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Original Research Article

Assessing awareness towards cervical cancer screening (Pap smear) among women in Tikrit-Iraq

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Abstract

Cancer is a disease in which the cells grow out of control all women are at risk of cervical cancer most often over 30 years. A prospective study was done in the gynecology ward in Salah-Aldeen general hospital from 1-February to 30 August 2017.A total of Three hundred (300)married women, age ranged between 20-65 years old, were attended, this cross sectional study was carried out as questionnaire in a face to face interview covering knowledge, attitude, and practices of the pap smear about 1/3 of the women 111 (37%) had knowledge about pap smear and about half of women 143 (47%) had knowledge about cervical cancer. Only 93 (31%) had experience of pap smear at least once previously. The most common cause was low experience and lack of counseling 67.6%), also fear of vaginal examination (34%) and frightens of painful procedure (29%). Awareness (Knowledge, attitude and practice) of pap smear as screening for cervical cancer among women in Tikrit city was low. However, the attitude toward screening was positive. There is a need to improve awareness on cervical cancer screening by educating and encouraging women to participate in a cervical cancer screening program would be highly beneficial in early detection and reducing cervical cancer

Keywords: Pap smear, cervical cancer, knowledge, attitude, Tikrit, Iraq

INTRODUCTION

Cervical cancer is the second most common cancer in women after breast cancer (Luesley et al., 2016). Annually the woman's death by cervical cancer is over two million and seven hundred cases their ages between 25 and 64 years worldwide. About 2.4million occurs in developing countries and only 0.3 million occurs in developed areas. This variation is due to the education of women and recognition of the symptoms, the screening program of cervical cancer in developed countries (Etherington et al., 1997). Also awareness about preventable condition, and how can detect and treat the pre- invasive disease are another causes (Monga et al., 2011).

The women between 25 and 64 years in UK offered cytological screening for cervices every 3 - 5 years; the major advance to prevent cervical cancer. The vaccination against human papilloma virus (HPV), which is the most common cause of cervical cancer.

Pap smear is a simple, cost-effective and non-invasive screening test that is done by a gynecologist doctor at the primary health care to detect cell abnormalities that might lead to cervical cancer (Kawakeb et al., 2016). The combined Pap smear with a regular program of screening and appropriate follow-up can reduce cervical cancer mortality up to 80%. In the United States, Pap smears are obtained as part of a medical examination by a woman's physician or in the context of a health maintenance program. A cervical cancer screening program refers to the women to Pap smear until no symptoms of pathologic

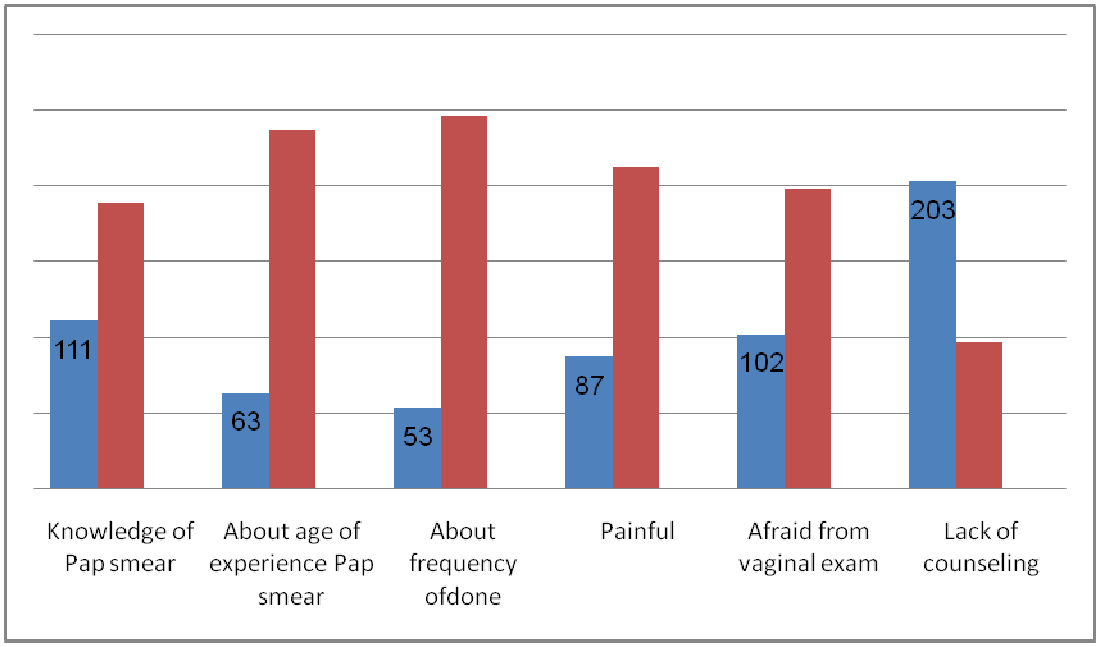

Figure. 1. Distribution the woman, according to the knowledge and attitude of the Pap smear.

changes of the cervix, in order to classify them have or not to have cervical cancer or its precursors (Silverberg, 1980). By the mid-1990s, the screening program had become embedded in routine public health practice. And reduction in mortality in 1993 and 1994 was due largely to the striking increase in coverage achieved by the organized national screening program between 1988 and 1992 (Department of Health Cervical Cytology 1992-1993; Anderson et al., 1999). In Iraq, many researches were done in different cities (Diyala, 2012; Baghdad 2013, 2014, 2015 and Kirkuk 2012) all done on women experience Pap smear and search for relation to evaluate the causes and risk factors of cervical cancer (Mahmoud et al., 2012). Iraqi program proposal for early detection of cervical cancer has begun in 2012, in Baghdad, Basra, and Neinava governorates only. Till now, program for screening of cervical cancer is not applied in other governorates in Iraq due to many obstacles, including diminutions of pathologists in Iraq and lack of women's awareness about the screening and shortage of educational program on this subject (Querleu et al., 2008; Kitchener et al., 2008). According to the etiology of (HPV) infection in cervical cancer has led to adding (HPV) testing for, screening in the woman between 25-65 years old. The woman who has symptoms and abnormal Pap smear or visual lesion on the cervix should be evaluated with colposcopy and biopsy (Stoler et al., 2007; Ferlay et al., 2010).

The aim of this study is to assess knowledge, attitudes and practices among married women in the Tikrit City about Pap smear and cervical cancer.

PATIENTS AND METHODS

The current work represented a cross sectional study, it was conducted in Salah- Aldeen general hospital from 1 February to 30 August 2017. This study included (300) married women who were chosen by simple random sampling. Their ages were between 20 and 65 years old, attending Gynecological ward in Salah- Aldeen general hospital as patients or their relatives' from different residency (urban and rural areas) of Salah-Aldeen governorate. The questionnaire was developed to collect all data relevant to socio-demographic factors, questions about knowledge, attitude and practices of the Pap smear, cervical cancer screen and cervical cancer as a disease. The data was collected from sample by direct interview and information written by researchers.

Statistical analysis

Data presented by simple tables and figures. Then these data analyzed statistically by using SPSS program (version 11) software. P values of less than 0.05 were considered significant

RESULTS

The sample of this research was (300) women, all of them were married. The age group was taken from 20 years old to 65 years old.

Table 1. The relation between the knowledge of Pap smear and age

Knowledge / Age (years)	Yes Number	Yes %	No Number	No %	TOTAL Number	TOTAL %
20-< 30	16	25.4	47	74.6	63	21
30- <40	34	35.4	62	64.6	96	32
40- <50	33	39.3	51	60.7	84	28
50- <60	16	47	17	53	34	11.3
60 -65	12	52.2	11	47.8	23	7.7
Total	111	37	189	63	300	100
Chi square = 8.056 df= 4 p ≤ 0.05						

Table 2. The relation of knowledge of Pap smear with educational level

Knowledge / Educational level	Yes Number	Yes %	No Number	No %	Total Number	Total %
Illiterate	1	4	24	96	25	9
Primary	7	16	36	84	43	14
Secondary	52	36.1	92	63.9	144	48
High education	51	57.9	37	42.1	88	29
Total	111	37	189	63	300	100
Chi squire= 36.22 df= 3 P ≤ 0.05						

Table 3. The relation between knowledge of Pap smear and occupation.

Knowledge / Occupation	Yes Number	Yes %	No Number	No %	Total Number	Total %
Housewife	47	24.5	144	75.5	191	64
Employed	64	58.7	45	41.3	109	36
Total	111	37	189	63	300	100
Chi squire= 34.63 df= 1 P value ≤ 0.05						

Table 4. The knowledge of Tikrit women related to residence.

Knowledge / Residence	YES Number	YES %	NO Number	NO %	Total Number	Total %
Rural	36	26.6	99	73.4	135	45
Urban	75	45.5	90	54.5	165	55
Total	111	37	189	63	300	100
chi squire=11.24 df=1 P value ≤ 0.05						

Women knowledge and attitude of Pap smear

Figure-1 presents the difference in knowledge among women, 111 women had information about Pap smear and 189 had not any idea about it. About knowledge of age, 63 (21%) knows the age of done and only 53 (17.6%) know the frequency of done, the attitude of pain associated with the procedure only 87 (29%) answered (yes) associated with pain, fear of vaginal exam 102 (34%) woman, lack of counseling 203 (67.6%).

Table-1 showed the relation between knowledge of Pap smear and women's age; higher frequency of knowledge was in the age group 30 to <40 years old34 out of 111 women represented 35. 4%. This relation was not significant at a P value ≤ 0.05.

Table 2- showed the relation between knowledge of Pap smear and educational level, the high frequency of knowledge is in secondary education level 52 women out of 111, and frequency of (no) information in illiterate 1(4%)women. This relation was significant at P value ≤ 0.05.

Table-3 results revealed the relation between knowledge of Pap smear and occupation, the higher frequency of (yes) in employing women 64 (58.7%) women, while in housewife women only 47 (24.5%) women. This relation was significant at P value ≤ 0.05.

The knowledge of Tikrit women, according to the

Table 5. The knowledge and attitude of Tikrit women about cervical cancer

		Knowledge And Attitude			
		YES Number	%	NO Number	%
A bout of cervical cancer		143	47.5	157	52.5
Source of knowledge	Friend and relative	96	32	204	68
Of cervical	NET.	32	10.65	268	89.35
Cancer	TV.	11	3.33	289	96.67
	Books& journals	17	5.6	283	94.4
	Doctor	67	22.3	233	77.7
About cervical cancer screening	Age of screening	107	35.6	193	64.4
	Frequency	33	11	273	89
Knowledge of HPV vaccination	Age of vaccination	11	3.6	289	96.4
Knowledge	Married at young age	43	14.3	257	85.7
The risk factor of	HPV infection	17	5.6	283	94.4
Cervical	Smoking	36	12	264	88
Cancer	STD	67	22.3	233	77.7
	Multiple partners	89	29.6	211	70.4
	Contraceptive>5 years	54	18	246	82
	Multiply parity >5 child	23	7.6	277	92.4
	Husband with multiple partner	55	18.3	215	81.7
	Multiple risk factor	64	21.3	236	78.7
Knowledge	Bleeding between cycle	198	66	102	34
About clinical	Post coital bleeding	191	63.6	109	36.4
Feature of cervical cancer	Post-menopausal bleeding	46	15.3	254	84.7
	Abdominal pain	189	63	111	37
	Long& heavy period than usual	127	42.3	173	57.7
	Abnormal vaginal discharge with foul smell	201	67	99	33
Attitude of fate of	Treatable	119	39.6	181	60.4
Cervical Cancer	Fatal	188	62.6	112	37.4

residence showed the highest frequency of knowledge in urban women; 75 (45.5%), this relationship was significant at P value ≤ 0.05, Table- 4.

The distribution of samples according to the knowledge and attitudes of cervical cancer

This study showed that Tikrit woman's knowledge, hearing, screening, clinical feature, risk factors and treatment of cervical cancer. The knowledge of cervical cancer 143 (47.5%) from all women 300, and the source of higher frequency knowledge was from relatives and friends 96 (32%) and less frequency from TV 11 (3.33%) and 107 (35.6%) women know about the age of screening of cervical cancer and only 33 (11%) knows about the frequency of screening. Only 11 (3.6%) of cases heard about HPV vaccination. The knowledge of risk factor of cervical cancer revealed a higher frequency with multiple partners 89 (29.6%) and less frequency with HPV infection 17 (5.6%) cases. The level of knowledge of clinical feature with cervical cancer had a higher frequency with abnormal vaginal discharge with foul smell 201 (67%) and the knowledge fate of cervical cancer higher frequency answered fatal 188 (62.6%) and less answered treatable 119 (37.3%) all these information's were shown in Table -5.

Table-6- showed the distribution of Tikrit women's knowledge of cervical cancer according to age. Higher frequency as age (31 to <41) years old 50 (35%) women. This relation was the insignificant P value ≤ 0.05.

Table 7. Showed the relation between the knowledge

Table 6. Distribution of knowledge of cervical cancer, according to age.

Age (years)	Yes		No		Total	
	Number	%	Number	%	Number	%
20 to < 30	21	14.5	42	26.7	63	21
30 to < 40	50	35	46	29.3	96	32
40 to < 50	43	30	41	26.2	84	28
50 to < 60	18	12.5	16	10.2	34	11.3
60 -65	11	7.7	12	7.6	23	7.7
Total	143	100	157	100	300	100
Chi squire = 6.73 df= 4 P value ≤ 0.05						

Table 7. The relation between Tikrit women's knowledge and their education.

Knowledge / Education	Yes		No		Total	
	Number	%	Number	%	Number	%
Illiterate.	2	8	23	92	25	9
Primary.	7	16.2	36	83.8	43	14
Secondary.	54	37.5	90	62.5	144	48
High education	80	90.9	8	9.1	88	29
Total	143	47.7	157	52.3	300	100
Chi squire = 104.68 df= 3 P value ≤ 0.05						

Table 8. The relation between knowledge and occupation.

Knowledge / Occupation	YES		NO		Total	
	Number	%	Number	%	Number	%
Housewife	45	23.5%	146	76.5	191	64
Employed	98	89.8%	11	10.1	109	36
Total	143	47.7%	157	52.3	300	100
Chi squire =122.4 df=1 P value ≤ 0.05						

Table 9. The relation between knowledge of cervical cancer and residence.

Knowledge / Occupation	YES		NO		Total	
	Number	%	Number	%	Number	%
Urban	105	63.6	60	36.4	165	55
Rural	38	28.1	97	71.9	135	45
Total	143	47.6	157	52.4	300	100
Chi squire= 37.48 df=1 P value ≤ 0.05						

Table 10. Pap smear experience among women, according to (age, education, occupation and residence).

Done of Pap smear, according		YES		NO		Total	
		Number	%	Number	%	Number	%
	20-	26	41	37	59	63	21
	30-	28	29.1	68	70.9	96	32
Age	40-	12	14.2	72	85.8	84	28
	50-	18	52.9	16	47.1	34	11.3
	60-65	9	39.1	14	60.9	23	7.7
	Illiterate	4	16	21	84	25	9
Education	Primary	16	37.2	27	62.8	43	14
	Secondary	31	21.5	113	78.5	144	48
	High education	42	47.7	46	52.3	88	29
Occupation	Employ	54	49.5	55	50.5	109	3
	Housewife	39	20.4	152	79.6	191	64
Residence	Rural	36	26.6	99	73.4	135	45
	Urban	57	34.5	108	65.5	165	55

of cervical cancer and educational level of women in Tikrit city. The highest rate reported by women has knowledge of high educational level 80 (90.9%) cases, and less frequency among illiterate women 2 (8%) cases. The relation between the knowledge and the education level of women was significant at a P value ≤ 0.05.

The results in table-8 presented that the knowledge in employing women had higher frequency 98(89.9%) women while less frequency in house wife 45(23.5%) women. This relation was significant at P value ≤0.05.

The relation of knowledge of cervical cancer and residence showed a higher frequency in urban 105 (63.6) woman and less frequently in rural 38 (28.1%) women. This relation was significant at P value ≤ 0.05. As shown in Table -9.

The distribution of the women experience Pap smear, according to age the higher frequency of age had done the Pap smear (30 to < 40)years old and according to educational level higher frequency in higher education 42 (47.7%) women. The relation to occupation higher frequency presented in employer 54 (49.5%) women. The relation to residence higher frequency present in urban 57 (34.5%) women as shown in Table -10.

DISCUSSION

Pap smear is the appropriate screening test for detection, the premalignant lesion of cervical cancer in worldwide, The current study showed that knowledge and attitude about Pap smear in women in Tikrit city, less than half 37% due to low education, poor medical care and poor awareness of the medical program. A similar study conducted in Iran in Kerman city (81.1%) of women was aware about Pap smear (Soltanahmadi et al., 2010) and only 44.3% of women have knowledge about Pap smear in Rasht-Iran (Sedighe et al., 2012) .Another study in Yazd city, the knowledge of Pap smears was reported (29.2%) (Baghyani, 2003).

The current study showed an insignificant relation of knowledge of Pap smear and age. This result agrees with screen done in Brazil (Gamarra et al., 2005) and disagree with results in women of Sao Paolo that showed a significant relation in knowledge with age below 24 years old (Nascimento et al., 2006) due to early sexual relation and good medical health program .The knowledge of Pap smear with high level of education showed significant increase and this agree with educated women in Oman have increased knowledge about Pap smear (Nasar et al., 2017).

Also, in the United Arab of Emirates and Argentine showed similar results (UAE, 2004; Cesar, 2003). The study showed a relation between the occupation and knowledge of women about Pap smear was positively related the higher frequency of knowledge in employing women as compared with house wife. Results agree with study in Sudan. (Almobarak et al., 2016).

The knowledge and attitude of women about cervical cancer in current study appeared half of the sample. While a study in Iran showed 53.9% (Farshbaf-Khalili et al., 2015) and in northwestern in Taiwan (Chang et al., 2002). The higher frequency source of knowledge was from friends and relatives. A study in Iran showed that most sources of information were taken from the doctor (Baghyni Animoghaddam, 2003). While in Sudan a study revealed that the major source of information about Pap smear test has been delivered through the media and gynecological doctors (Almobarak, 2016). The knowledge of women about age of cervical cancer screening, the frequency of screening and HPV vaccination had no information due to the poor medical program and low education of women attends to hospital.

Knowledge risk factor higher frequency was in multiple partners (married more than one time). Another study in Tabriz showed that pregnancy at age below 20 years old, beginning sexual intercourse before the age of 16, using oral contraceptives for 5 years, and smoking was the main risk factors for cervical cancer (Bahmanjanbeh, 1997)

Knowledge of clinical features of the cervical cancer higher frequency was replied by abnormal vaginal discharge with foul smell. Another study in India showed bleeding per vagina was the most common (Arunadevi, and Prasad, 2015).

Attitude of woman about the fate of cervical cancer higher frequency said fatal. Another study in India showed fate of cervical cancer is treated with radiotherapy (Arunadevi, 2015). About the relation of knowledge of cervical cancer to the age the higher frequency of age group 30 to < 40years less frequent with age 60-65 years old this result may be due to the most woman attends to hospital from middle age 30 to40 years. Our results disagree with study in Iran (Forough., 2008).

The relation of education with the knowledge of cervical cancer was significantly higher in high educational level women and less frequently in illiterate due to the ability of the educated woman to read about the disease and complications. The results agree with study in Kuala Lumpur, Malaysia showed a significant relation (Tan, 2010).

The relation of knowledge of cervical cancer with occupation was significant related the higher frequency knowledge of cervical cancer in the employer and less among the housewife women .The results agree with the study with Kuwaiti women (Al Sairafi, 2009).

The relation was significant between the knowledge of cervical cancer and residence the higher in urban and less among rural women this variation may be due to the low educational level and low medical care of women in rural area . This study was agreed with study in Baghdad, which revealed that relation is significant higher frequency in urban areas (Abd Al-Hussen and Abbas, 2017). The poor practice of Pap smear in the current

study was near to one third only from 300.

The distribution experience of Pap smear, according the age between (30 to <40) years old women because most cases visit the hospital from this age group. A similar result in Sudanese women (Almobarak, 2016).

The education, the higher frequency was from high educational level. Another study was in Sudan showed the same results (Almobarak, 2016).

According the occupation and residence the higher frequency of employing and urban women. This study agrees with study done in Sudan (Almobarak, 2016). And disagree with study in Iran (Jalilian and Emdadi, 2011; Karimy et al., 2012).

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Conflicts of Interest

The authors disclose no conflicts of interest.

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