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RESEARCH ARTICLE

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EVALUATION OF WOMEN'S KNOWLEDGE OF HUMAN PAPILLOMA VIRUS (HPV) AND HPV VACCINE

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ABSTRACT

In this study, we aimed to evaluate the knowledge level of women aged 18 to 45 years who applied to our clinic about HPV infection and vaccination. For this purpose, 204 women aged 18 to 45 years who applied to our clinic between 2009 and 2018 were asked to answer questions about HPV and its vaccine. A questionnaire was prepared to determine the knowledge level of the women. The answers were evaluated using the SPSS program. In the study, the mean age of the 204 participants was 27.8 years. 26 women (12.8%) reported that they had no knowledge, 60 had little knowledge (29.4%), and 98 (48.0%) had high knowledge of HPV. 20 (9.8%) also reported that they had had the HPV vaccine. In the evaluation of questions about the vaccination, 130 women (63.72%) stated that they did not have sufficient knowledge about the vaccine and did not want to get vaccinated. 30 women (14.72%) said that they had read about the risks associated with the HPV vaccine and believed that it was harmful. 24 women (11.76%) stated that they could not get vaccinated because of the cost.

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INTRODUCTION

Human papillomavirus (HPV) is a member of a sexually transmitted virus family. More than 200 subtypes have been identified, and about 40 of them cause anogenital infections¹. Low-risk HPV types can cause condyloma, while high-risk types can cause cancers of the vulva, vagina, cervix, penis, anus, and head and neck (8,9). Cervical cancer caused by high-risk HPV types is among the most common cancers in women (10,11). Invasive cervical carcinoma is seen in approximately 530,000 women every year, and approximately 260 of them die from this disease². According to the data from the TR Ministry of Health, the incidence of cervical cancer in 2015 is 4.5 per hundred thousand. At this rate, it ranks ninth among cancer types seen in women (12-13). Considering the information above, the importance of practices aimed at preventing HPV infections is clearly seen. HPV vaccine protects against infections caused by types 6, 11, 16, and 18. In our country, two different vaccines exist that contain type-specific virus-like particles obtained. The HPV vaccines being studied were licensed bivalent (Cervarix, GlaxoSmithKline), quadrivalent (Gardasil, Merck), nonavalent (Gardasil 9, Merck), and another bivalent HPV vaccine (Cecolin, Inovax). by purifying major capsule (L1) proteins by applying DNA recombinant technology.

HPV vaccines are for prevention. They have no therapeutic properties³. Routine HPV vaccination recommendations of the National Cancer Institute (NCI) in the USA are for young girls and women between the ages of 9-12 (9 years at the earliest) and 13-26 years old⁴. It is recommended to be vaccinated before becoming sexually active. According to the Centers for Disease Control and Prevention (CDC), the bivalent vaccine is recommended for girls between the ages of 9 and 18 and the quadrivalent vaccine is recommended for girls and boys between the ages of 9 and 18⁵. Despite the developments regarding the HPV vaccine, the knowledge level in society about HPV infections and vaccine is not at the desired level. In this study, we aimed to determine the knowledge level of women about HPV and its vaccine.

MATERIALS AND METHODS

Between 2009 and 2018, 204 women aged 18-45 years who applied to our clinic were asked to answer questions about HPV and its vaccine. An questionnaire was prepared to determine the knowledge level of the women. Before the application, the purpose of the study and how to complete the forms were explained, and verbal consent

was obtained from the participants. The answers given by the patients were evaluated using the SPSS 21.0 package program.

RESULTS

The patients had a mean age of 27.8. Fourteen women (41.2%) who said they did not know about HPV were married while 28 (16.9%) were single; of those with little knowledge, 10 (29.4%) were married while 95 (55.9%) were single; 8 women (23.5%) who said they had a lot of knowledge were married while 42 (24.8%) were single. Among those who were vaccinated, 2 (5.8%) were married and 5 (2.9%) were single. Of those who said they did not know about HPV, 98 (81.6%) were primary school graduates, and 10 (18.0%) were high school graduates.

school graduates, 16 patients (29%) were high school graduates, and 8 patients (27.9%) were university graduates. Four patients (3.3%) with high knowledge of HPV were primary school graduates, 21 patients (38.5%) were high school graduates, and 9 patients (31.0%) were university graduates.

CONCLUSION

It is estimated that, hpv vaccine strategy could prevent 60 million cervical cancer cases and 45 million deaths over the next 100 years. It also considers the large spectrum of cancers and other diseases preventable by HPV vaccination. It incorporates recent information regarding HPV vaccines, including the licensure of new HPV vaccines and evidence on vaccine immunogenicity and effectiveness with reduced dose schedules.

Table 1. Age, marital status, education level, and knowledge levels about HPV

	LEVEL OF KNOWLEDGE ABOUT HPV			Vaccinated	P
	None	Very little	High		
Age (\bar{x})	23.3	30.1	29.8	27.8	.001
Marital status					
Married (n = 34)	14 (41.2%)	10 (29.5%)	8 (23.5%)	2 (5.8%)	.001
Single (n = 170)	28 (16.9%)	95 (55.9%)	42 (24.8%)	5 (2.9%)	
Educational Status					
Elementary (n = 120)	98 (81.6%)	18 (15%)	4 (3.3%)	0 (0%)	.001
High school (n = 55)	10 (18.0%)	16 (29%)	21 (38.5%)	8 (14.5%)	
University (n = 29)	0 (0%)	8 (27.9%)	9 (31.0%)	12 (41.3%)	

There were no university graduates who said "I don't know about HPV". 18 women (15%) who said they had little knowledge about HPV were primary school graduates, 16 (29%) were high school graduates, and 8 (27.9%) were university graduates. Of those who said they had a lot of information about HPV, 4 (3.3%) were primary school graduates, 21 (38.5%) were high school graduates, and 9 (31.0%) were university graduates. Based on these results, we see that as education level increases, the knowledge of and vaccination rates against HPV increase.

DISCUSSION

Cervical cancer is a type of cancer directly related to HPV. In developed countries, the disease is caught in early stages due to screening tests, which have caused the incidence of the disease to fall to the tenth rank. On the other hand, in developing countries, cervical cancer ranks third. Because of the relationship between cervical cancer and HPV, the importance of having knowledge about HPV and its vaccine is clearly seen. Among the women in our study to determine the level of knowledge about HPV and its vaccine; 26 (12.8%) stated that they had no knowledge about HPV, 60 (29.4%) stated that they had little knowledge, and 98 (48%) stated that they had very good knowledge. Guvenc et al. ⁶ reported the rate of hearing about HPV was 25.8% in their study. Cetin et al. ⁷ found the level of knowledge about HPV to be 4.5% in their study. Ragin et al. ⁸ reported that the rate of those who knew that HPV was sexually transmitted was 78% in their study, and 87% of the participants stated that they had heard of the HPV vaccine before. In our study, the rate of those with medium and high knowledge about HPV was found to be 59.9%. The reason for the high level of HPV knowledge in our study may be related to the fact that the patient profile applying to private institutions is better educated. While 14 married patients (41.2%) and 28 single patients (16.9%) stated that they had no knowledge about HPV, 10 married patients (29.5%) and 95 single patients (55.9%) had little information; and 8 married patients (23.5%) and 42 single patients (24.8%) stated that they had high knowledge about HPV. The rate of those who had moderate and high knowledge about HPV was found to be 80.7% in singles. While 98 patients (81.6%) with no knowledge of HPV were primary school graduates, 10 patients (18.0%) were high school graduates; there were no university graduates who had no knowledge of HPV. Eighteen patients (15%) with a medium level of HPV knowledge were primary

Cochrane report; Efficacy, effectiveness and immunogenicity of one dose of HPV vaccine compared with no vaccination, two doses, or three doses March 2022-- Unpublished data has been redacted from this version of the report that: single dose may be effective for immunity (15,16,17). HPV is the causative agent in cervical, anogenital, oral, gastrointestinal, and penile cancers. (10,11,13,14) . For this reason, vaccination is of great importance, especially for girls and boys aged 9-11. HPV vaccine is not available free of charge in our country. The cost, the knowledge of judges and patients about the vaccine, and religious and social beliefs are among the factors that prevent the widespread application of the vaccine. Considering the results obtained from the study, physicians have an important role in increasing the level of knowledge about HPV and its vaccine and eliminating prejudices about the vaccine.

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