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Evaluation of the Knowledge Levels of University Students about Human Papilloma Virus

Üniversite öğrencilerinin Human Papilloma Virüs ile İlgili Bilgi Düzeylerinin Değerlendirilmesi

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Abstract

Amaç Human papilloma virüsü (HPV), üreme sisteminin en yaygın viral enfeksiyon etkenidir. Cinsel olarak aktif kadın ve erkeklerin büyük bir kısmı ömürlerinin bir noktasında bu virüsle enfekte olmaktadır. Bu çalışmada amaç üniversite öğrencilerinin HPV aşıları hakkındaki bilgi, tutum ve davranışlarını incelemektir.

Gereç ve Yöntem Araştırma anketi online Google anket olarak gönüllü üniversite öğrencilerine uygulanmıştır. Anket formu, demografik bilgiler ve HPV aşıları ile bilgi düzeylerinin değerlendirilmesine yönelik toplam 23 sorudan oluşmaktadır. Sonuçlar elektronik tablolara aktarılarak Microsoft Excel ve SPSS Version 25.0 istatistik paket programı kullanılarak değerlendirilmiştir.

Bulgular Araştırmaya toplam 300 öğrenci katılmıştır. Tanımlayıcı istatistik sonuçlarına göre katılımcıların %71'i kadın ve %92'si sağlık alanında (tıp, diş, ilk ve acil yardım, fizyoterapi, hemşirelik vb.) ve %8'i sağlık dışındaki bölümlerde okumaktadır. Öğrencilerin %7'si HPV aşısı olduğunu, %36'sı HPV aşısı olmak istediğini belirtirken; %45'i aşı olma konusunda kararsızdır. Öğrencilerin %63'ü HPV aşılarının rutin aşı takvimine girmesi gerektiğini düşünürken; %33'ü çekimserdir. Öğrencilere yöneltilen "HPV aşısını önerirseniz kimlere önerirsiniz?" Sorusuna öğrencilerin 17'si "Ailesinde rahim ağzı kanseri öyküsü olan kadın ve erkeklere", öğrencilerin 208'i "hem erkekler hem de kadınlara", 43'ü "tüm kadınlara", 10'u sadece "ailesinde rahim ağzı kanseri öyküsü olan kadınlara" cevabını verirken; öğrencilerin 22'si HPV aşılarını önermediğini bildirmiştir. HPV aşısını önermeme nedenleri incelendiğinde öğrencilerin 10'u aşının güvenliği hakkında şüpheler, 10'u oluşabilecek olumsuz sonuçlardan çekinme ve 2'si yeterli danışmanlık almada zorluk nedenleriyle HPV aşısını önermediğini belirtmiştir.

Sonuç Çalışmamızda, üniversite öğrencilerinin HPV aşısı ve enfeksiyonu ile ilgili bilgilerinin düşük olduğu ve aşılama oranının da (%7) düşük olduğu görülmüştür. Üniversite öğrencilerinin HPV aşısı ile ilgili bilgilenmelerinin sağlanması için gerekli eğitim ve danışmanlıkların yapılması için multidisipliner halk sağlığı çalışmalarının yapılması gereklidir.

Anahtar Kelimeler Farkındalık, Human papilloma virüs, HPV, bilgi düzeyi, üniversite öğrencileri

Özet

Aim *Human papilloma virus (HPV) is the most common viral infection agent of the reproductive system. A large portion of sexually active women and men are infected with this virus at some point in their lives. The aim of this study was to examine the knowledge, attitudes and behaviors of university students about HPV vaccines.*

Material and Method *The research survey was applied to volunteer university students as an online Google survey. The survey form consists of a total of 23 questions aimed at evaluating demographic information and knowledge about HPV vaccines. The results were transferred to spreadsheets and evaluated using Microsoft Excel and SPSS Version 25.0 statistical package programs.*

Results *A total of 300 students participated in the study. According to the descriptive statistics results, 71% of the participants were female, 92% were studying in the health field (medicine, dentistry, first and emergency aid, physiotherapy, nursing, etc.) and 8% were studying in departments other than health. While 7% of the students stated that they had received the HPV vaccine, 36% stated that they wanted to receive the HPV vaccine; 45% were undecided about getting vaccinated. While 63% of the students thought that HPV vaccines should be included in the routine vaccination schedule; 33% were hesitant. When asked the question "If you recommend the HPV vaccine, to whom would you recommend it?", 17 of the students responded "To women and men with a family history of cervical cancer", 208 of the students responded "to both men and women", 43 of them responded "to all women", and 10 of them responded only "to women with a family history of cervical cancer"; 22 of the students reported that they did not recommend the HPV vaccine. When the reasons for not recommending the HPV vaccine were examined, 10 of the students stated that they did not recommend the HPV vaccine due to doubts about the safety of the vaccine, 10 of them stated that they were afraid of possible negative outcomes, and 2 of them stated that they did not recommend the HPV vaccine due to difficulties in receiving adequate counseling.*

Conclusion *Our study found that university students have low knowledge about HPV vaccine and infection and the vaccination rate is also low (7%). Multidisciplinary public health studies should be conducted to provide the necessary education and counseling to ensure that university students are informed about HPV vaccine.*

Keywords *Awareness, Human papillomavirus, HPV, knowledge level, university students*

INTRODUCTION

Human Papilloma Virus (HPV) is one of the most common viral infections transmitted through contact, especially sexually, and it is thought that every person is infected with a type of HPV at some point in their life. HPV, which is detected in 99.7% of cervical cancers, can infect both male and female individuals, so it is extremely essential to measure the level of knowledge of individuals about the HPV virus in addition to the studies conducted on this virus. In Turkey, the knowledge of society and especially university students about HPV should be evaluated and education and information meetings should be held to protect against this virus.[1]

Although HPV poses less of a health risk in men, certain types are associated with cervical cancer, genital warts, and other types of cancer. For this reason, especially young women being aware of this virus and learning how to protect themselves will increase the lifespan of women in the population and improve their quality of life in the future.[2] Considering that the HPV virus can be transmitted not only through sexual contact but also through public restrooms, beauty salons and even simple contact, educating the society at a young age, creating awareness on this issue, and informing them that this virus is a serious condition and that there is no harm in sharing it with their doctors and families if they are infected with HPV will prevent this virus from spreading to more individuals and provide a better quality of life for future generations.[3] Therefore, being informed about HPV, knowing the methods of protection and participating in regular screening tests are of great importance for public health.[2]

In this study, the results of a survey that measured the knowledge levels of university students about HPV were presented. In addition, these results were compared with similar surveys conducted in previous years and changes and trends in the knowledge level were examined.[2-4] The aim of this study was to examine the knowledge, attitudes and behaviors of university students about HPV vaccines.

MATERIALS and METHODS

The study was conducted between April 1 and May 1, 2024. The ethics committee of the study was obtained from the Sakarya University Non-Interventional Ethics Committee (Issue no: E-71522473-050.04-349270-86). The research survey was applied to volunteer undergraduate students receiving health education as an online Google survey. The survey form consists of a total of 23 questions to evaluate demographic information and HPV vaccines. University students who agreed to participate in the study were asked to fill out the data collection form prepared as a Google survey. The results were transferred to spreadsheets and evaluated using Microsoft Excel and SPSS Version 25.0 statistical package program.

RESULTS

A total of 300 students participated in the study. According to the descriptive statistics, 71% of the participants were female, 92% were studying in the health field (medicine, dentistry, first and emergency aid, physiotherapy, nursing, etc.) and 8% were studying in departments other than health. While 7% of the students stated that they had the HPV vaccine, 36% stated that they wanted to get the HPV vaccine, and 45% were undecided about getting vaccinated. While 63% of the students thought that HPV vaccines should be included in the routine vaccination schedule; 33% were hesitant. When asked the question "If you recommend the HPV vaccine, to whom do you recommend it?", 17 of the students answered "To women and men with a family history of cervical cancer," 208 of the students answered "To both men and women," 43 of the students answered "To all women," and 10 of the students only "To women with a family history of cervical cancer," while 22 of the students reported that they did not recommend HPV vaccines (Figure 1). When the reasons for not recommending the HPV vaccine were examined, 10 of the students stated that they did not recommend the HPV vaccine due to doubts about the safety of the vaccine, 10 due to fear of possible negative consequences, and 2 due to difficulty in receiving adequate counseling. The students'

answers about HPV vaccines are shown in Table 1.

Table 1. Student responses to questions about Human papillomavirus (HPV) vaccines

HPV vaccine information	Yes %	No %	No idea %
1. HPV vaccines can also be given in childhood	118 (39.3)	43 (14.3)	139 (46.3)
2. HPV vaccine should not be administered due to its side effects.	15 (5.0)	164 (54.6)	121 (40.3)
3. The risk of cancer increases after HPV vaccination.	7 (2.3)	150 (50.0)	139 (46.3)
4. HPV vaccine is safe.	17 (5.6)	6 (2.0)	124 (41.3)
5. HPV vaccination should be administered to women of childbearing age.	108 (36.0)	60 (20.0)	132 (44.0)
6. HPV vaccination should be given to all sexually active women and men.	187 (62.3)	28 (9.3)	85 (28.3)
7. HPV vaccination should definitely be done before the first sexual experience.	155 (51.6)	23 (7.6)	122 (40.6)
8. HPV vaccine is paid.	147 (49.0)	127 (42.3)	26 (8.6)
9. HPV vaccine is included in the routine vaccination calendar in our country.	18 (6.0)	159 (53.0)	123 (41.0)
10.HPV vaccination reduces the risk of urogenital infections and cervical cancer in women.	180 (60.0)	6 (2.0)	114 (38.0)
11.The contents and types of vaccines currently on the market are sufficient to cover cancer-causing types of HPV.	33 (11.0)	54 (18.0)	213 (71.0)
12.HPV can be transmitted through toilets in public areas and contact devices such as epilators.	172 (57.3)	27 (9.0)	101 (33.6)
13. Girls who have been vaccinated against HPV do not need to have a pap smear test later in life.	9 (3.0)	133 (44.3)	158 (52.6)
14.HPV vaccines protect against many types of cervical cancer and genital warts.	184 (61.3)	7 (2.3)	109 (36.3)
15. HPV vaccination is recommended for all women between the ages of 11 and 26.	159 (53.0)	19 (6.3)	122 (40.6)
16. HPV vaccine requires three doses.	97 (32.3)	13 (4.3)	190 (63.3)
17. Those who have received the quadrivalent HPV vaccine do not need to receive the nine-valent HPV vaccine.	22 (7.3)	30 (10.0)	248 (82.6)
18. HPV vaccination can also prevent the development of head and neck cancers by preventing the development of lesions outside the genital area.	64 (21.3)	34 (11.3)	202 (67.3)
19. Since HPV does not cause cancer in men. men do not need to be vaccinated.	20 (6.6)	164 (54.6)	116 (38.6)
20. People diagnosed with HPV do not need to get the HPV vaccine.	37 (12.3)	112 (37.3)	151 (50.3)
21. Both HPV vaccines available in Turkey protect against both genital warts and cervical cancer.	132 (44.0)	10 (3.3)	158 (52.6)
22. HPV vaccination is approved for males between the ages of 11 and 26.	93 (31.0)	16 (5.3)	191 (63.6)
23. When used in people infected with HPV. the HPV vaccine can yield positive results in treatment.	91 (30.0)	36 (12.0)	173 (57.6)

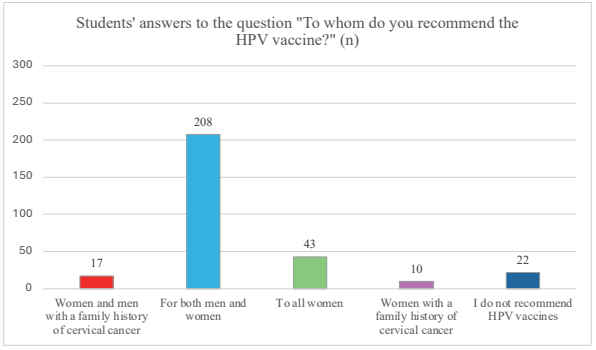

Figure 1: Student responses to the question "To whom would you recommend the HPV vaccine?"

DISCUSSION

HPV is one of the most common sexually transmitted diseases in adults and adolescents. It is the main etiological agent of cervical cancer and is an important public health problem. It is important for our young people, who are the health workers of the future, to be informed about HPV infection and vaccination, both for their own health and for the health of the society they will be advising. In our study, the knowledge levels of university students about Human Papilloma Virus were evaluated and it was determined that university students' knowledge levels about HPV were low. In the study conducted by Şahin et al., it was determined that 35.5% of university students had never heard of HPV before and 47.6% did not know whether HPV caused cancer.[5] When the literature is examined, many studies support this information.[6-9] However, there are also studies where the level of knowledge is found to be different. In a study evaluating the knowledge levels and attitudes of students who completed their gynecology and obstetrics internship at a medical school about the HPV vaccine,[10] it was reported that more than half of the students (55.4%) reported themselves as knowledgeable about HPV. In another study,[11] it was reported that more than half of the nursing students (55.7%) had heard of HPV infection before. It can be thought that the differences between the studies are due to the lack of any standard in the education curriculum of university students.

In our study, 36% of the students stated that they wanted to get the HPV vaccine; only 7% of the students reported that they had been vaccinated. In a study conducted with the participation of 2nd year students of the Faculty of Medicine, it was determined that 75.7% of the students knew that they had received the HPV vaccine, but only 5 female students had received the vaccine, and 54% of these were female students.[12] In a study conducted with students of the Faculty of Medicine at Mustafa Kemal University in 2013, it was determined that no students had been vaccinated against HPV and 67% of the female students did not consider getting vaccinated.[13] In a study conducted by İşgüder et al., the rate of fourth year students knowing that the HPV vaccine was administered was determined as 25% in first year students and 90.3% in fourth year students, and only 2 students were reported to have been vaccinated, 80% of whom were female students.[14] It was thought that the fact that the number of those who had received the HPV vaccine in our study and other studies was quite low may be due to the lack of knowledge of the students.

While 63% of the students think that HPV vaccines should be included in the routine vaccination schedule, 33% are hesitant. When asked, "If you recommend the HPV vaccine, to whom would you recommend it?", 17 of the students responded, "To women and men with a family history of cervical cancer," 208 of the students responded, "To both men and women," 43 of the students responded, "To all women," and 10 of the students responded only, "To women with a family history of cervical cancer," while 22 of the students reported that they did not recommend HPV vaccines. In our study, the students stated that they recommended that HPV vaccines be administered to both women and men. In the study conducted by Önsüz et al., 51.6% of the students stated that they would recommend the vaccine to adolescent girls, 50.6% to sexually active girls, 50.3% to all sexually active women, and 45.3% to all women with risky sexual behavior.[10] In other words, the students indicated the female gender as the priority when recommending the HPV vaccine. Some calculations have

shown that administering the HPV vaccine to both genders is much more effective than administering it to only women.[15,16] Therefore, it would be beneficial to administer HPV vaccines to individuals of both genders.

In our study, when the reasons for not recommending the HPV vaccine were examined, 10 of the students reported that they did not recommend the HPV vaccine due to doubts about the safety of the vaccine, 10 due to fear of possible side effects, and 2 due to difficulty in obtaining adequate counseling. In the study conducted by Önsüz et al., the cost of the vaccine was shown as the most important factor in students recommending the HPV vaccine.[10] When the literature was examined, it was reported that individuals stated that they would get vaccinated if the cost of the vaccine was eliminated.[17-19] In our study, it was concluded that vaccines cannot be recommended due to the problems that may be experienced regarding the safety and results of the vaccine and the difficulty of obtaining counseling, rather than the cost of the vaccine. Activities should be carried out to permanently improve the knowledge, attitudes, and behaviors of university students about infection, cancer, and vaccination, and interventions should be planned to facilitate access to the vaccine and screening test.

CONCLUSION

University students in particular are a critical group in terms of increasing the level of knowledge and awareness regarding sexual health and personal hygiene. Awareness and behaviors acquired at a young age have an important place in terms of creating a healthy society in the coming years. In this context, it is necessary to measure the level of knowledge of university students regarding HPV and the related health risks that this virus may cause and to evaluate the results of studies conducted in previous years by comparing them. This will both show the effectiveness of the trainings and studies conducted in previous years and will reveal whether the knowledge and awareness levels of the society have increased. In this context, while it is shown how important the trainings conducted are, the efficiency obtained from the trainings and studies can be increased by using different methods and can be compared with the studies to be conducted from now on. The level of education of the society can be monitored and this data will be a pioneer for other studies to be conducted on public health in the future and will shed light on them.

Ethics Approval

The ethics committee of the study was obtained from the Sakarya University Non-Interventional Ethics Committee (Issue no: E-71522473-050.04-349270-86).

Peer-review

Externally and internally peer-reviewed.

Authorship Contributions

Concept: A.K., A.A., Z.Y., G.K., M.A., Design: A.K, A.A, Z.Y., G.K., M.A., M.G., Data Collection or Processing: A.K., A.A., Z.Y., Analysis or Interpretation: A.K., A.A., Z.Y., G.K., M.A., Literature Search: A.K., A.A., Z.Y., G.K., M.A., Writing: A.K., A.A., Z.Y., G.K., M.A.,

Conflict of Interest

No conflict of interest was declared by the authors.

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