

Determinants Of Factors Affecting The Implementation Of The HPV Vaccination In Women Of Childbearing Age

**Chanda Paramitha Bherty^{1*}, Niken Grah Prihartanti², Nur Laila Faizah³,
Ana Dyah Aliza⁴**

^{1,2,3,4}Program Studi Profesi Bidan, STIKes Pemkab Jombang, Indonesia

*Corresponding author: chanddapb89@gmail.com

Phone: +62 8560 6339 552

Abstract: Cases of cervical cancer in women of childbearing age are caused by infection with the human papilloma virus. Efforts to prevent cervical cancer in women of childbearing age are influenced by the understanding of HPV knowledge. The method of this research is cross sectional, the population taken in this study are women of childbearing age in Jombang district with a total of 71 respondents. The technique used in sampling is incidental sampling. The inclusion criteria for sampling are as follows: Women of childbearing age who have internet access, Women of childbearing age who are willing to be respondents. This research was conducted online using google-form. Researchers collected data using a questionnaire sheet to assess the age, education, occupation, income and knowledge of women of childbearing age. Analysis using Pearson bivariate correlation data analysis. The results showed that women of childbearing age had very good knowledge of HPV vaccination (49.3%). But it is not statistically significant on the factors of age, occupation, education and income.

Keywords : Knowledge, HPV(Human Papilloma Virus), Women, Childbearing Age

1. Introduction

Human Papilloma Virus (HPV) infection is the most common sexually transmitted disease in the world. Cervical cancer is closely related to viral action, which is the main cause of cervical intraepithelial neoplasia and invasive lesions (Fang et al., 2014). Three HPV vaccines are currently available in many countries around the world The bivalent HPV vaccine (Cervarix, biologic GSK) prevents high-risk (HR) infection with HPV 16 and 18. This genotype is responsible for approximately 70% of cervical cancer cases globally and is considered responsible on the number of low- and high-grade squamous intraepithelial lesions (LSIL and HSIL, respectively) (Clifford et al., 2003).

The quadrivalent HPV vaccine (Gardasil, Sanofi Pasteur MSD), in addition to HR 16 and 18, also targets LR HPV 6 and 11 which are associated with 90% of anogenital warts in men and women (Braaten & Laufer, 2008). Both bivalent and tetravalent vaccines have been shown to be effective and immunogenically valid in trials conducted in recent years with efficacy trials of up to 55 years, especially in those who are virus nave (Harper & DeMars, 2017). Finally, the envalent HPV vaccine (Brand, Sanofi Pasteur MSD, 9vHPV, trade name Gardasil9), in addition to the four quadrivalent vaccine genotypes, also targets five additional HR genotypes, namely HPV 31/33/45/52/58, which is the most common type. invasively detected cervical cancer worldwide,

after HPV 16 and HPV 18 (Capra et al., 2017). Vaccination can be given to people who have not had contact with the masked genotype; For this reason, it is preferable to get vaccinated in adolescence, before sexual activity begins and before potential exposure to the virus (Loke et al., 2017). A cross-sectional study showed a prevalence of HR HPV infection of 24% in a group of young Sicilian women (18-24) (Ammatuna et al., 2008). According to the official statistics on HPV vaccine coverage (2015), in Sicily the percentage of young women (full) vaccinated against HPV was 44.10% compared to the national average rate of 62.15% (Ministero della Salute, 2018). In a female population living in Sicily, it has been shown that the switch to the envalent vaccine will increase the prevention of HSIL cervical disease in up to 90% of cases (Capra et al., 2017).

Awareness of the risks associated with HPV infection is very important. A large number of systematic reviews, (Hendry et al., 2013) have shown that incorrect perceptions of risk can prevent people from receiving vaccinations; In addition, proper knowledge of viral epidemiology can lead to the adoption of behaviors, for example the use of condoms, to minimize the risk of infection. Most of the surveys conducted to date on awareness and attitudes towards specific HPV vaccinations have involved young people (Sopracordevole et al., 2012).

In 2008 an Italian survey among women 14-24 indicated the need to strengthen HPV knowledge, as only 23.3% of the interviewees had heard of HPV and cervical cancer (in Giuseppe et al., 2008). Knowledge of HPV infection has been shown to be poor among the public, students, patients and healthcare professionals (Klug et al., 2008) and, more recently, among European adolescents (Patel et al., 2016). Furthermore, according to another study, vaccination of women over 25 years of age, together with screening programs, offers an opportunity to reduce the incidence of cervical cancer in countries with limited resources and a high disease burden. In 2017, the results of a large survey in Italy showed that 73.8% of interviewees were aware of the availability of the HPV vaccine, but did not believe in the vaccine and believed that the PAP test was sufficient for prevention, expressed by 14.0% and 14.3% of women, respectively. -each (Censis, 2018). This study aims to explain the Determinants of Factors Affecting the Implementation of HPV Vaccination in Women of Childbearing Age.

2. Materials and Methods

Quantitative research with analytical observational approach is used for this research. This study used a cross sectional approach. Women of childbearing age in Jombang Regency are the population and the number of respondents is 71 women. Incidental sampling is the method of choice for this exercise. The following criteria will be used to select the sample: Women of childbearing age who have internet access, Women of childbearing age who are willing to be respondents. This research was conducted online using google-form. Researchers collected data using a questionnaire sheet to assess the age, education, occupation, income and knowledge of women of childbearing age. Statistical test for Pearson bivariate correlation data analysis.

3. Results and Discussion

3.1 Univariate Analysis

Table 1. Frequency distribution of respondent characteristics

No	Characteristics	Category	f	%
1	Age	55-46	2	5,6
		45-36	6	7,0
		35-31	11	8,5
		30-26	17	9,9
		25-16	32	69,0
		Total	71[u1]	100,0
2	Education	Primary School	1	1,4
		Junior High School	5	7,0
		Senior High School	41	57,7
		D3	5	7,0
		Bachelor	17	23,9
		master	2	2,8
		Total	71	100,0
3	Job	Doesn't work	9	12,7
		Student	29	40,8
		House Wife	13	18,3
		Work	20	28,2
		Total	71	100,0
4	Income	<1.000.000	51	71,8
		1.000.000-2.000.000	11	15,5
		>2.000.000	9	12,7
		Total	71[u2]	100
5	knowledge	Very good	35	49,3
		Well	17	23,9
		Enough	11	15,5
		Not enough	6	8,5
		Very less	2	2,8
		Total	71[u3]	100

3.2 Bivariate Analysis

The results of bivariate correlation [u4] analysis are the dependent variable is the knowledge of reproductive health, while the independent variables are age, education, occupation and income.

Table 2. Chi Square Analysis

	Age	Education	Job	Income
knowledge (p-value)	0,001	0,650	0,013	0,106

3.3 The relationship between respondent's age and knowledge of HPV vaccination

The majority of respondents (69%) are between 25 and 16 years old, and the results show that only 49.3% of respondents have a very high level of knowledge. The p-value for this correlation is 0,001 ($p < 0,05$). This is in accordance with research findings (Mery Noria Pay, 2014) which confirms that the characteristics of adolescent thinking in general at the formal operational stage are the development of abstract thinking, logical reasoning, appreciation of aesthetics, and the ability to draw conclusions from the data provided. When a person reaches a certain age, they acquire the mental and physical maturity needed to take on greater responsibilities. There are at least six physical factors that can slow down adult learners, leading to a gradual loss of cognitive and motor skills. So that one's knowledge can be formed in the long term and last into old age through inherited information, own experience, experience of others, environment, and other intrinsic factors. The level of maturity and strength of a person in thinking and working increases with age, but there are 6 physical factors that can hinder the learning process in adults, resulting in a decrease in thinking and working power from time to time. As a result, one's knowledge can be formed in the long term and maintained even in old age through previous learning, own experiences, experiences of others, environment, and other intrinsic factors (I G A Ayu Dharmawati & I Nyoman Wirata, 2016)

3.4 The relationship between respondent's education and knowledge of HPV vaccination

The majority of respondents graduated from high school (57.7%), and the value of $p=0,650$ ($p > 0,05$) showed no significant relationship between education and the level of knowledge of respondents (very good; 49.3%).^[U5] The results showed that most of the respondents had a very good level of knowledge. The level of education is basically one of the factors that influence a person's knowledge and actions because knowledge will directly affect behavior (I G A Ayu Dharmawati & I Nyoman Wirata, 2016)

The respondents' very good knowledge in this study was proven by the respondents' insight or understanding regarding the meaning, transmission, symptoms, risk factors, and prevention through the HPV vaccine. Respondents' knowledge is generally good due to the large amount of information obtained from mass media such as television, newspapers, billboards, posters and banners. In addition, with social media, people can get various information quickly and easily. Another factor that influences knowledge about HPV in respondents is that with increasing age, the level of knowledge will develop according to the knowledge that has been obtained and also the experience of the respondents (Sofia & Magfirah, 2021). According to (Pamudji, 2017), this excellent knowledge supports public health in the future, information must be shared among stakeholders and health professionals.

3.5 Relationship between respondent's job and knowledge of HPV vaccination

In the results of the study, the value of $p=0,013$ ($p < 0,05$) showed that there was significant relationship between the work factors of the respondents who were mostly students (40.8%) with a very good level of knowledge of the respondents (49.3%).^[U6] According to previous research, there was research in the Pela Mampang sub-district of Jakarta in 2019 which stated that there was a significant relationship between the job of women of childbearing age and users of the HPV vaccine. The results shown in this study, women of childbearing age who job have the opportunity to use the HPV vaccination 21 times greater than women of childbearing age who do not have job (Hurit, 2022). Job affects

the knowledge of female employees who work in these places, because the world of work is wide they can exchange ideas and solve problems with many people, and there is a process of adaptation to the world of work, from what is not usually known to what must be understood and done. From this knowledge good knowledge can be obtained because most of the women job already know about the HPV vaccination (Herawati Anita, Linda Kusumawati, 2018).

3.6 The relationship between respondents' income and knowledge of HPV vaccination

The majority of respondents' income was below IDR 1,000,000 (71.8%), but the correlation between it and their level of knowledge was not statistically significant $p=0,106$ ($p>0,05$). [U7] In the research (Khairiyah Ar-Rasily & Dewi, 2016) statistically it was also found that the level of income did not significantly affect the level of knowledge. This can happen because not only people with high incomes can provide certain facilities to obtain knowledge and information. Because knowledge of something can be obtained from anywhere. (Abdi Rayoga et al., 2022) confirms that not only high-income people have access to resources to study and prepare for HPV vaccination today. High and low income people now have access to smartphones. Anyone with a smartphone can learn whatever information they are looking for.

4 Conclusion

Women of childbearing age have very good knowledge of HPV vaccination. But it is not statistically significant on the factors of age, occupation, education and income. This is influenced because this study has limitations, namely it does not discuss other factors and this research uses validity and reliability tests on different population samples so that it can affect the results of the study.

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