

Knowledge, Attitude and Practice Pattern of Nurses of Tertiary Care Hospitals Regarding Cervical Cancer, its Screening and Prevention

Rubina Hafeez¹, Fouzia Perveen², Shehla Naeem Zafer¹

ABSTRACT

Objective: To assess the knowledge, attitude and practice pattern regarding cervical cancer, its screening and prevention among registered nurses from tertiary care hospitals.

Methods: A descriptive cross sectional study was conducted with convenient sampling technique to assess the knowledge, attitude and practice regarding cervical cancer its screening and prevention among registered nurses from 15th January to 15th July 2016. Over all 129 nurses who had already completed their nursing training and willing to participate in the study were enrolled. A self structured pretested questionnaire was used to assess their existing knowledge, attitude and practices regarding prevention and screening of cervical cancer. For each correct answer score 1 marks was given. The findings of the study were developed in frequencies and percentages of each variable.

Results: The overall mean scores of the knowledge regarding cervical cancer, its screening and prevention among registered nurses was 5.19 ± 3.69 out of 14 score. The attitude of the nurses regarding cervical cancer, its screening and prevention was poor as mean attitude was 2.88 ± 1.44 out of 8 score. Similarly practicing pattern was also assessed which was found very poor as mean was just 1.35 ± 0.95 out of 4 score.

Conclusion: Overall knowledge of the nurses regarding cervical cancer, its screening and prevention did not found up to the required standard. The attitude and practice pattern was found much lesser as compare to knowledge, which shows that continuous education is required to upgrade these for prevention of the cervical cancer.

Key words: Prevention, Screening, Cervical cancer, Knowledge, Practice, Pap smear.

How to cite this article: Hafeez R, Perveen F, Zafer SN. Knowledge, attitude and practice pattern of nurses of tertiary care hospitals regarding cervical cancer, its screening and prevention. J Dow Health Sci 2018; 12 (1): 24-28.

INTRODUCTION

Amongst the major health problems, cervical cancer is one which is major cause of death in women.¹ It is 4th common cancer in females, and it is mostly caused by human papilloma virus (HPV). The cervical cancer is linked with genital infection with HPV. The HPV infections are transfer through sexual contracts. According to World Health Organization (WHO), in 2012, 2,66,000 deaths occur due to cervical cancer. The incidence rate of this problem is 5,28,000 in 2012. Out of the total burden of the disease, 85% counted from the under developed countries.²

The associated risk factor of cervical cancer is HPV infection. The major problem in identify the HPV infection is that it has no symptoms, however constant genital HPV infection is found to be the most common cause of cervical cancer among women of reproductive age.² According to a study, the most common risk factor is reported as multi-parity and unsafe sexual practice.³ According to WHO recognized vaccines, there are two vaccines available in the market worldwide which can prevent the cervical cancer.¹

The knowledge about the disease is very low in common women due to which the use of preventive vaccine is very rare.⁴ The knowledge in female health care workers were found much better but that is where it is teaches as subject also. Different studies reported different figures of knowledge 23% to 94% regarding pap smear in female healthcare workers.⁵⁻⁷

In other studies conducted in Nigeria and India,⁸⁻¹⁰ in general women and nursing student, the knowledge for cervical cancer or HPV was found much low as compared to others.

1. Institute of Nursing, Dow University of Health Sciences, Ojha Campus, Karachi, Pakistan.

2. Obstetrics and Gynecology Department, Dow Medical College, Dow University of Health Sciences, Karachi, Pakistan.

Correspondence: Ms. Rubina Hafeez, Assistant Professor, Institute of Nursing, Dow University of Health Sciences, Ojha Campus, Karachi, Pakistan.

E-mail: rubinahafeez207@gmail.com

Due to such a diversified knowledge figures, there is a need to assess it in our own health care workers specially nurses who are commonly help in treating the cervical cancer patients. This study was developed to assess the knowledge, attitude and practice pattern of the nurses regarding cervical cancer and its screening and prevention among registered nurses from tertiary care hospitals.

METHODS

A descriptive cross sectional study was conducted with consecutive sampling technique to assess the knowledge, attitude and practice regarding cervical cancer, its screening and prevention among registered nurses from 15th January 2016 to 15th July 2016. Over all 129 nurses who had already completed their nursing training and willing to participate in the study were enrolled. A self structured pretested questionnaire was used to assess their existing knowledge, attitude and practices regarding prevention and screening of cervical cancer. In Questionnaire, we took 14 questions of knowledge, 3 questions for attitude and 4 questions for practice of cervical cancer and each correct answer of question gave one score.

The findings of the study were developed in frequencies and percentages of each variable. Mean and standard deviation were calculated for all continuous variables like, age and work experience.

Prior approval was obtained from Institutional Review Board.(IRB.677/DUHS/Approval/2016/ 148).

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2008. Informed consent was obtained from all patients for being included in the study.

RESULTS

A total of 129 nurses were included in this study. Majority of nurses (80/129 i.e. 62.0%) were between 25-35 years of age and the mean age of the participants were 34.2 ± 3.8 years. Majority of them (54.3%) were married. Out of the participated nurses 53.4% had 1-5 years' work experience followed by 28.7% having more than 10 years of experience. (Table 1)

Knowledge of nurses for cervical cancer, its screening and prevention was determined through 14 questions. According to analysis of the data, only 36.4% know which age group is most commonly involved in cervical cancer. Only 14.0% nurses knew that HPV infection is necessary in development of cervical cancer. However majority (84.5%) know what treatment is available in

Pakistan. Cervical cancer screening test was not known by majority (62.8%) of the nurses. Similarly, majority of the nurses (71.3%) did not know the most common sign and symptoms of cervical cancer.

Table1: Demographic characteristics of study participants

Demographic characteristics	n (%)
Age	
25-35 years	80(62.0)
36-45 years	21(16.3)
>45 years	28(21.7)
Nursing education	
Nursing diploma	83(64.3)
Diploma with midwife	21(16.3)
BScN	25(19.4)
Marital status	
Unmarried	59(45.7)
Married	70(54.3)
Number of children	
0 children	23(32.9)
1-2 children	31(44.3)
>2 children	16(22.8)
Working organization	
Civil Hospital	68(52.7)
Dow hospital	61(47.3)
Work experience	
1-5 years	69(53.4)
6-10 years	23(17.8)
>10 years	37(28.7)
Monthly income	
Up to Rs. 30,000	68(52.7)
30,001-50,000	24(18.6)
>50,000	37(28.7)

Only 8.5% nurses knew that if a woman is having abnormal vaginal bleeding with pain, she should not send for cervical screening. Very few nurses (10.9%) knew the correct interval for screening of cervical cancer. Only 38.8% nurses have the correct knowledge about who should be screened for cervical cancer. Regarding any vaccine available for cervical cancer was known by only 18.8% nurses. (Table 2)

Attitude of the nurses regarding getting further information for cervical cancer was very positive as 97.7% nurses needs it. However when asked question to nurses "who can provide cervical screening knowledge to the patient?" about 39.5% reported that no one of the consultant, resident Medical Officer (RMO), Lady Health Visitor (LHV) or nurses can provide it. They think that experts of medical educationalist can do it in better way. Similarly, majority of the nurses (65.1%) did not routinely ask to patients whether they screened for cervical cancer or not. (Table 3)

Table 2: Knowledge Pattern Regarding Cervical Cancer Among Registered Nurses

Knowledge	n(%)
Age group is most commonly involved in cervical cancer	47(36.4)
Infection is involved in development of cervical cancer - HPV	18(14.0)
Treatment of cervical cancer - Chemotherapy - Radiotherapy - Depends on stage of disease - Surgery	27(20.9) 4(3.1) 57(44.2) 21(16.3)
Screening test is available for cervical cancer - Human Papillomavirus (HPV)/ Visual Inspection with Acetic acid (VIA)/ Colposcopy	48(37.2)
All women need cervical screening - Depends on age	35(27.1)
Recommended age for cervical cancer screening - All women age 21 years or within 3 years of becoming sexually active	35(27.1)
Women not recommended for cervical screening test - After total hysterectomy with history of prior normal result	46(35.7)
Most common sign and symptoms of cervical cancer - Post coital vaginal bleeding and Pelvic pain - Unusual vaginal bleeding - Increased urinary frequency - Without any symptom	64(49.6) 69(53.5) 107(82.9) 114(88.4)
Woman with abnormal vaginal bleeding and pain, need cervical screening - Screening is for women without symptoms, must see to GP	11(8.5)
Recommended interval for screening of cervical cancer - 3 years	14(10.9%)
Women should screened for cervical cancer - All sexual active women	50(38.8)
Vaccine available for cervical cancer - Yes	24(18.6)
Cervical cancer is a disease of public health concern - Yes	69(53.5)
Cervical cancer is common problem - Very common	25(19.4)

Showed correct answer only

Table 3: Attitude Pattern Regarding Cervical Cancer Among Registered Nurses

Attitude	n(%)
Interested in obtaining more information regarding Cervical Cancer - Yes	126(97.7)
Who can provide cervical screening knowledge to the patient - Consultant - RMOs - LHVs - Nurses	21(16.3) 58(45.0) 68(52.7) 53(41.1)
Ask routinely to patients for screening cervical cancer - Yes	45(34.9)

Table 4: Practice Pattern Regarding Cervical Cancer Among Registered Nurses

Practice	n(%)
Discussed screening methods for cervical cancer with client - Yes	43(33.3)
Referred to patients for cervical screening - Yes	27(20.9)
Comfort to provide cervical cancer screening knowledge to clients - Yes	27(20.9)
Screened for cervical cancer - Yes	12(9.3)

According to study objectives, we have also collected the data on practicing patterns of the nurses. Only 33.3% nurses have ever discussed any screening methods for cervical cancer with their clients. Similarly very few (20.9% each) have ever referred any patient for cervical cancer or provide screening knowledge to their clients. Only 9.3% nurses have ever been screened themselves for cervical cancer by screening test. (Table 4)

According to the findings, mean knowledge of nurses participated in the study was 5.19 ± 3.69 . The attitude of the nurses towards cervical cancer, its screening and prevention was poor as mean attitude was 2.88 ± 1.44 . Similarly practicing pattern was also assessed which was found very poor as mean was just 1.35 ± 0.95 . (Figure 1)

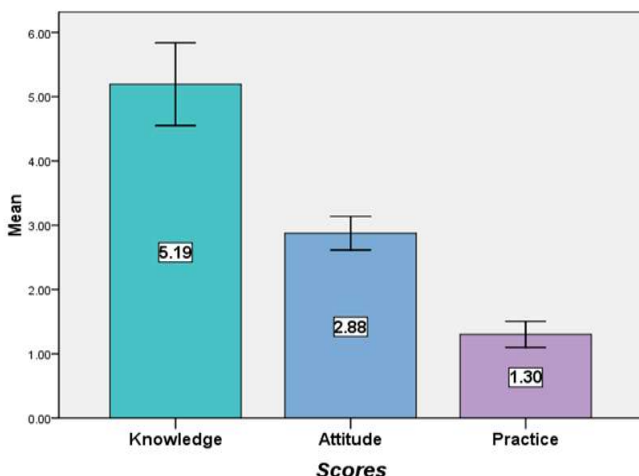


Figure 1: Mean Knowledge, Attitude and Practice Scores About Cervical Cancer

Its screening and prevention among participated registered nurses also showed that knowledge was not up to the standard requires to nurses. It was also shown that in comparison to knowledge the attitude and practice of cervical cancer, its screening and prevention is very low.

DISCUSSION

Amongst the major health problems, cervical cancer is one which is major cause of death in women.

According to a study¹, 34.88% of the participants regarding knowledge of cervical cancer were between 41-50 years of age, whereas majority 67.9% was married. In our study, it is not matched as majority of enrolled nurses (62.0%) were between 25-35 years of age followed by >45years of age (21.7%). The mean age of the participants was 34.2 ± 3.8 years and majority of them (54.3%) were married.

In a study¹¹, 47% of respondents knew that HPV infection is a necessary cause of cervical cancer. In our study very low percentage of nurses (14.0%) knew that HPV infection is necessary in development of cervical cancer. However majority (84.5%) know that its treatment is available in Pakistan.

According to a study⁶, the self practicing of Pap test was found very low as only 26.4% of the study subjects had a Pap test and the most common reason 31% was not practicing it was absence of disease symptoms. In another study⁵, it was reported that 23.3% of the female respondent health workers had done the test previously. In studies conducted in Ethiopia, China, South Africa and Turkey, all participants (98.1%) had not received HPV vaccination.^{12,13-15} In another study it was noted that none of the respondent had undergone a pap smear test themselves.¹² In our study also, only 9.3% nurses have ever been screened themselves for cervical screening test.

According to a study⁴, overall knowledge of cervical cancer in nurses was 23% based on scoring. In different studies⁵⁻⁷, it was found between 23-94%. In our study the nurses over all knowledge was found poor and attitude regarding cervical cancer, its screening and prevention was very much low.

In studies conducted in India,^{4,16,17} 79% of the respondents had knowledge about screening methods for cervical cancer. In our study, it was found much lesser as only 37.2% nurses know about the correct method of screening for cervical cancer.

In a study¹, most of participants (35.78%) think that HPV infection is a major risk factor for cervical cancer. In another study³, it was reported that multi-parity and

unsafe sexual practice was mostly risk factors (29.1% and 21.8% respectively). In our study the correct knowledge of nurses regarding cervical cancer was 53.3% and they think it is a disease of public health concern.

In studies^{4,6} conducted in India, 89.6% and 89% of the study subjects respectively, had favorable attitude towards Pap test and vaccination. In our study, attitude of the nurses regarding getting further information for cervical cancer was very positive as 97.7% nurses needs it. In our study, the name of screen test for it is not known by majority (62.8%) of nurses.

CONCLUSION

Overall knowledge of the nurses regarding cervical cancer, its screening and prevention did not found up to the required standard. The attitude and practice pattern was found much lesser as compare to knowledge which shows that continuous education is required to upgrade these for prevention of the cervical cancer.

Acknowledgment: The authors would like to thanks, Dow University of Health Sciences & Civil Hospital, Karachi for their general support.

Conflict of interest: All authors disclose any financial and personal relationships with other people or organization that could inappropriately influence their work.

REFERENCES

1. Mahajan SM, Jadhay VS, Magare AR, Adchitre SA, Salve SB. Awareness and screening practices of cervical cancer among nursing staff working in tertiary care hospital, *Int J Community Med Public Health* 2017; 4:3590-5.
2. World Health Organization 2016. Human papillomavirus (HPV). Accessed April 20, 2016, from <http://www.who.int/immunization/diseases/hpv/en/>
3. Razzaq S, Sayed SA, Ali SA. Knowledge and Awareness Regarding Cervical Cancer and Uptake of Pap Smear among Women in Karachi, Pakistan. *EC Gynecology* 2017; 4:154-61.
4. Pegu B, Dhiman N, Chaturvedi J, Sharma SK. Nurse's knowledge and attitude regarding cervical cancer screening at a tertiary care hospital, *Int J Reprod Contracept Obstet Gynecol* 2017; 6:907-10.
5. Bakari M, Takai IU, Bukar M. Awareness and utilization of Papanicolaou smear among health care workers in Maiduguri, Nigeria. *Niger J Basic Clin Sci* 2015; 12:34-8.
6. Swapnajaswanth M, Suman G, Suryanarayana SP, Murthy NS. Perception and practices on screening and vaccination for carcinoma cervix among female healthcare professional in tertiary care hospitals in Bangalore, India. *Asian Pac J Cancer* 2014; 15:6095-8.
7. Ali SF, Ayub S, Manzoor NF, Azim S, Afif M, Akhtar N, et al. Knowledge and awareness about cervical cancer and its prevention amongst interns and nursing staff in tertiary care hospitals in Karachi, Pakistan. *PLoS One* 2010; 5:e11059.
8. Adeleke NA, Komolafe JA. Knowledge, attitude and practice of cervical cancer screening among women of reproductive age group in Osogbo, south western Nigeria. *Sex Health Matters* 2007; 8:70-3.
9. Basu P, Chowdhury D. Cervical cancer screening & HPV vaccination: a comprehensive approach to cervical cancer control. *Indian J Med Res* 2009; 130:241-6.
10. Poonam R, Naik, K, Nagaraj, Nirgude AS. Awareness of cervical cancer and effectiveness of educational intervention programme among nursing students in a rural area of Andhra Pradesh. *Healthline* 2012;3:41-5.
11. Nilsen K, Aasland G, Klouman E. The HPV vaccine: knowledge and attitudes among public health nurses and general practitioners in Northern Norway after introduction of the vaccine in the school-based vaccination programme 2017; 35:387-95.
12. Dulla D, Daka D, Wakgari N. Knowledge about cervical cancer screening and its practice among female health care workers in southern Ethiopia: a cross-sectional study. *Int J Women Health* 2017; 9:365-72.
13. Bal-Yilmaz H, Koniak-griffin D. Knowledge, Behaviors, and Attitudes About Human Papilloma Virus Among Nursing Students in Izmir, Turkey. *J Cancer Edu* 2017, 32:1-7.
14. Gu C, Chan CW, Twinn S. How sexual history and knowledge of cervical cancer and screening influence Chinese women's screening behavior in mainland China. *Cancer Nurs* 2010; 33:445-53.
15. Ackerson K. Personal influences that affect motivation in Pap smear testing among African American women. *J Obstet Gynecol Neonatal Nurs* 2010; 39:136-46.
16. Dhodapkar SB, Chauhan RC, Thampy S. Knowledge and awareness of cervical cancer and its prevention among nursing staff of a tertiary care teaching institute in South India. *Int J Reprod Contracept Obstet Gynecol* 2014; 3:1056-60.
17. Chawla PC, Chawla A, Chaudhary S. Knowledge, attitude & practice on human papillomavirus vaccination: A cross-sectional study among healthcare providers. 2016; 144:741-9.

