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Consideratıon Of HPV Vaccination in Patients Applying to Ketem Outpatient Clinic. How Aware am I of the HPV Vaccine?

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Abstract

Objective: Human Papilloma Virus (HPV) infection causes a wide range of diseases, from genital warts to cervical cancer. Since HPV infection often progresses without symptoms, early diagnosis is difficult. The aim of the study is to determine the frequency of HPV positivity among women applying to KETEM polyclinic in Adıyaman province

Methods: This cross-sectional study was conducted through surveys among 273 women who applied to Adıyaman Central KETEM polyclinic. The applied questionnaire consists of 25 questions. Questionnaires were administered through face-to-face interviews. In addition to sociodemographic data, the questionnaires included questions about HPV vaccination. Chi-square, t-test and ANOVA tests were used as statistical analysis methods. $p<0.05$ was considered significant.

Results: The mean age of the participants was 47.12±8.60. 83.9% of the participants were housewives, 63.5% described their economic status as medium, and 79.7% had health insurance. The frequency of those who had a PAP-smear test before was 89.7%, and the frequency of those who had a PAP-smear for regular health check-ups was 60%. 2.6% of PAP Smear test results were positive. The frequency of those who received the HPV vaccine was 3.7%. The frequency of those who thought that the HPV vaccine was protective against cancer was 41.0%. The frequency of those who had heard of the HPV vaccine was 20.7%, the frequency of those who wanted to get the HPV vaccine was 86.3%, and the frequency of those who were considering having their children vaccinated against HPV was 89.3%. Age, education level and employment status affect the level of awareness about the HPV vaccine ($p<0.05$).

Conclusion: The frequency of those who received the HPV vaccine was quite low. Although one fifth of the participants had heard of the HPV vaccine, the majority were not against getting both themselves and their children vaccinated against HPV.

Keyword: HPV, Vaccine, Communicable Disease, Reproductive Health

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INTRODUCTION

Genital warts, known as condyloma acuminata, are a sexually transmitted viral infection caused by Human Papillomavirus (HPV) and are becoming more common day by day. Genital warts are single or multiple, soft, painless, cauliflower-looking structures. Although HPV infection plays a role in the development of cervical cancer, scientific studies have proven that it can cause cervical dysplasia, warts throughout the body, especially in the genital area, and cancer of the vulva/vagina, anus, and penis. It has been determined that HPV 16 (50-60%) and HPV 18 (10-12%) types are effective in more than 70% of cervical cancer worldwide. Since HPV infection often progresses without symptoms, early diagnosis is difficult. For this reason, it is important to identify risk factors, raise awareness of individuals at risk and direct them to receive health care, and follow-up evaluation (1).

More than 70% of sexually active women will be infected with HPV once in their lifetime. Each year, HPV infection causes 470,000 cervical cancers. More than 35 types of 16 HPV cause infection in the genital area. HPV 16 and 18 cause 70% of cervical cancer and high-grade cervical intraepithelial neoplasia. For this reason, a vaccine has been produced against HPV (2). The main purpose of the HPV vaccine is to reduce the incidence of anogenital cancer. Vaccines are divided into two groups: preventive and therapeutic vaccines. In particular, vaccine studies carried out to date have focused mostly on preventive vaccines. While preventive vaccines are now available, studies on therapeutic vaccines are still ongoing. The goal of the preventive vaccine is to prevent long-term infection and reinfection by creating an effective immune response in the area where HPV infection occurs. Therapeutic vaccination aims to eliminate a previous infection or to create a protective effect against the development of a malignant disease. Preventive vaccines provide protection against 2 high-risk HPV types, 16 and 18 (3).

The aim is to determine the frequency of HPV positivity among women applying to KETEM polyclinic in Adıyaman province and to obtain information about the approach of the women participating in the study to HPV vaccination.

METHODS

This is a descriptive study. The study was conducted among women who applied to

KETEM polyclinic in Adıyaman. The population of the study consisted of women aged 18 and over living in Adıyaman province, according to 2021 data. The formula n= Nt^2pq/d^2 (N-1)+t^2pq was used to determine the number of people to be sampled and the number of people to be sampled was calculated as 273 people with a 95% confidence interval, 23% (4) prevalence and 5% deviation.

The survey form was prepared by conducting the necessary literature review. The applied survey consists of 25 questions. The criteria for inclusion in the study group were determined as being a woman aged 18 and over who applied to the Ketem outpatient clinic and agreeing to participate in the study. The people to be included in the study were among women who applied consecutively and accepted the study as of 01/04/2022. Surveys were administered by interviewers through face-to-face interviews.

Necessary permissions for the study were taken from the Adıyaman University Non-Interventional Research Ethics Committee (decision dated 15.03.2022 and numbered 2022/3-29)

Statistical analysis

The obtained data were recorded in the statistical package program (SPSS 22.00) and error checks, tables and statistical analyzes were made through this program. Means are given along with standard deviations. chi-square, t-test and ANOVA tests were used as statistical analysis methods. A value of $p<0.05$ was considered significant.

RESULTS

The mean age of the participants was 47.12±8.60 (min-max: 38-60). All participants were married. The mean number of children was 3.67±1.77 (min-max: 0-10). 83.9% of the participants were housewives, 63.5% described their economic status as medium, and 20.3% did not have health insurance (Table 1)

The frequency of those who had a PAP-Smear test before was 89.7%, and the frequency of those who had the PAP-Smear test at the KETEM outpatient clinic was 54.9%. 59.8% of the participants reported that they had a PAP Smear test for regular health check-ups and 20.3% due to doctor's recommendation. 2.6% of the PAP Smear test results were positive and 9.6% could not be evaluated.

The frequency of those who received the HPV vaccine was 3.7%. The frequency of people who believed that the HPV vaccines were protective against cervical cancer was 41.0%. The frequency of those who had heard of the HPV vaccine was 20.7%, the frequency of those who wanted to get the HPV vaccine was 86.3%, and the frequency of those who were considering having their children vaccinated against HPV was 89.3% (Table 2).

Age, education level and employment status affect the level of hearing about the HPV vaccine ($p<0.05$) (Table 3).

Employment status affects the idea of getting HPV vaccination ($p<0.05$). (Table 4).

Table 1: Some sociodemographic characteristics of the participants.

	n	%
Employment status		
Employed	44	16.2
Unemployed	227	83.8
Socioeconomic status		
High	22	8.1
Medium	172	63.5
Low	77	28.4
Social security type		
Pension fund	74	27.3
Social Security Institution	60	22.1
Other	82	30.3
None	55	20.3

Table 2: Some participants' thoughts about the HPV vaccine.

HPV vaccination status	**n**	**%**
Yes	10	3.7
No	261	96.3
Does the HPV vaccine protect against cervical cancer?		
Yes	111	41.0
No	3	1.1
No idea	157	57.9
Have you heard of the HPV vaccine?		
Yes	56	20.7
No	215	79.3
Would you consider getting the HPV vaccine?		
Yes	234	86.3
No	37	13.7
Would you get your child the HPV vaccine?		
Yes	242	89.3
No	29	10.7

Table 3: Distribution of hearing about HPV vaccine according to some variables.

Age group, years	**Yes**	**No**	**Statistics**
30-40	21(37.5)	40(18.6)	
41-50	26 (46.4)	96 (44.7)	x^2=12.925
51 and above	9 (16.1)	79 (36.7)	p=0.002
Education			
Illiterate	4(7.1)	63(29.3)	
Literate	3(5.4)	37(17.2)	x^2=111.96
Primary school graduate	9(3.3)	99(36.5)	p=0.000
Highschool graduate and above	40(71.4)	16(7.4)	
Employment Status			
Employed	21(37.5)	206(95.8)	x^2=111.087
Unemployed	35(62.5)	9(4.2)	p=0.000
Economic status			
High	14(25.0)	8(3.7)	x^2=28.794
Medium	33(58.9)	139(64.7)	p=0.000
Low	9(16.1)	68(31.6)	

* Column percentages are shown on the table above

Table 4: Distribution of the idea of getting the HPV vaccine according to some variables

Age groups, years	**Yes**	**No**	**Statistics**
30-40	55 (23.5)	6 (16.2)	x^2=1.142 p=0.565
41-50	105 (44.9)	17 (45.9)	
51 and above	74 (31.6)	14 (37.8)	
Educational Background			
Illiterate	56 (23.9)	11 (29.7)	x^2=5.076 p=0.166
Literate	32 (13.7)	8 (21.6)	
Primary school graduate	93 (39.7)	15 (40.5)	
Highschool graduate and above	53 (22.6)	3 (8.1)	
Employment status			
Employed	43 (18.4)	1 (2.7)	x^2=5.771 p=0.016
Unemployed	191 (81.6)	36 (97.3)	
Economic status			
High	19 (8.1)	3 (8.1)	x^2=3.209 p=0.201
Medium	153 (65.4)	19 (51.4)	
Low	62 (26.5)	15 (40.5)	

* Column percentages are shown on the table above

DISCUSSION

HPV vaccination is very important because HPV infection can be prevented by vaccination and thus cervical cancer can be prevented. In our study, a very small number of participants (3.7%) reported that they had received the HPV vaccine. In a study conducted among nurses, 5.7% of the participants and in a study conducted among physicians, 15.3% of the participants were observed to have received the HPV vaccine (4). In a study conducted in mid-adult women, it was determined that 15.6% of them had ever received the HPV vaccine (5).

In the study carried out by Kızmaz et al. among female patients, it was observed that none of the participants had received the HPV vaccine (6). Studies conducted both among healthcare professionals and other groups in society show that the tendency to receive HPV vaccination is low in our country. In addition, the fact that the frequency of HPV vaccination among healthcare workers is higher than other groups in the society indicates that as awareness about HPV increases, the frequency of those vaccinated will increase.

Two out of every five women (41%) participating in the study think that the HPV vaccine is protective against cervical cancer. In a study conducted among midwifery students, it was determined that 6.6% of the participants viewed the HPV vaccine as protective against cervical cancer (7).

It was determined that one in every five women participating in our study had heard of the HPV vaccine before. In the study carried out by Başlı et al. at a vocational school of health, the frequency of hearing about the HPV vaccine was found to be 75.6% (8). In the same study, it was determined that the most important source of information was lessons. The

frequency of people hearing about the HPV vaccine from healthcare professionals is only 10.5% (8). In the study conducted by Grigore et al., 62.3% of women had heard of the HPV vaccine (9). In the study conducted by Charakorn et al. in Thailand, the frequency of people hearing about the HPV vaccine was found to be 36% (10). In the study conducted by Kızmaz et al., the frequency of people hearing about the HPV vaccine was found to be 40.1% (6). In a study conducted among women, it was shown that nearly half of the women did not have information about HPV vaccination and one in four women thought that HPV vaccination was not necessary, one in nine women did not get vaccinated because they did not pay attention about HPV vaccination (11).

Eight out of ten women (86.3%) who participated in our study are considering getting the HPV vaccine for themselves and nine (89.3%) for their children. In Grigore's study, it was determined that half of the participants had positive opinions towards the HPV vaccine (9). In the study conducted by Kızmaz et al., after a brief information given to the participants, the frequency of those who wanted to be vaccinated reached 68.3%. In the study conducted by Showket et al. in India, it was observed that the frequency of those who wanted to be vaccinated was 13%, even among those who had knowledge about cervical cancer and HPV (12).

Having a good economic situation significantly affects the level of hearing about the HPV vaccine. In the study conducted by Üzüm et al., the frequency of non-routine vaccination was found to be high in people with high income (13). In the study conducted by Yasin et al., it was observed that the frequency of vaccination increased with increasing income (14).

CONCLUSION

It was observed that the percentage of participants hearing about the HPV vaccine was low. Those with a high level of education have a high rate of hearing about the HPV vaccine. It has been observed that people are considering getting vaccinated if the HPV vaccine is implemented in routine practice. Awareness can be increased by training on the prevention of cervical cancer. It will thus contribute to the maintenance of public health.

Ethics Committee Approval: This research complies with all the relevant national regulations, institutional policies and is in accordance the tenets of the Helsinki Declaration and has been approved by the Adıyaman University Non-Interventional Research Ethics Committee (decision dated 15.03.2022 and numbered 2022/3-29).

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