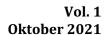
Proceeding International Conference on Health Science

ocs.unism.ac.id/index.php/ICoHS





USE of THE HPV VACCINE IN WOMEN OF FERTILE AGE AS PREVENTION OF CERVICAL CANCER: LITERATURE REVIEW

Ismi Natiqtul Fadhilah^{1*}, Winda Maolinda¹, Ika Mardiatul Ulfa²

¹Diploma Three of Midwifery Program, Faculty of Health Sari Mulia University Indonesia

*Correspondence author: Phone: 082240760942,

Email: <u>isminatiqotulf@gmail.com</u>

Abstract

Patients with cervical cancer in Indonesia are still quite high. According to the WHO in 2018, an estimated 570,000 women were diagnosed with cervical cancer in the world and around 311,000 women died of cervical cancer. Meanwhile, according to the Ministry of Health, the incidence of cervical cancer in Indonesia in 2019 reached 84,185 women who were positive for cervical cancer. With the high number of cervical cancer in Indonesia, the government seeks to prevent cervical cancer by holding the HPV vaccine. The HPV vaccine is one of the primary prevention methods for cervical cancer. However, with the facilities provided by the government, the number of women of childbearing age who participated in the HPV vaccination was not followed. This study aims to determine how many women of childbearing age have used the HPV vaccine as an effort to prevent cervical cancer and what factors influence women of childbearing age not to have the HPV vaccine. This study uses a literature study approach using selected sources based on predetermined criteria. From 10 types of literature reviews, there were 1067 respondents, 178 respondents had received the HPV vaccine and 889 respondents had not received the HPV vaccine. This is caused by, there is no desire to do the HPV vaccine, have a negative motivation for the HPV vaccine, economic factors, low level of knowledge, do not get family support, and have a negative attitude towards the HPV vaccine. There are still many cervical cancer sufferers, especially in Indonesia, not because of ineffectiveness but because of a lack of awareness about the importance of the HPV vaccine for women of childbearing age.

Keywords: cervical cancer, HPV vaccine and women of childbearing age.

Introduction

Cervical cancer is cancer that occurs in the uterine cervix, an area of the female organ which is the entrance to the uterus which is located between the uterus (uterus) and the vagina (vagina). (Ministry of Health RI, 2019). According to data from the *World Health Organization* (WHO) shows cervical cancer is the fourth common cancer in women. In 2018, an estimated 570,000 women were diagnosed with cervical cancer worldwide and about 311,000 women died from the disease. (WHO 2018).

The incidence of cervical cancer in Indonesia in 2018 according to the Health Service of the Republic of Indonesia reached 77,969 with an age range of 30-50 years. Meanwhile, the Ministry of Health (Kemenkes, 2019) stated that cervical cancer in Indonesia reached 84,185 women with an age range of 30-50 years showing positive cervical cancer.

According to data from the South Kalimantan Provincial Health Office (2019), there were 27,751 women who had an IVA examination with an age range of 30-50 years. Of the 27,751 women who had the examination, 218 (1.57%) tested positive for cervical cancer. Meanwhile, data from the Banjarmasin City Health Office (2019) as many as 3,423 women from the age range of 30-50 years underwent VIA examinations and 53 (0.78%) women tested positive for cervical cancer.

According to research from Patria Asda and Siti Uswatun Chasanah (2020) about Mother's Knowledge About Immunization *Human Papillomavirus* (HPV)in Nglaban Ngaglik Sleman Hamlet said the HPV vaccine is a primary prevention effort which is expected to reduce the occurrence of high-risk HPV infections, reduce the incidence of cervical cancer carcinogenesis and ultimately reduce the incidence of cervical cancer.

HPV vaccination is included in the choice of immunization (other immunizations that are not included in the immunization program but can be given according to their needs and their implementation is also carried out by competent health workers in accordance with the provisions of the legislation. HPV vaccine has 96-98% efficacy to prevent cervical cancer caused by HPV type 16/18 (Regulation of the Minister of Health of the Republic of Indonesia Number 12 of 2017).

According to a scientific article from Yulia Fitriani, et al (2018) regarding the Health Belief Model On The Determinants Of Human Papilloma Virus Vaccination in Women Reproductive Age in Surakarta, Central Java said that some private hospitals are already serving the HPV vaccine, but the presence of these facilities are not followed by the number of women of childbearing age who follow vaccination.

Based on the description in the above background that shows much of cervical cancer as well as lack of awareness of the public to make vaccines HPV as pe To prevent cervical cancer, the authors are interested in examining the use of the HPV vaccine in women of childbearing age as an effort to prevent cervical cancer.

Materials and Methods

The research method used in this study is a literature review by searching and reading various sources from books, journals, or other articles related to the research topic. The literature source used in this study is Google Scholar with 3 words. The keys are cervical cancer, HPV vaccine and women of childbearing age. The literature review search has been carried out since October 2020.

Results and Discussion

The literature collection process was carried out by conducting an assessment of journals which were initially narrowed down to 10 literatures. The search process is carried out through an electronic based indexed from Google Scholar (n: 664).

No	Author (Year)	Langu age	Source Article	Purpose	Research Method	Findings
1	Ajeng D. Sari (2019)	Indone sia	Google Scholar	Knowing the status of HPV vaccination, intention to vaccinate HPV and analyzing demographic profiles, knowledge and beliefs of HPV vaccinationa nalysis	Observationa l	Respondents who have not vaccinated against HPV as much as 120 (100%).
2	Anita Herawat i, Linda Kusuma wati & Ahmad Hidayat (2018)	Indone sia	Google Scholar	Knowing the relationship between knowledge about cervical cancer and their motivation to take preventive action through the provision of the HPV vaccine.	Analytical Survey	There are 36 respondents (54.5%) who have been vaccinated against HPV and who have not vaccinated against HPV as many as 30 respondents (45.5%).
3	Ns. Sri Mulyati, S. Kep, M.Kes (2018)	Indone sia	Google Scholar	Knowing the relationship between knowledge, economic status, the role of officers, and the role of families on HPV.	Analytical Descriptive	A total of 10 respondents (31.3%) used HPV vaccination and 22 respondents (68.8%) did not use HPV vaccination.

4	Nurlaila,	Indone	Google	Knowing the	Analytical	Respondents who did not
	Rahma	sia	Scholar	factors	descriptive	vaccinate HPV were 126
	wati			related to the		respondents (96.0%) and
	Shoufia			behavior of		8 respondents (6, 0%)
	h & Sri			vaccinating		had been vaccinated
	Hamzah			cervical		against HPV.
	(2020)			cancer		
5	Patria	Indone	Google	Knowing the	Descriptive) immunization
	Asda &	sia	Scholar	mother's		Respondents in this
	Siti			level of		study who had not
	Uswatu			knowledge		immunized with HPV
	n			about the		were 63 respondents
	Chasana			Human		(90%) and as many as 7
	h (2020)			Papillomavoi		respondents (10%) had
				rus (HPV		done HPV immunization
6	Sriani	Indone	Google	Knowing the	Quantitative	Respondents who did not
	Wuland	sia	Scholar	factors	Analysis	vaccinate HPV were 220
	ari			related to		respondents (96.9%)
	(2018)			HPV		while those who had
				vaccination		HPV vaccination were 7
				in adult		respondents (3.1%).
				women		
7	Yulia	Englis	Google	Analyzing	observationa	Respondents who have
	Fitriani,	h	Scholar	determinants	l analytic	not vaccinated HPV are
	Ambar			of HPV		100 respondents (50.0%)
	Mudigd			vaccination		while as many as 100
	o & Rita			in women of		respondents (50.0%)
	Benya			childbearing		have had HPV
	Andrian			age		vaccination. The benefits
	i (2018)	T 1	<u> </u>	**	01	are great
8	Yuli	Indone	Google	Knowing the		A total of 4 respondents
	Kusuma	sia	Scholar	relationship	l	(25.0%) had been
	wati,			between		vaccinated against HPV
	Ridhiya			knowledge,		and 24 respondents
	Wiyasa			early		(75.0%) had never been
	& Eka			detection of		vaccinated against HPV.
	Nurul			pap smears,		
	Rah			and HPV		
	mawati			vaccination		
	(2016)			with the		
				incidence of		
				cervical		
				cancer.		

9	Supatmi , calvenia .NPP & Septian GW (2020)	Indone sia	Google Schoola r	Analyzing the characteristic s of women of childbearing age with cervical cancer prevention measures which are influenced by several factors including age, education level, occupation and parity.	Quantitative analysis	A total of 125 respondents (96.0%) had not vaccinated against HPV and as many as 5 respondents (4.0%) had vaccinated against HPV.
10	Esy Enggela Erine (2018)	Indone sia	Google Scholar	Knowing the relationship between knowledge and attitudes with HPV vaccination in women of childbearing age	Survey	A total of 59 respondents (98.%) had not vaccinated against HPV and 1 respondent (1.6%) had been vaccinated against HPV.

In a research journal conducted by Ajeng D. Sari (2019) A total of 2 respondents (1.7%) had low knowledge of HPV vaccination, 33 respondents (27.5%) had moderate knowledge and as many as 85 respondents (70.9 %) have high knowledge. However, in this study, student knowledge about HPV vaccination did not affect the intention to vaccinate HPV, as evidenced by 120 respondents, 43 respondents (35.8%) had the intention to vaccinate HPV and 77 respondents (64.2%) did not have the intention to vaccinate HPV. According to the results of the study, this is due to the perception of obstacles in carrying out HPV vaccination by respondents, such as the high price (53.4%) and the lack of information about the place of HPV vaccination (62.5%). This is in line with the results of research by Holman et al (2014) which said that financial problems, parental attitudes and concerns about the safety of the HPV vaccine were obstacles to getting HPV vaccination.

The results of research conducted by Anita Herawati, Lisda Kusumawati & Ahmad Hidayat (2018) Of the 66 respondents there are 42 respondents (63.6%) who have good knowledge of HPV vaccination, 22 respondents (33.3%) have sufficient knowledge and 2 respondents (3.0%) who have less knowledge. This study is in line with the results of research conducted by Ajeng D. Sari (2019) that knowledge can be influenced by age, education level and occupation. This is evidenced by the age, the higher the age the more able to solve problems because they have a lot of experience. In terms of employee education, it can be seen that the higher the level of education, the higher the knowledge about HPV vaccination. However, even though the respondents have high knowledge, there are still some respondents who have negative motivation towards HPV vaccination. It is evident from this study that 36 respondents (54.5%) had positive motivation for HPV vaccination and 30 respondents (45.4%) had negative motivation. Respondents have a positive motivation because they have understood the importance of HPV vaccination. However, there are still respondents who have negative motivation because respondents do not understand the importance of HPV vaccination. In terms of costs, respondents are more concerned with the salary they earn for their daily needs. Respondents think that HPV vaccination requires a fairly expensive cost, so there are still respondents who have negative motivations for HPV vaccination.

In research conducted by Ns. Sri Mulyati, S. Kep, M.Kes (2018) Based on the results of the study, there were 5 respondents (15.6%) who had good knowledge of HPV vaccination from 5 respondents who had good knowledge using HPV vaccination only 1 respondent (20.0%)), 15 respondents (46.9%) had sufficient knowledge of 15 respondents who had sufficient knowledge as many as 11 respondents (73.3%) who did not use HPV vaccination while 12 respondents (37.5%) had poor knowledge of 12 respondents who had knowledge of not good, there are 10 respondents (83.3%) who do not use HPV vaccination. Of the 32 respondents, 13 respondents (40.6%) had high economic status, from 13 respondents who had high economic status, there were 5 respondents (38.5%) who did not take advantage of HPV vaccination and 19 respondents (59.4%) low economic status, from 19 respondents with low economic status as many as 17 respondents (89.5%) did not take advantage of HPV vaccination. As many as 13 respondents (40.6%) got the role of good health workers, from 13 respondents who got the role of good health workers as many as 5 respondents (38.5%) did not take advantage of HPV vaccination and as many as 19 respondents (59.4%) got the role of health workers, poor health, of the 19 respondents who received the role of a health worker that was not good, 17 respondents (89.5%) did not take advantage of the HPV vaccination. 11 respondents (34.4%) got a good family role, from 11 respondents who got a good family role as many as 4 respondents (36.4%) did not use HPV vaccination and as many as 21 respondents (56.6%) got a good family role, less good than 21 respondents who got a poor family role there were 18 respondents (85.7%) did not take advantage of HPV vaccination.

In a study conducted by Nurlaila, Rahmawati Shoufiah & Sri Hamzah (2020) Of the 134 respondents, 30 respondents (22.4%) had insufficient knowledge about HPV vaccination, 30 respondents (22.4%) had sufficient knowledge and 74 respondents (55.2%) have good knowledge. However, high knowledge did not affect respondents to vaccinate HPV as evidenced by the results of the study of respondents who did not vaccinate HPV as many as 126 respondents (96.0%) and as many as 8 respondents (6.0%) had already vaccinated against HPV. The majority of people are more concerned with basic needs (food, clothing, housing) than having to leave a little money to go to health services, the community's sense of awareness of this is very less. It is proven that as many as 58 respondents (43.3%) have low income economic factors and 76

respondents (56.7%) have high income. Economic level will affect the health of families with low economic levels who are unable to provide funds for HPV vaccination.

In a research journal written by Patria Asda & Siti Uswatun Chasanah (2020) From the questionnaire, it was found that the majority of respondents had not vaccinated HPV as many as 63 respondents (90%) and respondents who had the HPV vaccine were 7 respondents (10%). as many as 25 respondents (35.7%) have good knowledge about HPV vaccination and as many as 45 respondents (64.3%) have less knowledge. Although the respondents have less knowledge, the respondents' desire to vaccinate against HPV is quite high. The results of the study proved that 21 respondents (30%) had no desire to vaccinate against HPV and 49 respondents (70%) had a desire to vaccinate against HPV. Respondents said they had an interest in HPV vaccination but had never received complete information regarding it.

The results of research conducted by Sriani Wulandari (2018) 87 respondents (38.3%) had poor knowledge about HPV vaccination and 140 respondents (61.7%) had good knowledge. This study is not in line with research by Jones and Cook (2010), respondents who have good knowledge of HPV vaccination are 3.59 times more likely to receive HPV vaccination compared to those with less knowledge. Evident from the results of the study showed that 220 respondents (96.9%) did not vaccinate HPV, while 7 respondents (3.1%). A total of 198 respondents (87.2%) have low education and 29 respondents (12.8%) have high education. A total of 150 respondents (66.1%) did not receive support from their husbands to vaccinate HPV and 77 respondents (33.9%) received support from their husbands.

The results of research conducted by Yulia Fitriani, Ambar Mudigdo & Rita Benya Andriani (2018) 72 respondents (36%) have poor knowledge about HPV vaccination and 128 respondents (64%) have good knowledge. In addition to knowledge, income level is one of the resources that influence a person to behave in health, this is because an adequate income level will provide greater possibilities to come to health facilities and check themselves. It is proven that 93 respondents (46.5%) have low income and 107 respondents (53.5%) have high income.

The results of research conducted by Yuli Kusumawati, Ridhiya Wiyasa & Eka Nurul Rahmawati (2016) A total of 4 respondents (125.0%) had been vaccinated against HPV and 24 respondents (75.0%) had never been vaccinated against HPV. Respondents said they were afraid that HPV vaccination was unsafe, afraid of the side effects of vaccination, and felt they were not ready to be vaccinated because they still needed more information about HPV vaccination. It is evident from the study that 20 respondents (83.3%) did not know about HPV vaccination. The results showed as many as 4 respondents (16.7%) did not want to vaccinate HPV because of the high cost. This is in line with the research of Yulia Fitriani, Ambar Mudigdo & Rita Benya Abdriani (2018), among the barriers to HPV vaccination are financial problems. The rejection of HPV vaccination mostly occurs because of the high costs involved.

In the results of research conducted by Supatmi, calvenia.NPP & Septian GW (2020) as many as 47 respondents (36.1%) have low education and as many as 83 respondents (63.9%) have higher education. However, higher education does not affect attitudes to HPV vaccination. Evident from the results of the study showed that as many as 125 respondents (96.0%) had not vaccinated against HPV and as many as 5 respondents (4.0%) had vaccinated against HPV. In addition to education, work also does not affect attitudes to do the HPV vaccine. It is proven by the results of the study as many as 48 respondents (36.9%) working and as many as 82 respondents (63.1%) not working. Apart from education and occupation, parity also does not affect attitudes to HPV vaccination. It is proven that 34 respondents (26.2%) have many children.

In a study conducted by Esy Enggela Erine (2018), according to the results of the study, the positive attitudes of respondents towards HPV vaccination were 14 respondents (23.3%) and negative attitudes were 46 respondents (76.7%). Attitudes formed in providing support for cervical cancer prevention through HPV vaccination are influenced by personal experience factors experienced by WUS, other people who are considered important such as family, the mass media as a tool for digging knowledge about cervical cancer and HPV vaccines as well as educational institutions, in this case the health center or health center. health facilities that provide learning about reproductive health to respondents. These factors provide stimulus for respondents in responding to cervical cancer prevention through HPV vaccination. Evident from the results of the study showed that 59 respondents (98.4%) had not vaccinated against HPV and only 1 respondent (1.66%) had vaccinated against HPV.

Conclusion

From the results of 10 journals that have been studied by the author, there are 1067 respondents, 178 respondents have done the HPV vaccine and as many as 889 have not done the HPV vaccine. Based on several journals reviewed by the authors, it was found that the reasons many people did not vaccinate HPV, namely, there was no desire to get the HPV vaccine, had negative motivations for the HPV vaccine, economic factors because respondents were more concerned with basic needs such as clothing, food and shelter, level of knowledge. low, low education, do not get family support and have a negative attitude towards the HPV vaccine.

Acknowledgments

I would like to express my gratitude to all who were involved in this research, especially from the supervisor who has guided me until the publication of this manuscript, and to my parents and friends who have helped a lot.

Declaration of Interest Statement

The author declares no conflict of interest in preparing this article.

Reference

- Asda, P., & Chasanah, SU (2019). *Mother's Knowledge About Human Papillomavirus (HPV) Immunization in Nglaban Ngaglik Hamlet, Sleman. JOURNAL OF SAMODRA HEALTH SCIENCES*, 10(2), 175-182. [Internet]. Available at: https://stikes-yogyakarta.e-journal.id/JKSI/article/view/54
- Damayanti, A. 2016. Midwifery Care for Patients with Cervical Cancer in the Gynecology Poly Room, RSUD Ulin Banjarmasin. [Internet].
- Banjarmasin City Health Office. *Banjarmasin City Health Profile 2019*. [Internet]. https://www.google.com/urldinkes.banjarmasinkota.go.id [Accessed on November 15, 2020].

- South Kalimantan Provincial Health Office. *South Kalimantan Province Health Profile 2019*. [Internet] https://www.google.comdinkes.kalselprov.go.id [Accessed on November 15, 2020].
- Fitriani, Y., Mudigdo, A., & Andriani, RB (2018). Health belief model on the determinants of human papilloma virus vaccination in women of reproductive age in Surakarta, Central Java. Journal of Health Promotion and Behavior, 3(1), 16-26. [Internet]. Available at:https://www.neliti.com/publications/235163/health-belief-model-on-the-determinants-of-human-papilloma-virus-vaccination-in
- Firdausy, VG, & Ghozali, G. (2018). The Relationship between Knowledge and Attitude with Cervical Cancer Prevention Behavior Through Vaccination of HPV (Human Papilloma Virus) in Women in the Work Area of PUSKESMAS Kampung Baru Ulu Balikpapan. [Internet]. Available at: https://dspace.umkt.ac.id/handle/463.2017/1835
- Indonesian Ministry of Health, 2019. *Indonesia Health Profile 2019*. [Internet] https://www.google.com/url.pusdatin.kemkes.go.idfolderstructure-publikasi-data-centre-data-dan-information.html&usg [Accessed on November 08, 2020].
- Nahak, PAL, Yuliwar, R., & Warsono, W. (2018). The relationship between mother's knowledge about cervical cancer and attitudes to take part in the Human Papilloma Virus (HPV) immunization in Tlogomas Village, Lowokwaru District, Malang City. Nursing News: Scientific Journal of Nursing, 3(1). [Internet]. Available at: https://publikasi.unitri.ac.id/index.php/fikes/article/view/762
- Rismawanti, V. (2020). Description of Knowledge of Women of Childbearing Age (WUS) About the Dangers of Cervical Cancer at the Kambesko Health Center. Tower of Science, 14(1). [Internet]. Available at: http://jurnal.umsb.ac.id/index.php/menarailmu/article/view/2007
- Safitri, R. (2017). Overview of Student Knowledge About Giving HPV Vaccine for Cervical Cancer Prevention in Midwifery Study Program, Faculty of Medicine and Health Sciences, Alauddin State Islamic University Makassar in 2016. [Internet]. Available at: https://scholar.google.co.id/scholarid
- Wantini, NA, & Indrayani, N. (2020). Availability of HPV Vaccination in Young Women in terms of Parental Factors. *Journal of Nurses and Midwifery*, 7(2), 213-222.[Internet]. Available at: http://jnk.phb.ac.id/index.php/jnk/article/view/581
- Wantini, NA, & Indrayani, N. (2020). Low Availability of HPV Vaccination in Young Women. Indonesian Journal of Midwifery, 11(1), 69-78. [Internet]. Available at: https://jurnal.stikesmus.ac.id/index.php/JKebIn/article/view/327

WHO. 2018. World Health Organization. [Internet] https://www.google.com/urlwww.who.int [Accessed on November 08, 2020].