# Knowledge, Attitude and Practice of Workers about The Cervical Cancer and Pap Smear in The College of Nursing معارف ومواقف وممارسات العاملين في كليات التمريض حول مسحة عنق الرحم وسرطان الرحم

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### **Abstract**

**Objectives**: The main aim of the study is to determine the level of knowledge, attitude and practice of workers about the cervical cancer and Pap smear in college of nursing. (Teaching and employers staff in Baghdad and Al-Mosul nursing college).

**Methodology:** Ninety two women was deals in present study. The study was conducted during April/2013. The participants were categorized into 2 groups according to their occupation: teaching staff (n= 44) and employer's staff (n= 48). The knowledge, attitude and practice of cervical cancer and Pap smear are assessed through answers of participants to a structured questionnaire. The questionnaire consisted of demographic variables, risk factors, knowledge and practice of cervical cancer and Pap smear . The data were analyzed by using the SPSS, version16. Frequency, percentage and chi-squared test

**Results**: The results of this study shows that the knowledge of the teacher sample is low (40.5%), Just over (35%) had heard of cervical cancer and the main source of information about knowledge is the doctors (36.6%). Almost (7.2 %) had down a pap smear test at least once, only (26.8%) of women wanted to be done the pap smear test and (50%) answers had fear from test of causes did not done pap smear.

**Conclusion:** Our conclusion is that educated women of sample have deficit knowledge, attitude and practice toward cervical cancer and Pap smear.

**Recommendation:** Efforts to increase coverage in cervical screening programs needs to be directed towards medical practitioners as well as towards women. Long term education programs should be made available to motivate the female population in the Iraq. In addition, training should be supplied to nurses and primary care physicians to encourage optional screening.

Key words: cervical cancer, Pap smear

### **INTRODUCTION:**

Carcinoma of the cervix is a major public health study were to determine their level of awareness on problem throughout the world <sup>(1, 2)</sup>.

Invasive cervical cancer is the second most common cancer in women worldwide, but 80% of cases occur in developing countries, and although readily detectable in its premalignant stage, cervical cancer remains the fifth most common cancer in the UK. In 1998,

it was reported that 12,800 women in the United States developed cancer of the uterine cervix, and 4,800 women died of the disease (3). Iraqi Cancer Registry 2010, was reported that 168cases are newly of the uterine cervix <sup>(4)</sup>. Population-based cervical smear screening programmers for cervical cancer have shown the effectiveness of screening in reducing mortality (5). The risk factors for cervical cancer include early age at first intercourse and multiple sexual partners. A male consort who in turn has had intercourse with multiple women and smoking also confer significant risk. Research evidence has suggested that infection with human papilloma virus significantly increases the relative risk for developing cervical cancer <sup>(6)</sup>.Human papilloma virus (HPV) is one of the most common sexually transmitted infections and the cause of 99.7% of cervical cancer cases, which is among the most frequent cancers in women (7). HIV infection may also increase a woman's risk for cervical neoplasia (8). Papanicolaou cytological testing (Pap smear) permits cervical lesions to be detected before they become cancerous, effectively reducing the incidence of cervical cancer by 75%–90% (9). It is claimed that the majority of cervical cancer (theoretically up 90%) could be prevented if all women were offered and complied with high quality cytological screening programs (10). The American preventive services task force recommended Pap smears at least every 3 years for women who have been sexually active and have a cervix (6,10) The poor uptake of the cervical cancer screening may be attributed to the lack of communication between healthcare workers and patients regarding availability and benefits of the screening (10).

# **Aim of study**

The aim of the study is to determine the level of knowledge, attitude and practice workers cervical cancer and pap smear in college of nursing staff.

# **Methodology**

The sample of the study: The total number of participants recruited for the study was 92 females. The participants were categorized into 2 groups according to their occupation: teaching staff (n = 44; 47.8%) and administrative staff of the universities (n = 48; 52.2%).

**Setting:** Data were collected from college of nursing in Baghdad (n= 55) and Al-Mosul (n=37) Universities. The study was conducted during April/2013.

**Instruments**: Each participant was asked to complete a pre-coded standardized questionnaire prepared by the researchers to elicit socio-demographic information, and knowledge, attitudes and practice towards cervical cancer and pap-smear. The first part of the questionnaire comprised the following 15 questions that assessed knowledge of the common risk factors for cervical cancer and Pap smear, the possible means for prevention and the recommended screening methods. A positive answer was assigned 1 point, whereas a wrong answer was given zero. The results were calculated as frequencies of the correct answers out of the total answers of the same question.

**Statistical methods:** The data were analyzed by using the SPSS, version 16. Frequency, percentage, were tabulated and association between variables was measured with the chi-squared test. The association was considered statistically significant when P was < 0.01.

### **Results:**

Table 1: Comparisons between the studies sample regarding their Knowledge Concerning the risk factors for Cervical Cancer

O	0			
Statements on cervical cancer and	Study groups			
its risk factors and control measures	Administrative	Teaching Staff	Total	P value
	staff			
	No.a <sup>1</sup> /No.b <sup>2</sup> (%)	No.a/No.b (%)	No.a/No.b (%)	

Q1:Cervical cancer is defined as:	7/48 (14.6%)	13/44(29.5%)	20/92 (21.7%)	0.200
correct answer				
Q2:cancer is Cervical caused by:	20/48 (41.7%)	23/44 (52.25%)	43/92 (46.7%)	0.410
correct answer				
Q3:Maternal mortality worldwide,	14/48 (29.2%)	9/44 (20.5%)	23/92 (67.8%)	0.590
cervical cancer come in the rank:				
correct answer				
Q4:The highest ratio of cervical	28/48 (58.3%)	20/44 (45.5%)	48/92 (52.2%)	0.435
cancer occur in the age group:				
correct answer				
Q5:Cervical cancer affect the	10/48 (20.8%)	15/44 (34.1%)	25/92 (27.2%)	0.284
woman who is: correct answer				
Q6:The cause of cervical cancer is:	12/48 (25.0%)	25/44 (56.8%)	37/92 (40.2%)	0.008
correct answer				
Q7:Cervical cancer affect the age	24/48 (50.0%)	30/44 (68.2%)	54/92 (58.7%)	0.068
group of: correct answer				
Q8:HPV affect: correct answer	20/48 (41.7%)	20/44 (45.5%)	40/92 (43.5%)	0.891
Q9:The incidence of HPV is	7/48 (14.6%)	14/44 (31.8%)	21/92 (22.8%)	0.116
increased in the age group of:				
correct answer				
Q10:HPV results in: correct answer	15/48 (31.3%)	14/44 (31.8%)	30/92 (32.6%)	0.957
Q11:The symptoms of cervical	10/48 (20.8%)	17/44 (38.6%)	27/92 (29.3%)	0.167
cancer is/are: correct answer				
Q12:The recovery ratio of cervical	11/48 (22.9%)	14/44 (31.8%)	22/92 (23.9%)	0.710
cancer when it is detected and				
treated early is: correct answer				
Q13:Cervical cancer is detected	12/48 (25.0%)	20/44 (45.5%)	32/92 (34.8%)	0.114
through: correct answer				
Q14:The mean(s) of cervical cancer	26/48 (54.2%)	30/44 (68.2%)	61/92 (66.3%)	0.001
prevention is/are: correct answer				
Q15:The treatment cervical cancer	13/48 (27.1%)	23/44 (52.3%)	36/92 (39.1%)	0.032
is by of: correct answer				
mean	15/48(31.6%)	19/44(43.5%)	35/92(40.5%)	0.062

This table summarizes the correct answers of the sample to fifteen questions to assess the sample knowledge about cervical cancer and Pap smear. The results show that teaching staffs' correct answers are highest in Q2, Q6, ,Q7,Q14 and Q15while the administrative staffs correct answers are highest in Q4, Q7 and Q14It is also worth to say that the percentage of only four questions with correct answers (Q3, Q4, Q7, and Q14) regarding knowledge of cervical cancer and Pap smear are more than (50%) from total answers, while fiver questions (Q1, Q5, Q9,Q11and Q12) with correct answer of less than (30%) from the total answers. Most of the sample had less than (50%) from the total correct answers. There is a significant differences between two groups (P value < 0.05) regarding the knowledge.

Table 2: knowledge of the study sample Regarding cervical cancer and Pap smear

Q.			Total	P value
	Have you heard	Study groups		chi-
	about cervical			square

	cancer and pap	Administ	rative staff	Teachi	ng Staff			
	smear	F	%	F	%	F	%	
1	Yes	2	2.3	29	33.3	31	35.6	27.966
								S.
2	No	44	50.6	12	13.8	56	64.4	
	Total	46	52.9	41	47.1	87	100	

Missing 5 of sample

This table summarizes the answers of question on" hearing about cervical cancer and pap smear". As shown in table 2 it is only (35.6%) of the sample have heard about cervical cancer and pap smear. This table found that there is a significant difference between knowledge of cervical cancer and pap smear according to occupation groups (p<0.05).

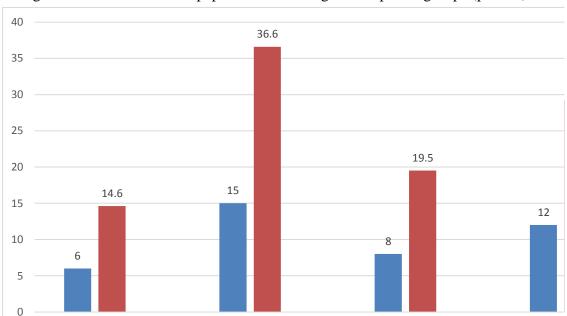


Figure 1: source of knowledge about cervicai cancer& Pap smear

Figure 1 show that the first main source of knowledge is the doctors (36.6%), books &journal (29.3%), mass media such as television or radio (19.5%) while family &friend (14.6%).

Table 3: Practices of the study Sample for Pap smear. (Married women only n=56)

Q.	Do you down pap			•	•	Total		P value chi-
	smear	study gro	ups				square	
		Administrative		Teaching Staff				
		staff		F	%	F	%	
		F	%					
1	Yes	1	1.8	3	5.4	4	7.2	N.S.
2	No	28	50	24	42.9	52	92.9	
	Total	29	51.8	27	48.2	56	100	

This table summarizes the answers of question on "Do you down pap smear". As shown in table 3 it is only (7.2%) of the sample have pap smear down. This table found that there is no significant difference between practice of pap smear down among the study sample (p value>0.05).

Table 4: Relationship between the study group and their desire to do Pap smear test (Married women only n=56)

	(112w1110w (10110m only in 00)									
Q.	Do you want to be					Total		P value chi-		
	done the pap smear test	study groups						square		
		Administr	ative staff	Teachir	ng Staff					
		F	%	F	%	F	%			
1	Yes	3	5.4	12	21.4	15	26.8	N.S.		
2	No	25	44.6	16	28.6	41	73.2			
	Total	28	50	28	50	56	100			

This table summarizes the answers of question "Do you want to be done the pap smear test". As shown in table 4 it is only (26.8%) of the sample want to be done the pap smear test and 73.2% who did not. This table found that there is no significant difference between the study group and their desire (p value>0.05).

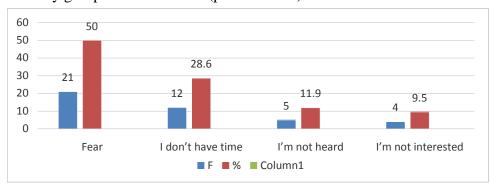


Figure 2: Reason for do not down pap smear

Figure 2 show that, the answers of question why did not done pap smear, the first reason was(50%)of sample say have fear and (28.6%) did not have a time,(11.9%)did not heard about test and only (9.5%)did not interest.

### **DISCUSSION:**

This is one of the first studies assessing the knowledge and practice for cervical cancer and pap smear. Overall we found a deficit knowledge and awareness of the issues related to screening, although there were specific gaps in knowledge about risk factors and screening intervals.

Cervical cancer is generally the second most common cancer in females, causing high morbidity and mortality worldwide <sup>(11)</sup>.It is well known individuals' knowledge and practice about the cause and significance of a particular illness are interconnected with their healthcare-seeking behaviors <sup>(12)</sup>.In our study the results showed a deficiency in knowledge about cervical cancer most of the sample had less than (50%) from the total correct answers(table 1) The knowledge aspect, most participants know that Pap smear could detect early stage cervical cancer (34.8%)and the early stage cervical cancer can be cured (23.9%).

In our study had heard of about cervical cancer and pap smear, less than half (35.6%) of the (table 2). The major source of knowledge of the patients came from doctors (36.6 %), books &journal (29.3%) and mass media such as television or radio (19.5%) (figuer1).

As well as low Pap smear uptake (7.2%), which was surprisingly common among the educated women (table 3)? Such findings have been reported by a number of previous

studies in Arab communities. For example in the Qatar, there are no data on the knowledge, attitude and practices of Qatari women about this cancer <sup>(6)</sup>. In United Arab Emirates, a study of knowledge, attitude and practice among female school teachers in Sharjah has shown that, although the teachers had good knowledge about the Pap smear test, they were not commonly practicing it <sup>(3)</sup>. In Jordan, the knowledge of cervical cancer and the pap smear test was inadequate in less-educated and older patients <sup>(14)</sup>. In our study show that(26.8%) of the sample want to be done the pap smear test and 73.2% who did not(table 4)because (50%)of sample say had fear and (28.6%) did not a time,(11.9%) not heard about test and only (9.5%) not interest.(figuer2).From literature review, the most common reason in patient who avoid pap smear are fear of vaginal examination, embarrassment and not concern the risk <sup>(11,14)</sup>.

As we know that the medical worker is one of the most important health knowledge provider and promoter. So if the medical workers have unsatisfactory knowledge, inappropriate attitude and practice, they would not be distribute the knowledge to the community and can't be persuade the patients to performed Pap smear. From this study, we could improve the medical worker knowledge, attitude and practice based on the defect we saw in the questionnaire <sup>(14)</sup>.

## **CONCLUSION:**

Our conclusion is that that educated women of sample have deficit knowledge, attitude and practice towards cervical cancer and Pap smear.

### **RECOMMENDATION:**

Efforts to increase coverage in cervical screening programs needs to be directed towards medical practitioners as well as towards women. Long term education programs should be made available to motivate the female population in the Iraq. In addition, training should be supplied to nurses and primary care physicians to encourage optional screening.

### **REFERENCES:**

- 1. D.A. Adekanle, A.S. Adeyemi and A.F.Knowledge,: Attitude and Cervical Cancer Screening Among Female Secondary School Teachers in Osogbo, Southwest NigeriaAfolabi,:Academic Journal of Cancer Research 4 (1): 24-28, 2011.
- 2. Ayinde, O.A. and A.O. Omigbodun: Knowledge, attitude and practices related to prevention of cancer of the cervix among female health workers in Ibadan. J. ObstetGynaecol. 2003, 23(1): 55-58.
- 3. Bakheit N&Haroon A,:The knowledge attitude and practices of Pap smear among local school teachers in the Sharjah District, Middle East Journal of Family Medicine, 2004; Vol. 4 (4)
- 4. Iraqi Cancer Registry 2010.
- 5. Marluce Bibbo and David Wilbur: Comprehensive Cytopathology: Cervical Cancer and Screening, 3rd edition, Elsevier, 2008.
- 6. F.M. Al-Meer,1 M.T. Aseel,1 J. Al-Khalaf,1 M.G. Al-Kuwari and M.F.S. Ismai: Knowledge, attitude and practices regarding cervical cancer and screening among women visiting primary health care in Qatar, Eastern Mediterranean Health Journal 2011, Volume 17, issue 11
- 7. Yanıkkerem, E. Piyan, G. Kavlak, T.: Assessing the Role of Education on Turkish University Students', Asian Pacific J Cancer Prev, 2010, 11, 1703-1711
- 8. Rama.: Awareness and knowledge of HPV, cervical cancer, and vaccines in young women after first deliveryin São Paulo, Brazil a cross-sectional study,BMC Women's Health 2010, 10:35

- 9. Risendal B, DeZapien J, Fowler B, Papenfuss M, GiulianoA.:Pap smear screening among urban Southwestern American Indian women, PubMed,1999 Dec;29(6 Pt 1):510-8
- 10. Healthy people 2000: national health promotion and disease prevention objectives. Washington DC, Department of Health and Human Services, United States Government Printing Office, 1990:228-238
- 11. Sriamporn S, Khuhaprema T, Parkin M: Cervical cancer screening in Thailand: an overview. J Med Screen, 2006, 13, S39-43.
- 12. Kleinman A, Seeman D. Personal experience of illness. In:Scrimshaw S. ed. Handbook of social studies in health and medicine. Thousand Oaks, California, Sage, 2000:230–242.
- 13. Amarin ZO, Badria LF, Obeidat BR. Attitudes and beliefs about cervical smear testing in ever-married Jordanian women. Eastern Mediterranean Health Journal, 2008, 14(2):389–397.
- 14. Oranratanaphan, S., Amatyakul, P. Iramaneerat, K. Srithipayaw, S.: Knowledge, Attitudes and Practices about Pap Smear among Medical Workers in a Thai University Hospital, Asian Pacific J Cancer Prev, 2010, 11, 1-6