HPV vaccination. Similarly, in the study conducted by Krisnadewani et al. (2021), it was found that there was no relationship between perceived severity and willingness to get HPV vaccination. Similarly, Zuliyanti (2018) in her study also proposed that there was no relationship between perceived severity and health behavior in the form of a pap smear examination. According to her, perceived severity of a disease would not affect health behavior, and vice versa. According to the health belief model theory, perceived severity is a concept which refers to individual perception towards severity of a disease, whether the disease is infectious or leaves the disease untreated. A person views the disease severity by considering the medical consequences that he will get if she suffers from the disease, as well as the changes experienced regarding the social life (Irwan, 2017).

Based on the study, it was also known that there was a relationship between perceived benefits and willingness to get HPV vaccination. The majority of respondents agreed that HPV vaccination can

prevent them from cervical cancer. Furthermore, respondents also agreed that HPV vaccination was effective in preventing cervical cancer, the sooner they got the HPV vaccination, the more effective the vaccine's performance in preventing cervical cancer would be. Moreover, respondents also agreed that HPV vaccination would maintain their own health. A study conducted by Fitriani et al. (2018) also found that there was a relationship between perceived benefits and HPV vaccination behavior. The high level of belief towards a method designed to minimize the threat of a disease will increase the person's preventive behavior to avoid a disease, which in this case was described by HPV vaccination as a strategy or effort taken to avoid cervical cancer. Similarly, a study conducted by Krisnadewani et al. (2021) stated that perceived benefits was related to willingness to get vaccination (p 0.040 < 0.05). Based on the health belief model theory, it is explained that the perceived benefits can help encourage perceived susceptibility and severity to encourage people in taking health action (Irwan, 2017).

According to this study, perceived obstacles were related to willingness to get HPV vaccination. According to a study conducted by Fitriani et al. (2018), it was found a relationship between perceived obstacles and behavior towards HPV vaccination. The higher the level of perceived obstacles, the higher the HPV vaccination behavior. Nevertheless, such finding is not in accordance with a study conducted by Putri et al. (2020) regarding relationship between perceived obstacles and the practice of using contraceptive methods which obtained a p-value of 0.834 > 0.05, which meant that perceived obstacles had no relationship with the practice of using contraceptive methods. Obstacles to HPV vaccination are generally caused by the high cost of HPV vaccination, the lack of information obtained regarding HPV vaccination, and the fear of side effects that will arise. It can be said if the perceived obstacles is a concept related to how big the obstacles faced by individuals in conducting health behavior. An obstacle which is considered not too significant will cause good perceived obstacles in the individual. Thus, even though the perceived obstacles are quite significant, which means that there are quite a number of obstacles faced in conducting these health behaviors, it will not prevent the individual from performing a behavior which in this case is indicated by the willingness to get HPV vaccination as an effort to prevent cervical cancer (Chusna et al., 2021). In this study, obstacles arose from various factors including costs, information, and available programs. The majority of respondents agreed that it was difficult for them to get HPV vaccination because the price of the HPV vaccine was quite expensive and there were no programs which provided free HPV vaccination around them. Moreover, obstacles also arose due to the lack of information obtained by respondents regarding HPV vaccination. This is also supported by the discussion results with employees at one of the office who stated that there was no health promotion program held at the office related to cervical cancer.

Based on the analysis, it was found that the cues to action were related to the willingness to get HPV vaccination among female employees in Sukabumi Regency Government. Similarly, a study conducted by Nugrahani et al. (2017) presented the finding that the perceived cues to action had an effect on HPV vaccine utilization. Women with high cues to action would get HPV vaccine to avoid cervical cancer, and vice versa. Similar finding was found in a study conducted by Wong et al. (2021) related to the belief theory in the acceptance of Covid-19 vaccination that was conducted among society

in Hong Kong. According to the study, there was a positive correlation between cues to action and acceptance of the Covid-19 vaccine. Cues to action are a very important element in providing impetus to the acceptance of the Covid-19 vaccine. The cue to act is a stimulus needed to perform health behavior. The cues appearing are divided into two, namely internal which can be in the form of feelings within the individual, and external which can be in the form of advice from other people, family, and information obtained from existing articles (LaMorte, 2019). Similarly, according to the belief theory, cues to action will trigger individuals to perform health behavior (Irwan, 2017). In preventing a disease, everyone has their own way. Generally, the actions taken or chosen by the individual receive help from others in the form of an assessment of what choices they will take later (Notoatmodjo, 2007). The occurrence of cervical cancer which occurs in close relative of individuals raises an assessment of the existing disorders caused by cervical cancer (Rosyida, 2019) . The existence of these assessments or perceiving experienced by cervical cancer patients and informed to others, resulted in a sense of anxiety for the person concerned and for the individuals around him. Thus, with this threat which causes the individual to conduct health behavior in the form of prevention efforts to avoid a disease which in this case is cervical cancer. This study also found that the majority of respondents agreed that they would vaccinate because there were close relatives who suffered from cervical cancer. Furthermore, the issue of HPV vaccination was starting to spread, as well as the emergence of recommendation to get HPV vaccination.

According to the data analysis, it was revealed that there was a relationship between self-confidence and the willingness to get HPV vaccination as an effort to prevent cervical cancer among employees in Sukabumi Regency government. Most of the respondents agreed that they were able to conduct the HPV vaccination at the following health services with complete and timely doses. Furthermore, the majority of respondents also agreed and believed that they could avoid cervical cancer if they got the HPV vaccination and it had benefits for their lives. This is in accordance with a study conducted by Warsini and Septiawan (2021) which found self-confidence as the dominant influential factor for the decision to get HPV vaccination among women of child-bearing age. Compared with women who had an active sexual relationship status, had performed early detection of cervical cancer and women of child-bearing age who had never had sexual contact, women of child-bearing age who had never had sexual intercourse had better primary prevention of cervical cancer. Self-efficacy is a factor in the health belief model which refers to the beliefs that exist in each individual regarding success in conducting a health behavior (LaMorte, 2019). Knowledge related to cervical cancer and HPV vaccination will also certainly increase the efficacy which exists in individuals in deciding whether to get HPV vaccination or not. The high level of knowledge possessed by a woman will affect the high level of decisions to be taken because indirectly they already know the risks when making such decisions (Warsini & Septiawan, 2021).

Conclusions

There was a relationship between perceived susceptibility, benefit, obstacle, cues to action, and self-efficacy with the willingness to get HPV vaccination. Meanwhile, the perceived severity was not

related to the willingness to get HPV vaccination as an effort to prevent cervical cancer among employees of Sukabumi Regency government in 2022. In the multivariate analysis, it was found that cues to action had the most significant effect on willingness to get HPV vaccination.

It is expected that female employees in the Sukabumi Regency Government increase the cues to action both internally and externally to get HPV vaccination in order to prevent the incidence of cervical cancer. Furthermore, the Sukabumi Regency Government can also conduct an HPV vaccination introduction program for female employees within the Sukabumi Regency Government as advised by the Health Minister regarding HPV vaccination for women.

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