

RESEARCH COMMUNICATION

Knowledge and Applications of the Midwives and Nurses at an Educational Hospital on the Early Diagnosis of Cervix Cancer

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Abstract

This descriptive study was made to determine the knowledge levels and application situations of 96 midwives and nurses at an educational hospital in Istanbul. Data were collected with the survey form and evaluated using frequency distribution and chi-square significance tests. Almost two-thirds of the midwives and nurses included stated that they never go for routine gynaecological tests without any symptoms, over 50% stated that they did not see themselves as being under risk in the aspect of cervix cancer, and 18.7% had no information about risk factors. While 54.2% had experienced at least one pap smear test, 20.8% stated that they did not see having a pap smear test as mandatory. Over 90.0 about the HPV vaccine, mostly from visual and published media, and 78.1% wanted to have HPV vaccination. A statistically significant difference was found between the the knowledge levels and application situations of the midwives and nurses and their age groups, educational status, and marital status ($p < 0.05$). Participants in the age group 32 and over, with undergraduate or more education, and who were married, had more knowledge and practical experience.

Keywords: Cervix cancer - early diagnosis - midwife - nurse - Turkey

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Introduction

Research done by WHO shows that the general health status of woman is being affected by the health problems related to the reproductive system. In the developing countries, one third of the diseases belonging to the woman of 15-44 age group are related to the reproductive system (Coskun 1995).

Despite numerous efforts on the subject, cancer disease, which is as old as the history of humanity, is still the second most lethal disease in today's world. In this aspect, it creates an important health problem for every society. Cancer is an important public health problem considering the disease burden, its lethal side and frequency. Cancer in women causes %26 of the deaths in the EU countries; breast cancer is the most frequent type, followed by the cervix cancer in the second place. It is stated that %5.9 of the deaths related to death are caused by breast cancer and %2 of those deaths are caused by cervix cancer (Ulger 2001; Parkin et al., 2005).

Unfortunately, the reliable and up-to-date data about this subject are not sufficient in our country. According to the 2003 data of the Turkish Ministry of Health; cervix cancer is in the tenth place among all cancer types seen in women; and it is in the third place after over and endometrium cancers among the gynaecological cancers. According to 2002 data of Turkey, the incidence of cervix cancer is 4.5 over one hundred thousand. In that same year, 1364 new cervix cancer cases and 726 deaths related

to the cervix cancer were reported (Parkin et al., 2005; Hatipoglu).

The most efficient treatment method in cancer is to catch the disease early and make an early diagnosis. Early diagnosis and treatment is quite important in reducing the mortality of the cervix cancer. Cervix cancer is a cancer type which benefits the best from early diagnosis and while early diagnosis increases the chance of treatment to %100, it also decreases the deaths related to the cervix cancer by %50. Pathological changes in the epithelium, which can not be observed by the naked eye, can be easily diagnosed by the pap smear test (papanicolau smear). Pap smear test, which is used in the early diagnosis of cervix cancer, is a test which is easy to apply, inexpensive, unharmed, highly sensitive and it decreases treatment burden, morbidity and mortality (Taskin, 2000; Zemheri and Koyuncuer, 2005).

In developing countries, it is stated that invasive cervical cancer incidences are declining with the routine usage of the pap smear test in the last 50 years. In the US regions with no scanning, complete life cervix cancer risk is stated as %3.67, mortality risk as %1.26 and incidence at 50 years of age as 88 in one hundred thousand. It is estimated that the death risk of woman due to the cervix cancer decreases from 4/1000 to 5/10000 with the help of the yearly-applied pap smear test. According to the WHO, even a scanning which is done in 10 years will decrease the incidence of cervix cancer by %64 (Soler et al., 2000; Saraiya, 2003; Waxman, 2005).

Human Papilloma Virus (HPV) is the most common

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sexually-transmitted disease. 20 million people are currently infected with HPV in the United States. %75 of the sexually-active individuals get infected with HPV at some point in their lives and %32-74 of the new infections are occurring in the 15-24 age group. All women are under risk for the oncogenical HPV infection which may late cause cervix cancer. In 2005, 500.000 cases of cervix cancer were seen due to this phenomenon and 260.000 deaths have occurred. HPV vaccination is a part of a series of coordinated strategies which are used in the prevention of cervical cancers. HPV vaccination is a primary precaution tool in decreasing the behaviors carrying a risk for the transmittance of HPV infections, making early diagnosis for the disease and applying the treatment of the precancerous lesions (Alhan, 2009).

Due to the increasing importance and cost of cancer; cancer prevention, early diagnosis and scanning programs gain more importance. Among the studies towards public; the most effective method in the aspect of prevention, early diagnosis and scanning activities is education. Health care personnel have important duties in the applications towards the struggle with cancer (Dogan and Bekar, 2008). It is especially obvious that the education of the nurses ,who have an important role in the protection, treatment and care towards this disease, will play an important part in raising public awareness about this subject. Nurses are in a quite suitable position to be the tools of change in the health care system and the whole public. They are working in all kinds of health care environments and in contact with all parts of the population; thus, without knowingly, they are acting as intermediaries of change. With these roles, they are in a key position in helping woman to gain positive knowledge and develop positive attitudes about health and changing the negative knowledge or attitudes as well. This phase is especially important because they act as role models towards the other members of the society with their knowledge about the diagnosis applications and applying these knowledge to real-life situations (Coskun et al., 2000; Pinar et al., 2008).

The aim of this research is to determine the knowledge levels and application situations of the midwives and nurses working in the woman labor clinics of an educational hospital.

Materials and Methods

The universe of this descriptive study was formed by 104 midwives and nurses working in the woman labor clinics of an educational hospital giving service in the European side of Istanbul between April-May 2010. Due to the health care personnel being on leave or using their sick days, and some of them not giving consent; 96 midwives and nurses formed the sample of this study. Data were collected by the researcher with the data collection form which was created to determine the descriptive features of the participants and their usage of early diagnosis methods. Necessary permissions were obtained from the institution before the research. Obtained data were evaluated in a computerized environment by using frequency distribution and chi-square significance test.

Results

Descriptive features of the midwives and nurses included in the research are shown in Table 1. It was determined that %60.4 of the midwives and nurses included in the research were in the 20-31 age group, %59.4 of them were working in this occupation between 1-10 years, %43.7 of them had associate's degrees, %52.1 of them were in the nursing staff, %69.8 of them were married and %79.2 of them had no cervix cancer history.

Attitudes and behaviors of the midwives and nurses towards the early diagnosis of cervix cancer are shown in Table 2. %62.5 of the participants stated that they had no gynaecological controls without any complaints, %54.1 of them stated that they think of themselves as not being under risk for cervix cancer and %18.7 of them stated that they had no information about the risk factors related to the cervix cancer. %54.2 of the participants stated that they had a pap smear test at least once, %20.8 of them stated that they did not see this test as a necessary one. %91.7 of the participants knew about the HPV vaccine, %54.2 of them had obtained information about the HPV vaccine from the visual and published media and %78.1 of them want to have HPV vaccination.

Seeing oneself as being under risk in the aspect of cervix cancer and having a pap smear test status of the participants is shown in Table 3. A statistically significant relationship was found between seeing oneself as being under risk in the aspect of cervix cancer and having a pap smear test status of the participants and their age groups ($p < 0.05$). It was seen that this statistically significant difference was created by the participants in the age group 32 and over; who saw themselves as being under risk and who had a pap smear test at least for once.

Knowing the risk factors about cervix cancer and wanting to have HPV vaccination status according to the educational status of the participants is shown in Table 4. A statistically significant relationship was found between knowing the risk factors about cervix cancer and wanting to have HPV vaccination status of the participants and their educational status ($p < 0.05$). It was seen that this statistically significant difference was created by the

Table 1. Descriptive Features of Midwives and Nurses Included in the Research (n:96)

Variables	Number	Rate (%)
Age Groups	20-31 Age Group	58 60.4
	32 and Over	38 39.6
Occupational Working Time	1-10 Years	57 59.4
	11 Years and Over	39 40.6
Educational status	Health Care Occupational High School	28 29.2
	Associate's Degree	42 43.7
Staff status	Undergraduate Degree and Over	26 27.1
	Midwife	46 47.9
Marital status	Nurse	50 52.1
	Married	67 69.8
Having a Cervix Cancer History Status	Single	29 30.2
	None	76 79.2
Her Family Has It	Her Family Has It	8 8.3
	Her Friend Has It	12 12.5
Total	96	100.0

Table 2. Attitudes and Behaviors of Midwives and Nurses Towards the Early Diagnosis of Cervix Cancer (n:96)

Variables		Number	Rate (%)
Having routine gynaecological controls without any complaints	Has control	36	37.5
	Has no control	60	62.5
Seeing oneself as being under Risk in the Aspect of Cervix Cancer	Sees her self under risk	16	16.7
	Sees herself not under risk	52	54.1
	Undecided	28	29.2
Knowing the Risk Factors about Cervix Cancer	She knows them well	36	37.5
	She knows them partially	42	43.8
	She does not know them	18	18.7
Having a Pap Smear Test Status	She had at least one test	52	54.2
	She had no test	44	45.8
The Reason of Not Having a Pap Smear Test	I have it	52	54.2
	I neglect it	14	14.6
	I think it is unnecessary	20	20.8
	I am afraid of getting a bad result	10	10.4
Knowing about the HPV Vaccination	She knows it	88	91.7
	She does not know it	8	8.3
The Source of Obtainment of the Information about the HPV Vaccination	Health care institution	14	14.6
	Visual and published media (TV, newspaper, radio, internet etc.)	52	54.2
	In-service education, education from health congresses etc.	22	22.9
	She has no information	8	8.3
Wanting to Have HPV Vaccination Status	She wants to get vaccinated	75	78.1
	She does not want to get vaccinated	21	21.9
Total		96	100.0

Table 3. The Comparison of Seeing Oneself as Being Under Risk in the Aspect of Cervix Cancer and Having a Pap Smear Test Status of the Participants (n:96)

Variables		Age Groups				Total		x ²	p
		20-31 age		32 age and over		N	%		
		N	%	N	%				
Seeing oneself as being under risk in the Aspect of Cervix Cancer	Sees her self under risk	4	25.0	12	75.0	16	100	p:0.002 x ² =9.66	
	Sees herself not under risk	42	80.8	10	19.2	52	100		
	Undecided	8	28.6	20	71.4	28	100		
Having a Pap Smear Test Status	She had at least one test	20	38.5	32	61.5	52	100	p:0.00 x ² =14.4	
	She had no test	30	68.2	14	31.8	44	100		

Table 4. Knowing the Risk Factors about Cervix Cancer and Wanting to Have HPV Vaccination Status According to the Educational Status of the Participants

Variables		Educational Status						Total		x ²	p
		Occupational high school		Associate's Degree		Undergrad and over		N	%		
		N	%	N	%	N	%				
		N	%	N	%	N	%	N	%		
Knowing the Risk Factors about Cervix cancer	She knows them well	4	11.1	8	22.2	24	66.7	36	100	p:0.002 x ² =12.5	
	She knows them partially	9	21.4	21	50.0	12	28.6	42	100		
	She does not know them	10	55.6	6	33.3	2	11.1	18	100		
Wanting to Have HPV Vaccination Status	She wants to get vaccinated	18	24.0	25	33.3	32	42.7	75	100	p:0.001 x ² =10.4	
	She does not want to get vaccinated	11	52.4	6	28.6	4	19.0	21	100		

Table 5. Having Routine Gynaecological Controls Without any Complaints and Knowing About the HPV Vaccination Status of the Participants According to Their Marital Status (n:96)

Variables		Marital Status				Total		x ²	p
		Married		Single		N	%		
		N	%	N	%				
Having Routine Gynaecological Controls without any Complaints	Has control	28	77.8	8	22.2	36	100	p:0.001 x ² =10.6	
	Has no control	12	20.0	48	80.0	60	100		
Knowing about the HPV Vaccination	She knows it	48	54.5	40	45.5	88	100	p:0.008 x ² =7.07	
	She does not know it	2	25.0	6	75.0	8	100		

participants who had undergraduate education or over.

Having routine gynaecological controls without any complaints and knowing about the HPV vaccination status of the participants according to their marital status is

given in Table 5. A statistically significant relationship was found between having routine gynaecological controls without any complaints and knowing about the HPV vaccination status of the participants and their marital

status ($p<0.05$). It was seen that this statistically significant difference was created by the married participants.

Discussion

In this descriptive study which was made to determine the knowledge levels and application situations of the midwives and nurses working in the woman labor clinics of an educational hospital; it was determined that %60.4 of the midwives and nurses included in the research were in the 20-31 age group, %59.4 of them were working in this occupation between 1-10 years, %43.7 of them had associate's degrees, %52.1 of them were in the nursing staff, %69.8 of them were married and %79.2 of them had no cervix cancer history (Table 1). Due to most of our participants being young and having good amount of knowledge, it is thought that the awareness towards the disease will increase in the future.

Our findings were interpreted as a fact which shows that the health care personnel serving in the woman health clinics do not think protective controls towards the reproductive system are important. In the study made by Ozdemir and Bilgili (2010), 43.3% of the nurses stated that they were not seeing themselves as being under risk in the aspect of cervix cancer (Ozdemir and Bilgili, 2010). In the study made by Acikgoz (2010), it was determined that 30% of the women were under the risk of cervix cancer (Acikgoz, 2010). These findings shows similarity to our study finding. It is a pleasing fact that majority of the participants know about the risk factors related to the cervix cancer. However, this should come as no surprise because it is normally expected from midwives and nurses working in the woman labor clinics of an educational hospital to know the risk factors and early diagnosis methods related to cervix and other common cancers.

Our findings show that almost half of the midwives and nurses included in the research do not have a pap smear test; and half of the ones who do not have this test choose this option due to not seeing this test a necessity. There are a number of studies, supporting this study finding. In the study made by Ozdemir and Bilgi (2010), it was determined that 23.7% of the nurses had a pap smear test (Ozdemir and Bilgili, 2010). In the study made by Gulen, despite nurses knowing the importance of the cervical cancer and protective measures towards this disease, their having pap smear test rates are not in desirable levels (Gulen, 2004). Likewise, in the study made by Acikgoz, 52% of the women were found have a pap smear test done (Acikgoz, 2010). Similarly, in the study made by Gungor et al., the pap smear test ratios of nurses, midwives and female health care technicians working a state hospital were found to be quite low (Gungor et al., 2001). These findings show similarity to our study finding. Seeing the test as unnecessary is the primary reason why women choose not to have a pap smear test. This is a sad fact that midwives and nurses working in the woman labor clinics of an educational hospital do not see this test as a necessity.

In the light of our findings, we conclude that the level of knowledge of the participants about the HPV vaccine is sufficient. It is a pleasing fact that majority of the health care personnel have information about this HPV

vaccine, which is a highly-debated subject, especially in the last years, in our country. Likewise, in the literature, there are a high number of studies which show similar results compared to our study finding. In the study made by Guvenc et al., it was stated that %62.2 of the women knew about the HPV vaccine and majority of this women learned this from the TV (Guvenc et al., 2008). In the study made by Pinar et al., it was stated that %57.7 of the women heard about the HPV vaccine and %69 of them thought that this vaccination should be applied on women (Pinar et al., 2008). In the study made by Ozkan et al., it was determined that %66.7 of the college students wanted to have HPV vaccination (Ozkan et al., 2008). Likewise, in the study made by Karabulutlu and Ulukavak, it was stated that %86.3 of the nursing and midwifery department students talked about the HPV subject before (Karabulutlu and Ulukavak, 2009).

A statistically significant relationship was found between seeing oneself as being under risk in the aspect of cervix cancer and having a pap smear test status of the participants and their age groups ($p<0.05$) (Table 3). It was seen that this statistically significant difference was created by the participants in the age group 32 and over; who saw themselves as being under risk and who had a pap smear test at least for once. This finding was interpreted as majority of the participants were single so they weren't seeing themselves under risk. There are studies with similar findings in the literature. In the study made by Acikgoz, it was determined that the women in the younger age group had lower ratios of pap smear test application (Acikgoz, 2010). In the study made by Ozdemir and Bilgili, it was determined that the younger age group had insufficient awareness towards the pap smear test application (Ozdemir and Bilgili, 2010). In the study made by Akyuz et al., it was found that the women in the 30-39 age group had higher pap smear test application rates (Akyuz et al., 2006).

A statistically significant relationship was found between knowing the risk factors about cervix cancer and wanting to have HPV vaccination status of the participants and their educational status ($p<0.05$). It was seen that this statistically significant difference was created by the participants who had undergraduate education or over. The low level of education in knowing the risk factors about cervix cancer and the application of early diagnosis methods towards this disease is an important problem. The level of education being high, is an important construct in the health care perception and behaviors of the individuals. As the education level of the women increases, so does their compliance to the cervix cancer scanning standard. In the study made by Akyuz et al., a statistically significant relationship was found between the knowing about the precautions towards cervix cancer status and the level of education of the women; it was found that the more the education level reaches higher, the more are those women having applications towards this disease (Akyuz et al., 2006). In the study made by Pinar et al., a statistically significant relationship was found between the educational status of the women and their knowledge of cervix cancer and status of wanting to have HPV vaccination (Pinar et al., 2008). Likewise, in the study made by Acikgoz, it was

determined that the level of education was affecting the applications of women towards cervix cancer (Acikgoz, 2010). These results show similarity to our own study findings.

A statistically significant relationship was found between having routine gynaecological controls without any complaints and knowing about the HPV vaccination status of the participants and their marital status ($p < 0.05$). It was seen that this statistically significant difference was created by the married participants. This finding was connected to the fact that women of our country generally have a small habit of going to gynaecological controls before marriage and they do not care much about the protective behaviors towards sexual health. Married women care more about the early diagnosis and applications of cervix cancer compared to single women. Married women, due to having regular sexual activities, may have more gynaecological complaints and they may have applied to woman labor clinics more. In the study made by Acikgoz, a statistically significant relationship between the marital status and gynaecological control status; and married women have applications at a more desirable level (Acikgoz, 2010).

These results show that there some lacking points in the knowledge and applications of the midwives and nurses towards the early diagnosis of cervix cancer. Considering the importance of early diagnosis applications in the concept of reproductive health, nurses and midwives, as a part of the health care personnel, should be individuals who can take responsibility in this matter with their educative, guiding, research-oriented and applicative roles and they should also be role models with their knowledge and applications. For the sake of both the health status of nurses and their role of service towards the society, their level of knowledge should be increased and their behaviors should be changed in a more positive way; and for these reasons, in-service education programmes should be planned. It is also advisable to increase the studies which examine the factors affecting the nursing applications that are most closely related to the early diagnosis in woman cancers.

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