

# Knowledge Concerning Cervical Cancer and Screening Among Married Women Attending Outpatient Clinics in Baghdad Maternity Hospitals

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**Abstract:** Background: Cancer of the cervix is one of the main reasons for gynaecological cancer death that occurs worldwide. It is known that cervical premalignant stage has been detectable for ten years or more before being developed to cervical cancer. Women's knowledge related to the causes and prevention of the cervical cancer could decrease the exposure of women to known risk factors of the disease that reduce the morbidity and mortality. Objective: To assess women's knowledge toward cervical cancer and find out the association between women's knowledge and their demographic variables. Methods: A cross sectional study was conducted between October 2016 and February 2017 at Baghdad maternity hospitals. A questionnaire was constructed to gather information from (400) married women, the data were collected through interview and self administered questionnaire which used. Data are analyzed through the use of SPSS version 20. Results: This study shows that the women's knowledge concerning cervical cancer was inadequate. The source of knowledge was friends and relatives among (52.5%) of the study sample. There are statistical significant differences between level of knowledge and age, duration of marriage, while there are no statistical significant differences between level of knowledge and the left over demographic variables. Conclusion: This study shows that the level of knowledge toward cervical cancer is inadequate. Recommendation: There is a need to provide information about cervical cancer risk factors, signs and symptoms, screening, and prevention for all women over the country in order to decrease the morbidity and mortality rate of cervical cancer.

**Keywords:** Knowledge, Cervical Cancer, Screening

## 1. Introduction

Cancer of the cervix is rated as the fourth most common cancer and cancer deaths among the female population in (2012), an estimation was (528,000) new patients of cervical cancer with (266,000) deaths. The majority of burden accounting for about (85%) has occurred in the less developed countries of the total cases of cervical cancer [1].

The age of the occurrence of cervical cancer is (35–45) years. Women who give birth to children at an early age, especially women have their first delivery before the age of (20) years. Also multiparous women with poor spacing between pregnancies are at an increased risk. These factors can increase the woman's risk of cervical cancer, because they increase the chances of infection with HPV, which can lead to dysplasia. History of cervical cancer, vagina, or vulva. Individuals at low socioeconomic classes or low income groups have been found to be at a high risk of developing cervical cancer. If the women's have family history, especially their mothers or sisters had the cancer.

Their chances of getting the cancer in the future are increasing [2].

The cervical cancer screening is very effective because of the presence of a precursor lesion, cervical intraepithelial neoplasia (CIN), helps determine whether there is a need for further tests. Over a long period lesions start as dysplasia and progress in a predictable process, allowing a great opportunity for intervention at a precancerous stage [3]

It remains a controversy over the most appropriate cervical cancer screening interval. Annual screening is common in the United States and in some European countries, cervical screening is offered every five years. The current recommendations in England, comprise a first invitation at (25) years of age, interval cervical screening is every three years for women's age between (25-49)years, and every five years for women's age between (50-64)years [4].

The cervical cancer can be prevented through the early detection of precancerous lesion and early treatment. The detection of precancerous stage requires knowledge about cervical cancer, so that the population are aware and therefore have a positive attitude concerning the measures of cervical precancerous lesions detection. Knowledge about the cancer is important so that population will be aware and have a positive attitude related to the detection of cervical premalignant stage. To fully utilize the screening method, awareness is necessary for women about the accessibility of methods, knowledge is necessary concerning cervical cancer and methods of screening. These increase demand for the screening of the precancerous stage, and thus reduce the number of cases and deaths from the cancer [5].

The screenings of cervical cancer in many developing countries are not available or are poorly accessible. Cervical cancer knowledge among female population is still limited and thus women are less willing to receive cervical cancer screening. Educational levels and misconceptions may also contribute to the poor uptake of cervical cancer screening [6].

The awareness of women toward the cancer could also enhance the desire to uptake of screening, early coming, their adherence to therapy, and follow up the protocols [7].

Awareness of the disease, accessibility of effective cervical screening programs and promotion of the available health care service could be decreasing the disease burden among the population. The important cause for the large differences between developed and developing countries in cervical cancer incidence and mortality is the lack of women's awareness, health care professionals, and in the latter the policy makers. The transmission of information and knowledge gain related to the causes and prevention of the cancer could decrease the exposure of women to known risk factors of cervical cancer. In spite of the fact that cervical cancer has not received as much attention it deserves from the health authorities, there is a current move to increase education and information dissemination about cervical cancer through outreach services [8].

## 2. Methods

Cross-sectional (descriptive analytic) study was done among married women. The study was performed between October 2016 and February 2017 in Baghdad maternity hospitals. Non probability (purposive sample) used to collect the data from (400) married women who attained outpatient clinics in maternity hospitals. A questionnaire constructed by the researchers to identify women's knowledge about cervical cancer and screening. A pilot study conducted in order to determine the reliability of the questionnaire in a sample of (20) women who excluded from the study sample ( $r_1 = 0.96$ ). Content validity was determined through a panel of (17) experts their experience mean and SD was  $28.82 \pm 7.5$ . The data were collected after obtaining the agreement from women to participate in this study. The study instrument was consisted of three main parts which include: Socio demographic characteristics, women's knowledge toward cervical cancer and screening, and source of knowledge assessment tool consisted of (7) subdomain. Data are analyzed through the use of SPSS (Statistical Process for Social Sciences) version 20 and excel.

## 3. Results

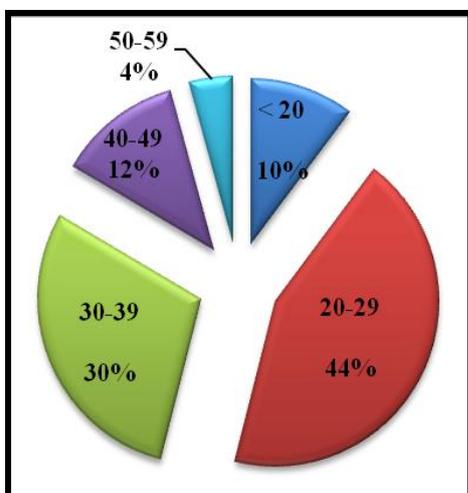


Figure 1: The age of women/ years

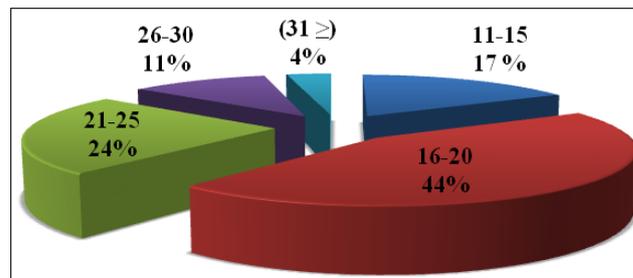


Figure 2: The age at marriage / years

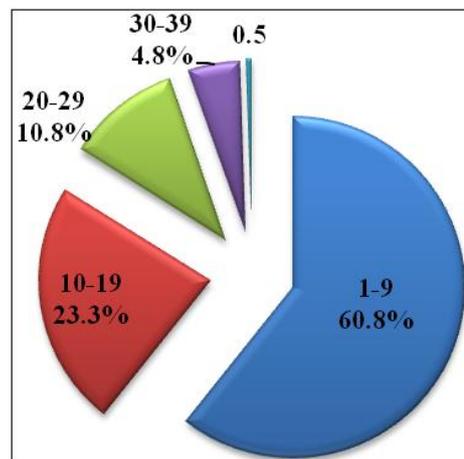


Figure 3: The duration of marriage/ years

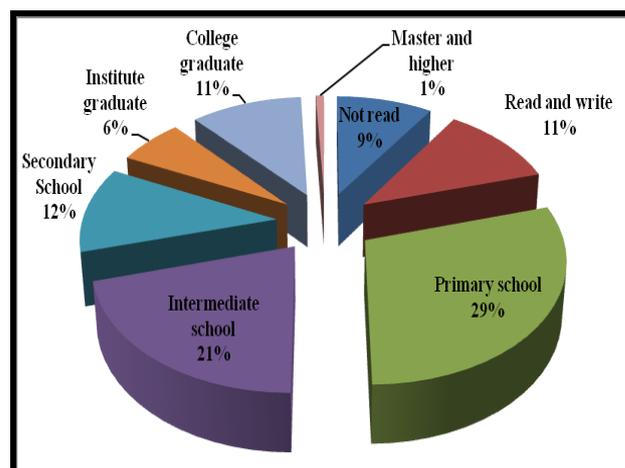


Figure 4: The educational level of study sample

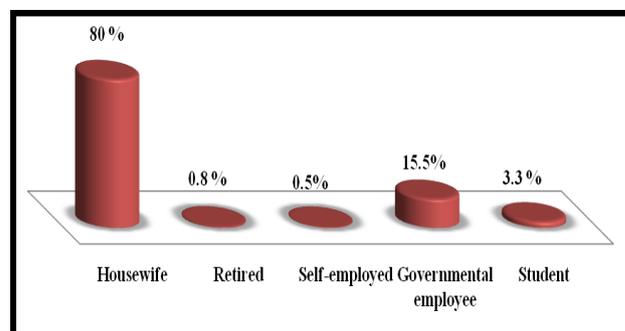
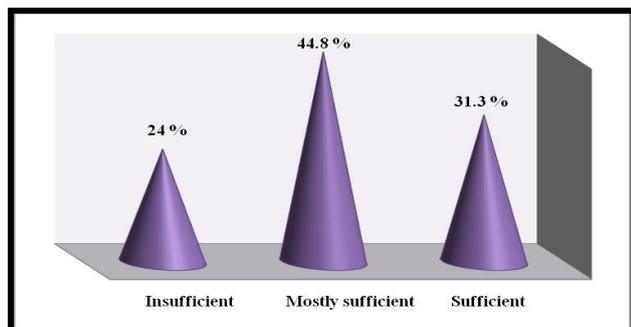
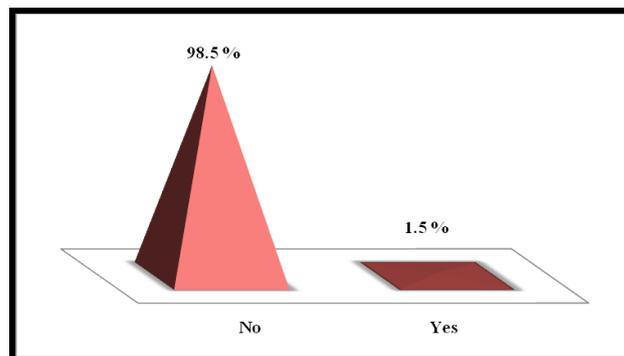


Figure 5: women's occupation



**Figure 6:** The monthly income of study sample



**Figure 7:** Smoking status

**Table 1:** Knowledge of Women Concerning Cervical Cancer According to Sub Domain (n= 400)

No.	Knowledge sub domain	Knowledge Level				M.S	R.S	Ass.
		Adequate		Inadequate				
		F	%	F	%			
A	Cervical cancer general knowledge	288	72	112	28	1.72	86	Moderate
B	Causes	200	50.0	200	50	1.50	75	Low
C	Risk factors	111	27.8	289	72.3	1.27	63.5	Low
D	Signs and symptoms	114	28.5	286	71.5	1.28	64	Low
E	Screening	71	17.8	329	82.3	1.17	58.5	Low
F	Treatment	217	54.3	183	45.8	1.54	77	Moderate
G	Prevention	93	23.3	307	76.8	1.23	61.5	Low

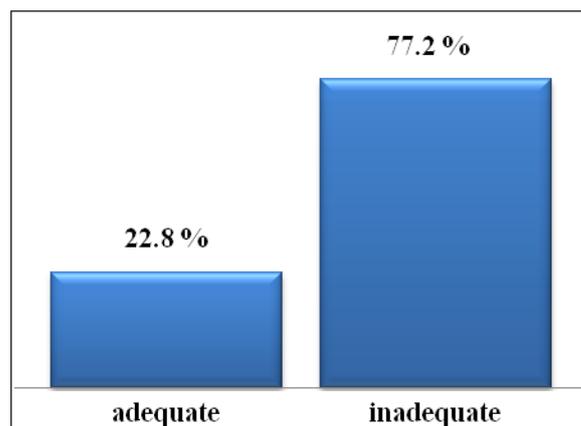
(M.S) mean score (R.S) relative sufficiency (Ass.) assessment  
 (Low=  $\geq 75$ ), (Moderate= 75.1-87.5), (High= 87.6-100)

Table (1) results show that the highest mean score and relative sufficiency of the study sample had knowledge regarding item No.(A and F) which was assessed as moderate level that refers to "cervical cancer general knowledge" and "treatment of cervical cancer", while the left over was assessed as low mean score and relative sufficiency.

relative, while the lowest percentage (10%) of women's source of knowledge was a Nurse.

**Table 2:** Sources of Knowledge Concerning Cervical Cancer (n= 400)

No.	Source of knowledge	Yes		No		Total	
		F	%	F	%	F	%
1	Mass media	152	38.0	248	62.0	400	100
2	Doctor	105	26.2	295	73.8	400	100
3	Nurse	41	10.3	359	89.8	400	100
4	Books and pamphlet	75	18.8	325	81.3	400	100
5	Friends & Relative	210	52.5	190	47.5	400	100
6	No source of knowledge	104	26.0	296	74.0	400	100



**Figure 8:** The women's knowledge level

The results show in table (2) that the highest percentage (52.5%) of women's source of knowledge was friends and

**Table 3:** Association between women's knowledge and Socio Demographic variables (n = 400)

ocio Demographic variables		Knowledge Level				Chi square statistics			Sig.
		Adequate		Inadequate		Value	df	P.value	
		F	%	F	%				
Age / years	< 20	5	12.2	36	87.8	10.3	4	.034	s.
	20-29	33	18.9	142	81.1				
	30-39	31	26.3	87	73.7				
	40-49	18	36.7	31	63.3				
	50-59	4	23.5	13	76.5				
Duration of marriage/ years	1-9	47	19.3	196	80.7	11.3	4	.023	s.
	10-19	20	21.5	73	78.5				
	20-29	17	39.5	26	60.5				
	30-39	7	36.8	12	63.2				
	40-49	0	0	2	100				
Level of Education	Not read	7	18.9	30	81.1	10.5	7	.161	NS.

	Read and write	6	13.3	39	86.7				
	Primary school	21	17.8	97	82.2				
	Intermediate school	22	26.5	61	73.5				
	Secondary school	12	26.1	34	73.9				
	Institute graduate	6	24.0	19	76.0				
	College graduate	16	37.2	27	62.8				
	Master and higher	1	66.7	2	33.3				
Occupational Status	Student	10	76.9	3	23.1	5.31	4	.256	NS.
	Governmental employee	45	72.6	17	27.4				
	Self-employed	1	50.0	1	50.0				
	Retired	1	33.3	2	66.7				
	Housewife	252	78.8	68	21.2				
Monthly income	Sufficient	26	20.8	99	79.2	1.05	2	.591	NS.
	Mostly sufficient	45	25.1	134	74.9				
	Insufficient	20	20.8	76	79.2				

(df) degree of freedom, (Sig) significant Probability value ( $P < 0.05$ ), (NS) Non Significant, (s) significant.

Table (3) results show that there are statistical significant differences between level of knowledge and age ( $p=.034$ ), duration of marriage ( $p=.023$ ), while there are no statistical significant differences between level of knowledge and (educational level, occupation status, monthly income).

#### 4. Discussion

It can be attributed of the weak demand to the cervical screening for the inadequate communication between health care professionals and female population concerning the accessibility and advantages of the screening. Knowledge of women in many developing countries concerning the disease is very restricted [9].

This study shows that the study population knowledge was inadequate and that could be due to the deficit of cervical cancer mass media education campaign. In developed countries the level of knowledge was found to be high. Knowing cervical cancer risk factors is very important that can make women to avoid them, which leads to the prevention of cervical cancer. Women's knowledge on cervical cancer risk factors was low in this study and the education on this important part with respect to prevention should be provided. These results are consistent and supported by John, who found that the majority of the study sample (78.6%) had poor knowledge, more than one third of women (35.8%) knew that a symptom of cervical cancer was vaginal bleeding [5]. Osman and colleagues demonstrated that more than two third (76%) of the participants didn't know that HPV infection is one of the cervical cancer risk factors, their study showed a very poor knowledge among immigrant Iraqis women in Malaysia [10]. Wong, who emphasized that the knowledge was very poor among his study respondents regarding cervical cancer risk factors, screening, and HPV vaccination, the mean and SD of the total knowledge score was  $2.37 \pm 1.97$  [11]. Sait showed that only (14.4%) of women knew that HPV is an etiological factor for cancer [12].

These results are inconsistent with the studies of Al Sairafi & Mohamed, who mentioned that the higher percent of the respondents (52.3%) had adequate knowledge about Pap smear [13]. Cerigo and colleagues who emphasized that more than two third of women (73%) knew that the risk factor for the disease, also the higher percentage (42%) of

them knew the cervical cancer risk factor is "multiple sexual partners" [14]. Donati and colleagues revealed in their study that nearly two-thirds of the women knew the cause of cervical cancer is HPV, more than two third (65%) of the women knew the cervical cancer is preventable by using Pap smear test [15].

Regarding the source of knowledge, the results are consistent and supported by Shrestha and colleagues who indicated that the higher percent of respondents (18%) got the information from friends and relatives [16]. Also Donati stated that their study population had got their information through friends [15].

Regarding the association between women's knowledge and demographic variables, this study shows that there are statistical significant relationships between level of knowledge and age, cervical cancer knowledge was significantly greater among women age (40-49) years, duration of marriage years, cervical cancer knowledge was significantly greater among married women for (30-39) years. There are no statistical significant relationships between level of knowledge and the left over demographic variables.

These results are consistent and supported by Al-Meer, et al., who mentioned that cancer knowledge was significantly greater among women age (30-49) years and married women for ( $> 15$ ) years [6]. Bansal, et al. who found that age was an independent predictor of better knowledge [17].

#### 5. Conclusion

This study revealed that women's knowledge concerning cervical cancer causes, risk factors, sign and symptoms, screening, and prevention was inadequate. There are statistical significant differences between level of knowledge and age, duration of marriage, while there are no statistical significant differences between level of knowledge with the left over study variable

#### 6. Recommendation

It is important to provide information about cervical cancer risk factors, signs and symptoms, screening, and prevention

to reach for all women over the country in order to decrease the morbidity and mortality rate of cervical cancer. Establishing a national awareness campaign, and providing cervical screening to all over the country through gynecologist and the health care professional's recommendation for the Pap smear test for all married women regularly and popularize the cervical cancer screening program through the mass media.

## References

- [1] Globocan (2012), International Agency for Research on Cancer: Estimated cancer incidence, mortality and prevalence worldwide in 2012. Lyon, France: IARC; 2013. Available from: <http://www.globocan.iarc.fr/>.
- [2] Saxena,R.: **Bedside Obstetrics And Gynecology**, 1st edition, Jaypee Brothers Medical Publishers, India, 2010, 400-420.
- [3] Ricci,S.S.: **Essentials Of Maternity, Newborn, & Women's Health Nursing**, 3<sup>rd</sup> edition, Lippincott Williams & Wilkins, Philadelphia, 2013, 237-245.
- [4] Rees,M.; Frcgp,S.; Oehler,M.; Moore,J. ;Crawford,P.: **Problem Solving in Women's Health**,1st edition, Oxford, UK, 2008, 182-184, 201-204.
- [5] John,J.: **The Knowledge, Attitude, Practice And Perceived Barriers Towards Screening For Premalignant Cervical Lesions Among Women Aged 18years And Above, In Songea Urban, Ruvuma**, Published dissertation, Muhimbili University of Health and Allied Sciences, (2011).
- [6] Jia,Y.; Li,S.; Yang,R.; Zhou,H.; Xiang,Q.,et.al.:Knowledge about Cervical Cancer and Barriers of Screening Program among Women in Wufeng County, a High-Incidence Region of Cervical Cancer in China , **Plos One**,8 (7), 2013, 1-7.
- [7] Gichangi, P. ; Estambale, B. ; Bwayo, J. ; Rogo, K.; Ojwang, S. ; et.al.: Knowledge and practice about cervical cancer and Pap smear testing among patients at Kenyatta National Hospital, Nairobi Kenya, **Int J Gynecol Cancer**,13, 2003, 827—833.
- [8] Nnodu, O.; Erinosho, L.; Jamda, M.; Olaniyi,O; Adelaiye,R.,et.al: Knowledge and Attitudes towards Cervical Cancer and Human Papillomavirus: A Nigerian Pilot Study, **African Journal of Reproductive Health**, 14(1), 2010, 95-107.
- [9] Al-Meer, F.M.; Aseel, M.T.; Al-Khalaf,J.; Al-Kuwari,M.G.; Ismail,M.F.: Knowledge, attitude and practices regarding cervical cancer and screening among women visiting primary health care in Qatar, **Eastern Mediterranean Health Journal**, 17 (11), 2011, 855-860.
- [10] Osman,M.; Al-Naggar,R.; Taha,B.: Knowledge and Awareness of Cervical Cancer Screening among Iraqi Immigrant Women Living in Malaysia, **World Journal of Medical Sciences**, 8 (2), 2013, 123-129.
- [11] Wong, L.: Knowledge and Attitudes About HPV Infection, HPV Vaccination, and Cervical Cancer Among Rural Southeast Asian Women, **Int.J. Behav. Med.**, 2010.
- [12] Sait,K.H.: Attitudes, knowledge, and practices in relation to cervical cancer and its screening among women in Saudi Arabia, **Saudi Med J**, 30 (9), 2009, 1208-1211.
- [13] AL-Sairafi, M.; Mohamed, F.: Knowledge, Attitudes, and Practice Related to Cervical Cancer Screening among Kuwaiti Women, **Med Princ**, 18, 2009, 35–42.
- [14] Cerigo,H.; Macdonald,M.; Franco1,E.; Brassard,P.: Inuit women's attitudes and experiences towards cervical cancer and prevention strategies in Nunavik, Quebec, **Int J Circumpolar Health**, 71, 2012, 1-8.
- [15] Donatia,S.; Giambib,C.; Declichb,S.; Salmasoc,S.; Filia,A.: Knowledge, attitude and practice in primary and secondary cervical cancer prevention among young adult Italian women, **Vaccine**, 30, 2012, 2075–2082.
- [16] Shrestha, S.; Saha,R.; Tripathi, N.: Knowledge, Attitude and Practice regarding Cervical Cancer Screening Amongst Women visiting Tertiary Centre in Kathmandu, Nepal, **NJMS**, 2 (2), 2013, 85-89.
- [17] Bansal, A.; Pakhare,A.; Kapoor,N.; Mehrotra, R.; Kokane,A.A.: Knowledge, attitude, and practices related to cervical cancer among adult women: A hospital-based cross-sectional study, **Journal of Natural Science, Biology and Medicine**, 6 (2), 2015, 324-327.