ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

# Knowledge of Women about Cervical Cancer in Saad Abu Alela Hospital in Khartoum, Sudan in 2019

# Doaa Mohammed Osman Abdullah<sup>1</sup>, Dr. Siham Ahmed Ballah<sup>2</sup>

U of K – Faculty of Medicine Department of Community Medicine

Abstract: <u>Background</u>: Cervical cancer being the second most common cancer among women worldwide is linked to HPV infection. It can be prevented by early detection, as well as vaccination. <u>Objectives</u>: to determine the knowledge of women about cervical cancer. Method: descriptive cross sectional study using questionnaire on 384 women. Data analysis was done by descriptive statistics and chisquare test. <u>Results</u>: Women in the study had a mean of age of 35.69 and 7.335 standard deviation. The study revealed the poor knowledge with 95.3% answered regarding knowledge question and only 4.7% answered yes. The source of knowledge was mostly from social media (3.1%), TV (1.6%).4.2% responded that cervical cancer can be prevented. Of those with knowledge about cervical cancer; 2.6% recognized HPV as a cause of cervical cancer, 1.6% said they don't know and 0.5% answered fungi. Regarding the risk factors; the largest percentage was for early sexual intercourse (25.0%), smoking and inheritance (19.4%). The relation between age and knowledge showed that 20 to 30 years old had the highest knowledge, while its relation to daily expenditure revealed that those who expend more than 250 pounds had the highest knowledge. <u>Conclusion</u>: The results indicate the need for education about cervical cancer, its cause, risk factors, signs and symptoms.

Keywords: Cervical Cancer, HPV Infection

#### 1. Introduction

There are more than 100 different strains of HPV, many of which are harmless. However, some types can cause abnormal changes to the cells of the cervix causing them to grow out of control which can eventually lead to the development of cervical cancer. Two strains of HPV 16 and 18 are known to be responsible for most of the cases of cervical cancer. Cervical cancer is the second common cause of cancer worldwide (15) and can often be treated successfully when detected early by screening test. The human papilloma virus is transmitted by sexual contact with someone who has it. Symptoms of cervical cancer include the following:

- Bleeding from the vaginal between one menstrual cycle and another or after menopause
- Pain in pelvis
- Pain during sex
- Abnormal vaginal discharge

Screening by using a special test called pap smear which is done by collecting cells from cervix and view them under the microscope. Papinaclaou test was first introduced in 1943 for detection of precancerous and cancerous changes in the cervix.

Cervical cancer can be prevented by vaccination and screening. Risk factors for cervical cancer include: Early age at first sexual intercourse, multiple sexual partnership infection, smoking, genetic predisposition and compromised immunity are all associated with the development cervical cancer.

Cervical cancer is thought to be the second most common cancer after breast cancer leading to death due to late diagnosis. Late diagnosis and detection is a reflection of poor knowledge .Up to my knowledge there is no information regarding the knowledge of cervical cancer in Sudan depending on the literature review; this study will help in assessing it to improve knowledge towards cervical cancer which may reduce the mortality and morbidity caused by this disease.

#### 1.1 Problem statement

Cervical cancer is the second common cause of cancer among women worldwide as mentioned earlier, after breast cancer leading to death because of the late diagnosis. late diagnosis and detection is a reflection of poor knowledge about cervical cancer.

## 1.2 Justification

Up to my knowledge there is no information regarding the knowledge about cervical cancer in Sudan depending on the literature review, this study will help in assessing it to improve knowledge towards cervical cancer which may reduce the mortality and morbidity caused by cervical cancer.

# 1.3 Objectives

# 1.3.1 General objectives

To asses knowledge, attitude and practice of women about cervical cancer in sad Abuallele hospital in Khartoum in 2018.

## 1.3.2 Specific objectives

- To asses knowledge about cervical cancer symptoms and signs
- To asses knowledge about risk factors
- To asses knowledge about cervical cancer screening and prevention

Volume 9 Issue 8, August 2020

www.ijsr.net

<u>Licensed Under Creative Commons Attribution CC BY</u>

ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

• To asses relation between demographic factors and the level of knowledge

## 2. Literature Review

In a study that was done regarding knowledge on HPV vaccination as an appendix of European guideline for quality assurance in cervical cancer screening; it concluded that since vaccine aims at protecting against naïve HPV infection; thus it would be useful in those already infected, and screening would be necessary. The advisory committee recommended routine immunization of girls 11 to 12 years old also it could be used for those of 9 to 10 years old. The vaccine for HPV provide protection which results in important health benefits, but now screening should be continued for women who are already infected.

Hispanic women identified sexual behavior and heredity as two primary causes of cervical cancer. Participants expressed the belief that a cervical cancer diagnosis would likely impact all aspects of women life; in sexual, physical, reproductive, emotional and economic health and well being. They recognized three means of cervical cancer prevention; having regular checkups, pap smear, and being aware of changes in body.

A study about knowledge and attitude towards cervical cancer revealed that 48% has the intention to receive the vaccine, those who refused it been concerned about the safety and efficacy of the vaccine. The results revealed that the intention to take the vaccine is related to the knowledge of HPV.

A study concerned with cervical cancer risk factors and pap smear testing behavior; found that the rate of having a pap smear test was high in 26 to 33 age group, married, secondary school graduate, inhabitant of large cities, those with medium and high income. On knowledge about cervical cancer it was found that those who had the test had accurate knowledge on cervical cancer risk factors, and knowledge that not only women with risk factors should be tested but also who are sexually active.

Knowledge of cervical cancer among Malaysian women who never had a pap smear test was very poor, while those who knew it were not aware of the methods of prevention .some perceive it a disease with no cure. Younger respondents had little knowledge of pap smear test role in early detection in contrast to older married women.

A research done in Thailand found that 92.4% knew that common symptoms include post coital bleeding, inter menstrual bleeding, and abnormal blood stained vaginal discharge. About 81.8% knew that HPV is the cause of cervical cancer.54.9% knew that pap smear test is needed after reaching sexually active age. About 6% thought they have no risk, 24.8% a moderate risk, 4.5% have high risk. Regarding practices; 56.4% underwent pap smear every year, 52.6% had a single partner, 20.3% required condom use, 18% practiced abstinence.

In Saudi Arabia 67.4% were aware of the pap smear test, 14.4% aware that HPV causes cervical cancer, and 9.8% aware of HPV vaccination.

Regarding barriers towards cervical cancer screening among young women in Malaysia; The most common barrier was that pap smear make them worry, followed by no encouragement or information from health care worker, the least common was no encouragement from the partner.

Knowledge of cervical cancer among women in Qatar was high among those aged 30 to 49 years old, with university degree, were employed, had been married for more than 15 years, had parity more or equal to 4.0ver 80% heard about cervical cancer, about 62.4% believed pap smear can detect cancer before symptoms s said multiple sexual partner, 37.2% said early sexual debuted.

A research done among Kuwaiti women showed that knowledge about pap smear mainly came from gynecologist (76.9%), only 42.3% of them believed that they should take it regularly, and only 35.2% had the test done.

Awareness of cervical cancer among female students in premier college in Kolkata, India revealed that students had a very low level of knowledge for risk factors, it was 3% for multiple sexual partner, 29% said that smoking is arise factor .4% responded that sexual activity is involved as etiology of cervical cancer.

Among Zimbabwean women although 81% has no previous knowledge of a screening test but about 80% expressed positive thought about it after an educational intervention.

A research was done on nurses found that only 42.1% got their knowledge from formal lecture while most of the remainder from mass media and work exposure. The results of this study showed that nurses have god knowledge but the uptake of screening service is poor.

Regarding knowledge of cervical cancer about 22.3% knew from community health workers; which was the largest percent, following medical or nursing staff, while knowledge from the media was 18.7%. The most known risk factor was HPV infection followed by early onset of sexual activity. 58.5% responded that they donor know if it can be prevented.

Knowledge of cervical cancer and screening practice among nurses in Tanzania at a regional hospital found that 38.7% knew that HPV infection causes cervical cancer, 60.6% knew it could be transmitted by sexual intercourse.

# 3. Methodology

This was a descriptive cross sectional study carried out in 2018 among women in sad Abuallele hospital. a sample size of 384 women was selected using simple random sampling with 95% confidence interval and expected prevalence of 0.5.the questionnaire contained questions on demographic factors, knowledge about the symptoms, screening and prevention, and about the risk factors associated with cervical cancer. the questions were simple, composed of

Volume 9 Issue 8, August 2020

www.ijsr.net

<u>Licensed Under Creative Commons Attribution CC BY</u>

ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

open and close ended questions. The aims of the study were explained to the women and were asked for consent to fill the questionnaire, which was self administered and interview. Those who consented were part of the study.

## Study design:

Cross sectional hospital based study design.

## Study area:

Sad Abuallele hospital, Mohammed named street, Khartoum, Sudan

# **Study population:**

- Inclusion criteria: Women between 20 to 50 years of age.
- Exclusion criteria: Women diagnosed with cervical cancer.

Sampling by simple random sampling.

# Data collection technique

Technique

- 1) Structured questionnaire
- 2) Interviewing.

#### **Tools**

Questionnaire containing both open ended and close ended questions.

## **Data Analysis**

The data was analyzed using the spas version statistics 21.Chi square test was used to find the association between the variables.

#### 4. Results

Three hundred and eighty four women completed the questionnaire. The mean age was 35.69 with 7.335 standard deviation. 9.4% of women were illiterate, most of them (39.1%) completed secondary school, 30.7% had a university degree and above while 18.2% finished primary school, and only 2.6% finished middle school

## **Knowledge on Cervical Cancer**

It was found that only 4.7% knew about cervical cancer and most of them knew this information from social media .they were also asked about risk factors for cervical cancer such as multiple sexual partners, early age of first sexual intercourse, infection with HPV and so on.

**Table 4.1:** Knowledge of women about cervical cancer in sadAbualee (n=384)

	Frequency	Percent		
Yes	18	4.7%		
No	366	95.3%		
Total	384	100.0%		

**Table 4.2:** Source of information regarding knowledge about cervical cancer among women in sadAbuallele hospital

	Frequency	Percent
TV	6	1.6 %
Social media	12	3.1%
I never heard of cervical cancer	366	95.3%
Total	384	100.0%

**Table 4.2:** Knowledge about risk factors of cervical cancer in sadAbuazalea

	Response	
	Number	Percentage
Early age of first sexual intercourse	18	25.0%
Multiple sexual partners	8	11.1%
Infection with HPV	6	8.3%
Smoking	14	19.4%
Inheritance	14	19.4%
Immunodeficiency	12	16.7%
Total	72	100.0%

## **Knowledge on screening and prevention:**

Women were asked about the prevention of cervical cancer, 4.2% of them reported that it can be prevented, of those 3.6% said that it can be detected early.

**Table 4.4:** Knowledge about cervical cancer prevention in sadAbuallele

	Frequency	Percent
Yes	16	4.2%
No	2	0.5%
Never heard of cervical cancer	366	95.3%
total	384	100.0%

**Table 4.5:** Knowledge about early detection of cervical cancer among women in sadAbuallele hospital

	Frequency	Percent
Yes	14	3.6%
No	4	1.0%
Never heard of it	366	95.3%
Total	384	100.0%

**Table 4.6:** Knowledge about the methods of cervical cancer prevention among women in sadAbualee hospital

	Frequency	Percent
Early detection	6	1.6%
Vaccination	2	0.5%
Drug intake	6	1.6%
I donor know	4	1.0%
Never heard of cervical cancer	366	95.3%
Total	384	100.0%

2.6% of those who knew cervical cancer responded that HPV is the cause.

 Table 4.7: Knowledge about the causes of cervical cancer

	Frequency	Percent
HPV	10	2.6
Fungi	2	0.5
I donor know	6	1.6
Never heard of cervical cancer	366	95.3
Total	384	100.0

Abnormal vaginal bleeding achieved the highest percentage in signs and symptoms knowledge (25.9%), followed by pain during sex (22.2%), and the least was bleeding after sex (14.8%).

Volume 9 Issue 8, August 2020

www.ijsr.net

<u>Licensed Under Creative Commons Attribution CC BY</u>

ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

**Table 4.8:** Knowledge about the signs and symptoms of cervical cancer

	Responses	
	Number	Percent
Vaginal bleeding bet. Menstrual cycle and another or after menopause	10	18.5
Pain in pelvis	10	18.5
Abnormal vaginal bleeding	14	25.9
Pain during sex	12	22.2
Bleeding after sex	8	14.8
Total	54	100.0

**Relations: Tables 4.9** 

**Table 4.9.1:** Relation between daily expenditure and the level of knowledge about cervical cancer

		Daily expenditure		Total
		Less than 250	More than 250	18
Have you	<b>V</b>	Count :6	12	4.70/
ever heard	Yes	Of total:1.6%%	3.1%	4.7%
of cervical	No	158	208	366
cancer	No	41.1%	54.2%	95.3%
Total	count	164	200	384
	%	42.7	57.3%	100.0%

**Table 4.9.2:** Relation between age groups and the level of knowledge about cervical cancer

		Age group		Total	
		20 to 30	31 to 40	41 to 50	Total
Have you ever heard of cervical cancer	Yes	Count:12	6	0	18
		% of total:3.1%	1.6%	0.0%	4.7%
	No	Count:98	154	114	366
	NO	% of total:25.5%	40.1%	29.7%	95.3%
Total		Count:110	160	114	384
Total		%:28.6%	41.7%	29.7%	100.0%

## 5. Discussion

The study revealed the lack of knowledge about cervical cancer with 95.3% never heard of it, and only 4.7% heard about cervical cancer. Of those who knew about cervical cancer only 1.6% heard about it from television, while the rest knew about it from social media (3.1%). A study was done in South Africa showed about 42.9% have knowledge about cervical cancer (14). There should be a practice toward improving knowledge about cervical cancer; with the highest knowledge being acquired through social media it should be targeted as a method to improve knowledge about cervical cancer.

Of those who heard about cervical cancer 4.2% responded that it can be prevented, 1.6% of them believed that early detection is a method of prevention, 0.5% responded that vaccine prevent it, 1.6% said that drugs could be used for prevention, and only 1% did not know the method of prevention. The remainder of those who knew cervical cancer said it cannot be prevented (0.5%). In Saudi Arabia 67.4% were aware of the pap smear test, 14.4% aware that HPV causes cervical cancer (7).

About 3.6% responded that cervical cancer can be detected early, only 1% said no. a study done in Malaysia revealed that women were not aware of pap smear test for early detection and some even though it is used only for

symptomatic patients (5). Women should be educated about the fact that cervical cancer can be detected early and about methods of prevention.

The results shows that a large percentage of those who heard about cervical cancer responded that HPV is the cause (2.6%), but a larger percentage never heard of neither cervical cancer nor the cause.

Regarding the signs and symptoms, a large proportion of women responded to abnormal vaginal bleeding (25.9%), followed by pain during sex (22.2%), vaginal bleeding between one menstrual cycle and another or after (18.5%), pain in pelvis (18.5%), and bleeding after sex (14.8%). Hispanic women identified sexual behavior and heredity as two primary causes of cervical cancer (2).

Regarding risk factors the most known was early age of first sexual intercourse with 28.05%, followed by smoking and inheritance (19.4% each), immunodeficiency (16.7%), multiple sexual partners with 11.1%, and the least percentage was infection with HPV (8.3%).

The study found that the younger ages between 20 to 30 years old constituted 3.1% off those heard of cervical cancer, and 1.6% were 31 to 40 years old. A study done in Qatar found that knowledge was high among women aged 30 to 49 years of age (9).

# 6. Conclusion

The study shows the low knowledge about cervical cancer, as well as about prevention and screening among women, with poor knowledge of signs and symptoms with the most known being abnormal vaginal bleeding. As noticed, the younger age women heard more of cervical cancer. There must be a trend toward raising awareness about cervical cancer through campaigns or more through social media as it has the highest percentage as a source of knowledge.

# References

- [1] Marc Arbyn, Joaim Diller. Review of the current knowledge on HPV vaccination: An appendix to the European guidelines for quality assurance in cervical cancer, journal of clinical virology, 2007.
- [2] Jan Gaylord, Julie Baum, Veronica. HPV and cervical cancer testing and prevention; Knowledge, attitude and beliefs among Hispanic women, qualitative health research, 10, 2008, VOL 10.
- [3] Li ping Wong, chin Sam. Ethnically diverse female university students, knowledge and attitude toward HPV, HPV vaccination and cervical cancer, European journal of obstetrics and gynecology and reproductive biology, 2009.
- [4] Aynur Uysal, Aylin Birsel. knowledge about cervical cancer risk factors and pap testing behavior among Turkish women, Asian pacific journal of cancer prevention, 2009, Vole 10.
- [5] Wong L pawingLolo W Y, khoo E M, Suhaib R. knowledge and awareness of cervical cancer and screening among Malaysian women who never had a

Volume 9 Issue 8, August 2020

www.ijsr.net

<u>Licensed Under Creative Commons Attribution CC BY</u>

ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

	pap smear: a qualitative study, Singapore Med J, 2009,	3000 and more
[6]	50(1):49. Pasut Nganwai, Prapapan Truadpon, Chlwat Inpa, Bunroek Sangpetngam, Monsicha Mekjaranapa,	5) Have you heard about cervical cancer  ☐ Yes ☐ No
	Angkor Apirakan, Bandit Chumworathayi. Knowledge, attitude and practice vies a vies cervical	6) In case you answer, Don't stop here.
[7]	cancer among registered nurses at the faculty of medicine, Khon Kean university Thailand, Asian pacific journal of cancer preevention, 2007, VOL 8. Khalid H. Sait. Attitude, knowledge, and practice in relation to cervical cancer and its screening among	7) Where did you hear about it?  Books Internet Friends Family Any medical staff health convoys Social Media Other
	women in Saudi Arabia, Saudi Med J 2009, volume 30(9).	8) What practices do you think are causative, mark in front
[8]	Redhwan Ahmed Alnaggar. Knowledge and barriers towards cervical cancer screening among young women in Malaysia, Asian pacific journal of cancer prevention, vol.11, 2010.	of the practice that you consider to be causative:  Early age in first intercourse  Having more than one sexual partner  HPV infection Smoking
[9]	F. M. Al MEER, M. T. ASEEL, J.ALKHALAF, M.G.AL KUWARI AND M.F.S Ismail. Knowledge,	Genetics Immunodeficiency Other
	attitude and practice regarding cervical cancer and screening among women visiting primary health care	9) Can you prevent cervical cancer \( \subseteq \text{Yes} \subseteq \text{No} \)
	in Qatar, East Mediterranean health journal, NO.11.2011, VOL 17.	10)If you answer no, don't answer question
[10]	Mona Alsairfi, Farida A. Mohammed. Knowledge, attitude and practice related to cervical cancer	Can you detect cervical cancer early: Yes No
	screening among Kuwaiti women, Med princepact 2009.	What are the methods of prevention? ☐ Early detection ☐ I don't know ☐ other Select
[11]	A.Saha, A Nag Chaudhury, P Bhowmik, R Chatterjee. Awareness of cervical cancer among female students	بسم الله لرحمن الرحيم
	of premier colleges in Kolkata, India, Asian pacific journal of cancer prevention, vol. 11, 2010.	جامعة الخرطوم كلية الطب قسم طب المجتمع
[12]	Sylvia C. Mumped, Carolyn M.sampselle, and Timothy Johnson. Knowledge, Attitude and	معرفة النساء عن سرطان عنق الرحم بمستشفى سعد ابو العلا, اكتوبر 2018
	demographic factors influencing cervical cancer screening behavior of Zimbabwean women, journal of women health, NO.6, 2011, VOL 20	المعلومات سرية و لاغراض البحث فقط, ادا كنت توافقين على الدراسة الرجاء الاجابة: 1. نعم. 2. لا.
[13]	G. O. Udigwe. Knowledge, attitude and practice of cervical cancer screening (pap smear) among female nurses in Nnewi, Nigeria, Nigerian journal of clinical	رقم التعريف:
[14]	practice, June 2006, VOL 9(1):40, 43. E.hoque and M toque. Knowledge and attitude towards	1.العمر:
[]	cervical cancer among female university students in south Africa, south far J Epidemiology infect, 2009, VOL 24(1).	امي او خلوة. 2.ابندائي2.المستوى التعليمي: 1 3.اوسط. 4.ثانوي. 4.جامعي او فوق الجامعي. 3. المنصرف اليومي :
[15]	Sara M, Dari E. Knowledge of cervical cancer and screening practice of nurses at a regional hospital in Tanzania, African health science, 2011, VOL 11.	4. الدخل المعيشي في الشهر: ا. اقل من 1000 جنيه. 2. 1000 الى اقل من 4. الدخل المعيشي في الشهر: 1. 2000 الى اقل من 3000 جنيه. 4. 3000 فاكثر.
Ann		<ol> <li>قل سمعت عن سرطان عنق الرحم: ا. نعم. 2. لا. في حالة الاجابة بلا توقفي هنا.</li> </ol>
	ge	<ol> <li>من اين سمعت عنه: ا.التلفاز. 2.الكتب. 3.الانترنت. 4.الاصدقاء أو العائلة.</li> </ol>
2) E	ducational level  Primary	<ol> <li>5.اي كادر طبي 6.القوافل الصحية 7.وسائل التواصل الاجتماعي</li> <li>8.اخرى:حددي</li> </ol>
	Middle Secondary University	6.ما هو المسبب لسرطان عنق الرحم: افيروس الورم الحليمي البشري. 2.البكتريا. 3.الفطريات. 4.لا اعرف. 5. اخرى:حددي
3) D	eaily discharge:	7. ماهي العلامات والاعراض المصاحبة له: ضعي علامة ( ) امام الاعراض والعلامات التي تعتقدين انها مصاحبة للمرض:
	iving income per month  Less than 1000 pounds  1000 to less than 2000 pounds  2000 to less than 3000 pounds	والعلامات التي تعلقين الها مصاحبة المرض:  ا. النزيف من المهبل بين كل دورة شهرية واخرى او بعد انقطاع الطمث ()  2. ألم في الحوض ()  3. وجود افرازات مهبلية ()  4. ألم أثناء الجماع ()

Volume 9 Issue 8, August 2020

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

702

Paper ID: SR20810172257 DOI: 10.21275/SR20810172257

ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

Volume 9 Issue 8, August 2020 www.ijsr.net

Licensed Under Creative Commons Attribution CC BY