# Current approach of health employees in Turkey to pap smear test

Türkiye'deki sağlık personelinin smear testine güncel yaklaşımı

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# **Abstract**

**Objective:** Our primary aim was to detect how much importance is given to pap smear test by the health staff.

**Material and Methods:** In this study inquiries including questions about age, marital status, occupation, attitude for applying to gynecology polyclinics as well as questions regarding their knowledge about and attitude to pap smear test and HPV vaccination were delivered to health staff as well as to a control group which was formed from patients applying to our polyclinics.

**Results:** Neither of the groups applied for gynecologic control without having complaints. There was no significant difference between the groups when the rates of having smear test at least once were taken into consideration. In this study we detected that the smear test was not offered routinely to nearly half of the patients. Those patients who were offered the smear test had the test by significantly higher rates. 91,17% of the women in the study group had heard about HPV vaccination.

**Discussion:** The awareness of health staff as well as the non-health staff population about pap smear test is far from adequate in Turkey. Furthermore, gynecologists do not offer smear tests to their patients efficiently. This situation may prevent the reduction of cervical malignancies in the near future. (J Turkish-German Gynecol Assoc 2009; 10: 68-70)

Key words: Pap smear, health staff, inquiry

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# Özet

**Amaç:** Bu çalışmada Pap smear testine sağlık personeli tarafından ne derece önem verildiğini tespit etmek amaçlandı.

Gereç ve Yöntemler: İzmir Atatürk Eğitim Araştırma Hastanesinde çalışan sağlık personeline ve kontrol grubu olarak kadın doğum polikliniğimize gelen ve sağlık çalışanı olmayan benzer yaş aralığındaki hastalara demografik soruların yanı sıra kadın doğum kontrolüne gitme tutumları ve smear testi ve rahim ağzı kanseri ve aşısı hakkındaki bilgi ve tutumları ile ilgili sorulardan oluşan anket formu verildi.

Sonuçlar: Her iki grubun da büyük bir kısmının yakınma olmadan kadın doğum poliklinik kontrolüne başvurmadıkları saptandı. Kontrol grubundaki kadınlar arasında smear testini hayatlarında en az bir kere yaptıranların oranı ile sağlık personeli arasında anlamlı fark olmadığı gözlemlendi. Tüm hastaların yarısına yakınına smear testinin hiç önerilmediği öğrenildi. Kadın doğum hekimince smear testi önerilen kontrol grubu hastalarının anlamlı olarak daha yüksek oranda smear testi yaptırdıkları gözlendi. Çalışma grubundaki olguların %91,17'si rahim ağzı kanseri aşısını duyduğunu söyledi.

**Tartışma:** Gerek sağlık personeli gerekse sağlık çalışanı olmayan kişilerin smear testi için başvurma oranları yetersizdir.Ayrıca Kadın-Doğum uzmanları bile hastalarına rutin smear testini yeterince etkili biçimde önermemektedirler.Bu durumlar yakın gelecekte serviks kanserinin azaltılabilmesini engelleyebilir.

(J Turkish-German Gynecol Assoc 2009; 10: 68-70) **Anahtar kelimeler:** Pap smear, sağlık personeli, anket **Geliş Tarihi:** 11 Şubat 2009 **Kabul Tarihi:** 20 Nisan 2009

### Introduction

Cervical carcinoma is a frequently diagnosed genital cancer in women. The incidence of cervical malignancies decreased markedly in those countries which use the Papanicolaou pap test intensively. In conjunction, the incidences of pre-invasive lesions were increased. This can be attributed to early diagnosis by the pap smear test (1). Nationally organized cervical screening programs are carried out in Switzerland, Finland, Denmark, Netherland and England. It was accepted that pap smears, which are handled for every 3 years, would prevent cervical carcinoma with a rate of 90% if all women were screened by such programs and if all the lesions were followed up efficiently. On May 2007 National Standards of Cervical Cancer Screening were announced by the Agency for Cancer Fight of the Turkish Health Ministry. This announcement

includes principles and standards of nationally based cervical cancer screening practices (2). Nevertheless, pap smears are still carried ou mostly because of physician or patient initiatives rather than routinely and systematically (3). According to the American Cancer Society, cervical cancer screening should start at the age of 21 not longer than 3 years from the first sexual intercourse. Smear tests should be taken annually. After the age of 30, if three consequent results are negative for cervical cancer, the screening period might be lengthened to 2 or 3 years. Another related current issue is HPV vaccines. HPV vaccination like cervical cancer screening should be organized nationally. A quadrivalent HPV vaccine was accepted by FDA in 2006 and it was recommended by The Centre for Disease Control and Prevention Advisory Committee on Immunization Practices(CDC-ACIP) for women between the ages of 9-26. This quadrivalent vaccine includes the two most commmon types of oncogenic HPV (16, 18) which are responsible for more than 70% of cervical cancer and HPV 6,11 which are responsible for 90% of genital warts (4). HPV vaccine should be given to 11-12 year old girls as a routine, to 13-26 year old women as catch-up and optionally to 9-10 year old girls (5). Studies on the efficacy of the vaccine in women above 26 years of age are still continuing (6). The final aim of prophylactic HPV vaccines is to decrease premalignant cervical lesions and ultimately to prevent cervical cancer. According to FUTURE I phase 3 study, the quadrivalent vaccine was found to be 100% protective against CIN2/3 and adenocarcinoma in situ and 100% protective against vulvar, vaginal, perianal intraepithelial lesions which are related with HPV types included within the vaccines (7) Despite these findings, cytological screening programs must be carried out effectively without regard to the vaccination status.

As a consequence, a significant decrease in the incidence of cervical carcinoma can only be expected if routine pap smear screening as well as a effective vaccination is realized concommitantly. This will probably not be seen in Turkey in the near future because both health employees and our population are not concerned with cervical cancer screening. Since the cost of vaccination is so high that it could not be included in the national vaccination program, HPV vaccination does not seem to be applied currently nationwide. In order to prevent cervical cancer, the most important issue is to increase the efficacy of smear tests. In this study our aim is to clarify this subject by determining the attitudes of health employee and patients in a developed city like İzmir and to enforce the Health Ministry announcement for cervical cancer screening.

# Materials and Methods

In this study enquiries including questions abut age, marital status, career, attitude to applying to gynecology outpatient clinics and determining the level of knowledge and attitude regarding the smear test and HPV vaccine were delivered to the health staff of Izmir Ataturk Training and Research Hospital (doctors and nurses). Patients applying to our gynecology outpatient clinics were taken as the control group. 204 sexually active health employees were included in the study group and the control group was formed with 188 sexually active patients from our outpatient clinics. The age interval of our study group was 23-52 years and 22-58 in the control group. Independent samples t-test and chisquare test were used for the statistical analysis of data.

## Results

The demographic data of the participants are shown in Table 1. Mean age of patients in the study group was 34.09±6.31years and 33.84±6.79 years in the control group

There was no statistically significant difference between the groups (p=0.641 and p>0.05) (Table 1)

The majority of patients in both groups were married . There was no statistically significant difference between the groups (p=0.213 ve p>0.05) (Table 1).

45.1% of the 204 health employees and 47.34% of our 188 patients had had at least one smear test. According to the smear tests without any complaints the difference was statistically insignficant (p=0.656 ve p>0.05) (Table 2).

If we examine the groups regarding the reasons for not having smear tests, 243 of the patients (62.50%) Reported that they did not feel it is necessary. When the routine smear test applications were considered there was no statistically significant difference between the groups (p=0.161 ve p>0.05) (Table 2).

The smear test was offered by gynecologists to 50,49% of patients in the study group and to 54,26% of patients in the control group. According to smear test offerings by their gynecologists there was no statistically significant difference between the groups (p=0.456 ve p>0.05) (Table 3). 63 (30.8%) patients in the study group who were offered a smear test by the gynecologists and 80 (42.55%) patients in the control group who were also offered the test had smear tests.

If we examine the smear distribution of groups according to the smear test offered by gynecologists, it was statistically significant to have a higher number of smear applications in the control group who were offered smear test (p=0.034 ve p<0.05)(Table 4).

A great majority of the patients in the study group (91.17%) were informed about HPV vaccination. 8.83% of the study group had no idea about this vaccination. 144 (70.58%) of 186 patients who were informed also had knowledge about which part of the population is suitable for vaccination. 169 (82.84%) women in the study group had intentions of offering cervical carcinoma vaccination to their relatives.

#### Discussion

The rate of routine gynecology outpatient applications of participants in the study group without any complaints was found to

Table 1. Comparision of cases according to demographics

	study (n=204)	control (n=188)	P
Age (mean±sd)	34.09±6.31	33.84±6.79	0.641
Marrital status	n/%	n/%	
Single	18 (8.82%)	9 (4.78%)	
Married	182 (89.21%)	177 (94.14%)	0.213
Divorced	4 (1.96%)	2 (1.06%)	

Table 2. Distribution of the patients according to routine smear test applications

	Study		Con	P	
	N	%	N	%	
Yes	41	20.10	49	26.06	
No	163	79.90	139	73.94	0.161
Total	204	100	188	100	

Table 3. Distribution of patients according to smear test offered by the gynecologists

	Study		Cor	P		
	N	%	N	%		
Yes	103	50.49	102	54.26		
No	101	49.51	86	45.74	0.456	
Total	204	100	188	100		

Smear Offered by	Study (n-%)			Control (n-%)					
the Gynecologist	smear applied	%	Smear not applied	%	Smear applied	%	Smear not applied	%	P
Yes offered	63	30.88	40	19.61	80	42.55	22	11.702	0.034*
Not offered	29	14.22	72	35.29	9	4.79	77	40.957	0.567

Table 4. Smear test distribution of patients in both groups according to their smear offers by gynecologists

be 16.18%. The same rate was 17.02% in the control group. Both rates were extremely low and no significant difference was detected between the women in the general population and health employees who were supposed to be more conscious. The fear of not getting proper facilities in outpatient clinics might explain why health employees like our control group members don't apply for routine outpatient applications.

While health employees were supposed to pay more attention to smear test we could not find any significant difference between the groups. In a study including 285 health employees in Uganda, 83% of participants were concerned about smear test but 81% of them had never been given a smear test (8). In another study including 650 female participants from London, 80.5% of participants have had smear test at least once and 70.5% of them had routine smear tests (9).

We detected that smear tests had never been offered to nearly half of the women in both groups (study group 49.51% and control group 45.74%). Also it was remarkable to realize that patients who were offered smear testing had smear tests at a greater rate. This demonstrated that the patients who were organized in a suitable way came to the necessary conclusions. However, it is noteworthy that despite the fact that the smear has a very important role in prevention of cervical carcinoma and despite the announcement and policy of Health Ministry, more than half of all patients at outpatient clinics don't have smear tests.

The possibility of success with well organized screening programs in which doctors play active roles seems to be high. The reasons why gynecologists do not offer smear tests has to be investigated further. It is demonstrated at the announcement that the pathological examination should be carried out at relevant state hospitals. The number of pathologists in our country (nearly 1000) is inadequate for such an organisation. Since the ultimate aim of our ministry is to create a 'Centre for Smear Examination', further legal arrangements should be carried out. We could not find publications about smear test offers by gynecologists.

91.17% of health employees in our study were informed about HPV vaccination and a great majority (82.84%) of them replied constructively by offering vaccination to their relatives. This demonstrates that HPV vaccine advertisements are nearly adequate. Although the number of heath employees who were informed about vaccination are adequate, we believe that this has

been achieved by the media. If it had been achieved by medical authorities, the number of health employees having routine smear tests should have been greater since the importance of the smear test besides the vaccine were clearly underlined. The public must be informed about the necessity and impor-

The public must be informed about the necessity and importance of smear testing. To achieve this aim the media might be involved. Although there is a policy by our Health ministry for cervical cancer screening, effective national pap smear screening facilities are yet not available in Turkey. Also HPV vaccination programs should be carried out besides the smear testing. Only after realization of this issue can a significant decrease in the incidence of invasive cervical cancer, which is a lethal illness with expensive treatment, be expected.

#### References

- Kalyoncu C., Işıklı B., Özalp S., Küçük N. Knowledge, Attitude and Behaviours of Patients Applying to Osmangazi University Obstetrics and Gynecology Department concerning smear test. Sağlık ve Toplum 2003; 13: 60-8
- National Standarts of Cervical Cancer Screening:Turkish Government Agency of Health Ministry for Cancer Fight. 27/05/2007.
- Atasü T., Aydınlı K.; Jinekolojik Onkoloji 1999; Second Edition (pages: 178-259).
- Villa LL,Costa RL, Petta CA, et al. Prophylactic quadrivalent human papillomavirus(types 6,11,16,and 18) virus-like particle vaccine in young women:a randomised double-blind placebo controlled multicentre phase II efficacy trial.Lancet Oncol 2005; 6: 271-8.
- Centers for Disease Control and Prevention. 2007.Quadrivalent Human Papillomavirus Vaccine:recommandations of the Advisory Committee on Immunization Practices(ACIP). MMWR 56(No.RR-2):1-26
   Centers for Disease Control and Prevention .MMWR 2007; 56: 1-24.
- Luna J, Saah A, Hood S, Bautista O,Barr E. Safety, efficacy and immunogenicity of quadrivalent HPV vaccine (Gardasil) in women aged 24-45.
   24 th International Papillomavirus Congress 2007 November 3-9. China: Beiijing: 2007.
- Garland SM, Hernandez-Avila M, Wheeler CM, et al. Quadrivalent vaccine against human papillomavirus to prevent anogenital diseases. N Engl J Med 2007; 356: 1928-43.
- Twaha Mutyaba, Francis A Mmiro, Elisabete Weiderpass. Knowledge, attitudes and practices on cervical cancer screening among the medical workers of Mulago Hospital, Uganda.BMC Med Educ. 2006; 6: 13.
- Yu CK, Rymer J. Women's attitudes to and awareness of smear testing and cervical cancer. Br J Fam Plann. 1998; 23: 127-33.