KNOWLEDGE AND ATTITUDE REGARDING CERVICAL CANCER SCREENING IN WOMEN ATTENDING OBSTETRICS AND GYNAECOLOGICAL OPD AT BIRAT MEDICAL COLLEGE TEACHING HOSPITAL

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ABSTRACT

Introduction

Cervical cancer is the most common Gynaecological cancer in Nepal which is preventable if appropriate screening and prevention measures are employed. Considerable reduction in cervical cancer incidence and cervical cancer-related deaths can be achieved by effective screening. However, lack of knowledge and awareness can result in underutilization of the preventive measures.

Objectives

The objective of this study was to assess the knowledge and attitude regarding cervical cancer screening in women visiting Obstetrics and Gynaecology OPD at tertiary care Hospital in Eastern Nepal.

Methodology

A cross-sectional questionnaire-based study was conducted in Obstetrics and Gynaecology outpatient department of Birat Medical College Teaching Hospital from 1 January 2019 to 31 December 2019. Women were enrolled in the study by convenient sampling methods. Structured questionnaire was used to collect the data. The collected data was entered in Microsoft excel and analyzed by using SPSS version 22.

Results

Among 374 participants, the mean age was 31.13 years. More than three fourth (89.6%) of participants were literate. Regarding occupation, 89.8% of participants were housewives, and 82.9 % of participants were married. As per the findings, only 43.27 % of participants i.e. less than the mean, had adequate knowledge of cervical cancer and its screening. 65.50 % of participants had a negative attitude towards cervical cancer screening. Literate participants had good knowledge and positive attitude regarding cervical cancer screening than illiterate participants (P value less than 0.05).

Conclusion

Considerable proportions of participants had inadequate knowledge and negative attitude regarding cervical cancer screening in Gynaecological patients visiting tertiary care Hospital in Eastern Nepal.

KEYWORDS

Cervical cancer, knowledge, screening

INTRODUCTION

Cervical cancer is the fourth most common cancer in women. Worldwide 570 000 women were diagnosed with cervical cancer and about 311 000 women died from cervical cancer, in 2018.[1] About 2,942 new cervical cancer cases are diagnosed annually in Nepal and it is most common Gynaecological cancer in women aged 15 to 44 years in Nepal.[2] The risk factors of developing cervical cancer are human papillomavirus (HPV), low socio-economic status, smoking, marrying before age 18 years, Young age at first intercourse, multiple sexual partners, spouse of multiple sexual partners, and multiparas.[3] Cervical cancer is largely preventable by effective screening programs and vaccination against human papillomavirus. Cervical cancer incidence and deaths have declined significantly in developed countries with systematic cytological smear screening programs such as Papanicolaou test.[4,5] This test allows cervical lesions to be detected before they become cancerous, and thereby helps to reduce the incidence of cervical cancer. Early detection of cervical cancer is crucial for a country like Nepal where treatment services such as surgery, chemotherapy and radiotherapy are frequently unavailable for advanced cervical cancer. Although the situation in Nepal is mostly unknown, particularly due to scarcity of the epidemiological data. Almost 90% of cervical cancer could be prevented if all women were offered and complied with high-quality cytological screening programs.[6] Cervical cancer screening coverage rates is very low (2.4 %) in Nepal.[7] The low coverage of cervical cancer screening in Nepal may be related to a variety of factors, including low socioeconomic status, low literacy and cultural barriers. The lack of awareness regarding cervical cancer in the population lead to underutilization of screening programs. Due to lack of routine screening of cervical cancer, women often seek care when they develop symptoms, often at an advanced stage of cervical cancer. Asymptomatic women are unconcerned with screening of cervical cancer. [8,9] Sherpa et al highlighted a lack of knowledge regarding the preventive role of screening of cervical cancer.[10] Therefore, this study was conducted with the aim to gather information regarding the knowledge and attitude regarding cervical cancer screening in women visiting the tertiary care Hospital in Eastern Nepal.

METHODOLOGY

A cross-sectional questionnaire-based study was conducted in Obstetrics and Gynaecology outpatient Department of Birat Medical College Teaching Hospital from 1st January 2019 to 31st December 2019. Ethical clearance was taken from the Institutional Review Committee of Birat Medical College Teaching Hospital. The Purposive sampling technique was used for data collection. The participants were explained about the aim of study and Informed consent was taken prior to enrolling in the study. Only those women who had given consent and aged more than or equal to 18 years were enrolled in the study. The women who were chronically ill, uncooperative, could not speak, read and write, women aged less than 18 years of age, women coming for obstetric checkups in the OPD and women with psychiatric problems were excluded from the study. Structured questionnaire was prepared with various questions regarding the socio-demographic profile of participants and questions to assess the knowledge about cervical cancer and attitude regarding cervical cancer screening. Face to face interview was held with the patients by the researcher himself using a preformed questionnaire. Confidentiality was maintained throughout the study. In order to assess the knowledge of participants about cervical cancer and its screening, there were twenty questions in the questionnaire which determined the level of knowledge of participants regarding cervical cancer and its screening. Each correct answer was given 1 score and 0 score for incorrect answer. The score was categorized as adequate knowledge (score of ≥ 50%) and inadequate knowledge (score of < 50%). Attitude was assessed by using a five-point Likert scale ranging from strongly agree to strongly disagree containing eleven questions in the questionnaire which determine the attitude of participants regarding cervical cancer screening. The score was categorized as positive attitude (score of ≥ 50%) and negative attitude (score of <50%). The data were collected from 374 participants. The collected data was entered in Microsoft excel and analyzed by using SPSS version 22. Data were presented in frequency, percentage, mean, standard deviations and P value less than 0.05 was considered statistically significant.

RESULTS

There was a total of 374 participants. The socio-demographic profiles of these participants are presented in table 1. The age of the participants was in the range from 18 to 78 years, with mean and standard deviation of 31.13 ± 8.804 years. The majority 88.5 % of participants followed Hindu religion. More than three fourth (89.6 %) of participants were literate among them the majority had a secondary (41.2 %) level of education. Most of the participants (89.8%) were housewives and most (87.2%) were from Indo-Aryan ethnicity and 82.9 % of participants were married.

Table 1: Socio-demographic Profile of the Participants (n = 374)

Frequency	n (%)
Age (years)	
≤ 20	36 (9.62)
21-30	180 (48.12)
31-40	107 (28.60)
41-50	46(12.29)
51 and above	5(1.33)
Ethnicity	
Indo-Aryan	326(87.2)
Tibeto-Burman	48(12.83)
Religion	
Hinduism	331(88.5)
Buddhist	18(4.8)
Muslim	24(6.4)
Christian	1(0.3)
Marital status	
Unmarried	64(17.1)
Married	312(82.9)
Education status	
Illiterate	39(10.4)
Primary	59(15)
Secondary	154(41.2)
Higher secondary	12(29.9)
Bachelor and above	10 (2.7)
Occupation	
Homemaker	336(89.8)
Others	38(10.2)

Knowledge about cervical cancer and its risk factor are shown in table 2. Almost all participants (95.98 %) heard about cancer but only 89.3 % of participants heard about cervical cancer. More than half of participants (57.2%) heard about cervical cancer from health facilities. More than three fourth of participants (80.5 %) knew that Smoking is a risk factor for cervical cancer. Multiple sexual partners are a risk factor for cervical cancer was known to 80.5 % of participants. More than three fourth of participants (77.3 %) knew that Sexually transmitted disease is a risk factor for cervical cancer but only 5 % of participants had knowledge about Human Papilloma Virus as a risk factor for cervical cancer. HIV is a risk factor for cervical cancer was known to 65.8 % of participants. Only 32.4 % of participants had knowledge that the early onset of sexual life was a risk factor for cervical cancer. If any family member had cervical cancer then there is a risk of cervical cancer to other family members was known to 55. 3 % participants. Only 20.1 % of participants had knowledge that an uncircumcised male partner is a risk factor for cervical cancer. OCP is a risk factor for cervical cancer was known to 56.4 % of participants.

Table 2: Knowledge about the risk factor for cervical cancer(n=374)

Variables	Correct responses, n (%)
Smoking	301(80.5)
Multiple sexual partner	301(80.5)
Sexually transmitted disease	289(77.3)
Human papillomavirus (HPV)	19(5.1)
HIV	246(65.8)
Early-onset of sexual life	121(32.4)
Family history of cervical cancer	207 (55.3)
Uncircumcised male	75(20.1)
Use of OCP	211(56.4)
Living with a cervical carcinoma patient	139(37.2)

Table 3 Shows participants knowledge about cervical cancer screening. Early detection is helpful was known to 87.2 % participants and 83.2 % of participants had knowledge that cervical cancer can be cured if detected early. Only 31 % of participants had knowledge that the vaccine is available for the prevention of cervical cancer but none had knowledge regarding the recommended age of vaccination. Only 0.5 % of participants knew the correct age to start screening for cervical cancer and only 0.3 % of participants knew that screening should be done in every 3 years. Cervical cancer can be prevented was known to 73.8 % of participants but 86.1% of participants didn't have knowledge regarding measures of prevention. Some of the symptoms of cervical cancer were known to 95.98 % of participants but 85 % of participants didn't know any detection methods.

Table 3: Knowledge about cervical cancer screening n=374

Variables	Correct responses, n (%)
Do you know that early detection of cervical cancer is helpful?	326(87.2)
Do you think cervica l cancer is curable if detected early?	311(83.2)
Can some be vaccinated against cancer cervix?	116(31)
What is the recommended age for someone to undergo vaccination?	0(0)
At what age should a woman start screening for cervical cancer?	2(0.5)
How frequently someone is screened for cervical cancer?	1(0.3)
Do you think cervical cancer can be prevented?	276(73.8)
Cervical cancer preventive measure	52(13.90)
What are some of the symptoms of cervical cancer that you know?	359(95.98)
Test done to detect cancer cervix?	56(14.97)

Table 4 shows participants' attitude towards cervical cancer screening. Cervical cancer is a very severe disease was agreed by 32.9 % participants. More than half (69.5 %) of participants thought that they are at risk of getting cervical cancer. Only 22.7% of participants thought that Cervical cancer screening is important. About half of (54.2 %) of participants agreed that only women who are sexually active needed cervical cancer screening. Only 18.9 % of participants think that women who have sexually transmitted diseases are more likely to get cervical cancer. Once cervical cancer is found, there is not much that can be done about it, was agreed by 13.6 % of participants. The chance of curing cervical cancer is better if the disease was detected at an early stage was agreed by 32.6 % of participants. women who had cervical cancer have some kind of symptoms showing it was believed by 48.1 % of participants. Cervical cancer runs in families were agreed by 27.3 % of participants. Women only need cervical cancer screening during childbearing age was agreed by 44.2 % of participants.

Table 4: Attitude towards cervical cancer screening (n = 374)

Statements	Positive Attitude (%)
Cervical cancer is very severe disease	32.9
I am at risk of getting cervical cancer	69.5
Cervical cancer screening is important	22.7
Only women who is sexually active need cervica l cancer screening	54.2
Once cervical cancer is found, there is not much that can be done about it	13.6
Chance of curing cervical cancer is better if disease detected at early stage	32.6
Cervical cancer is death sentence for most of the case	12
Women who have cervical cancer have some kind of symptoms showing it	48.1
Cervical cancer runs in families	27.3
Women only need cervical cancer screening during child bearing age	44.2

Table 5 shows Knowledge and attitude regarding cervical cancer and its screening. Only 43.31 %of participants had adequate Knowledge regarding cervical cancer and its screening. Only 34.50 % of participants had a positive attitude regarding cervical cancer screening.

Table 5: Knowledge and attitude regarding cervical cancer and its screening (n = 374)

Knowledge	**Adequate n (%)**	**Inadequate n (%)**
	162 (43.31)	212 (56.69)
Attitude	**Positive n (%)**	**Negative n (%)**
	129(34.50)	245(65.50)

Table 6 shows the association between Knowledge regarding Cervical Cancer and Socio-demographic variable. Knowledge regarding Cervical Cancer was significantly associated with Education, Marital status, Ethnicity and Occupation of participants. (P value was less than 0.05)

Table 6: Association between Knowledge regarding Cervical Cancer and Socio-demographic Variable (n = 374)

Variables	n (%)	P value
Occupation		
Homemaker	336(89.8)	.000
Others	38(10.2)	
Ethnicity		
Indo-Aryan	326(87.2)	.002
Tibeto-Burman	48(12.83)	
Marital status		
Unmarried	64(17.1)	.000
Married	310(82.9)	
Religion		
Hinduism	331(88.5)	.241
Buddhist	18(4.8)	
Muslim	24(6.4)	
Christian	1(0.3)	
Education		
Illiterate	39(10.4)	.000
Primary	59(15)	
Secondary	154(41.2)	
Higher secondary	112(29.9)	
Bachelor and above	10 (2.7)	

Table 7 shows the association between attitude regarding Cervical Cancer Screening and Socio-demographic Variable. Attitude regarding Cervical Cancer Screening was significantly associated with Education, Religion, Marital status, and Occupation of participants. (P value was less than 0.05)

Table 7: Association between attitude regarding Cervical Cancer Screening and Socio-demographic Variable (n =374)

Variables	n (%)	P value
Ethnicity		
Indo-Aryan	326(87.2)	.069
Tibeto-Burman	48(12.83)	
Religion		
Hinduism	331(88.5)	.046
Buddhist	18(4.8)	
Muslim	24(6.4)	
Christian	1(0.3)	
Marital status		
Unmarried	64(17.1)	.000
Married	312(82.9)	
Occupation		
Homemaker	336(89.8)	.000
Others	38(10.2)	
Education status		
Illiterate	39(10.4)	.000
Primary	59(15)	
Secondary	154(41.2)	
Higher secondary	112(29.9)	
Bachelor and above	10 (2.7)	

DISCUSSION

Cervical cancer despite being the commonest Gynaecological cancer in Nepal, there are no systematic national educational programs about cervical cancer screening. Awareness about cervical cancer screening can improve women's approach leading to an increased rate of early diagnosis and treatment of cervical cancer. Success of any screening programs depends on utilization by the target population. The uptake of screening mainly depends on women awareness regarding cervical cancer screening. The present study was focused in determining the knowledge and attitude regarding cervical cancer screening, which is one of the major factors that determine the success of any screening programs. Birat Medical College Teaching Hospital is a tertiary care Hospital located in Eastern part of Nepal. Total population of Eastern Nepal is 5,811,555[11] in which 50.4 % is females.[12] Though it is a tertiary care center, most of patients coming to this hospital are from nearby places, mostly from low socioeconomic and low education backgrounds so that result of this study can be generalized to the general population of Nepal. As per the findings, 89.3 % participants heard about cervical cancer, most of them (57.2 %) heard from health facilities. There was inadequate knowledge regarding

cervical cancer screening to 56.68% participants and 65.50% participants have negative attitudes towards cervical cancer screening. Statistically significant association was found between education of the participants and level of knowledge regarding cervical cancer screening (p value was less than 0.05). The level of knowledge regarding cervical cancer screening is influenced by the education level of women. This finding is consistent with the study conducted by Shrestha et al (2017) that shows 65.6 % of participants have inadequate knowledge regarding cervical cancer screening.[13] This was because this study was also conducted in a teaching hospital of Nepal and the target population was the same. However, the level of knowledge is far less than in developed countries. In developed countries 76% of women had adequate knowledge regarding cervical cancer screening.[14] This may be because of higher education level and women are more aware regarding cervical cancer in developed countries. This study revealed that only 43.31 % of participants had adequate knowledge regarding cervical cancer screening and only 34.49 % of participants had a positive attitude regarding cervical cancer screening. Similarly, only 0.5 % women knew the correct age to start screening for cervical cancer and only 0.3 % knew that screening should be done every 3 years. The finding was inconsistent with the study done by Shrestha et al (2014) that showed 16.0% of participants knew the correct age of start of screening of cervical cancer and 21.0% of participants knew that screening should be done in every 3 years.[15] The finding was consistent similar with the finding of Singh et al (2014) that showed 32.7% of the participants had adequate knowledge and 18.2 % of participants had positive attitude regarding cervical cancer screening.[16] The low level of knowledge regarding cervical cancer screening and negative attitude towards its screening, this was because of variety of factors such as lack of awareness regarding cervical cancer, low socioeconomic status, cultural barriers and women in Nepal feel shy to discuss the diseases affecting the sexual organs.

CONCLUSION

Considerable proportions of women have inadequate knowledge and negative attitudes regarding cervical cancer screening in Eastern Nepal. This limits the utilization of the screening programs for cervical cancer. Therefore, cervical cancer screening health camps and awareness programs should be conducted at community level for women to increase the level of knowledge and to change the attitude regarding cervical cancer screening.

RECOMMENDATIONS

There is a need to conduct cervical cancer screening health camps and awareness programs at community level for women to increase the level of knowledge and to change the attitude regarding cervical cancer screening.

LIMITATIONS OF THE STUDY

Hospital based so may be selection bias.

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CONFLICT OF INTEREST

We declare no conflict of interest.

REFERENCES

1. World Health Organization. Cervical cancer https://www.who.int/health-topics/cervical-cancer#tab=tab_1 Accessed on 11 August 2020
2. ICO/IARC HPV Information Centre Nepal: Human papillomavirus and related diseases, summary report 2019. https://hpvcentre.net/statistics/reports/NPL.pdf
3. Kashyap N, Krishnan N, Kaur S, Ghai S. Risk Factors of Cervical Cancer: A Case-Control Study. Asia Pac J Oncol Nurs. 2019;6(3):308-314. Doi:10.4103/apjon.apjon_73_18
4. Saraiya M, Ahmed F, Krishnan S, Richards TB, Unger ER, Lawson HW. Cervical cancer incidence in a prevaccine era in the United States, 1998-2002 Obstet Gynecol. 2007;109(2 Pt 1):360-370. DOI:10.1097/01.AOG.0000254165.92653.e8
5. McDonald CJ. Cancer statistics, 1999: challenges in minority populations. CA Cancer J Clin. 1999;49(1):6-7. Doi:10.3322/ canjclin. 49.1.6
6. The National Breast and Cervical Cancer Early Detection Program. Atlanta: Centres for Disease Control and Prevention, US Department of Health and Human Services;1995
7. Information Center on HPV and Cervical Cancer. Human papilloma virus and related cancers, fact sheet 2013. Available from: http://www.hpvcentre.net/statistics/reports/NPL_FS.pdf. Accessed on April 25, 2014
8. Gyenwali D, Khanal G, Paudel R, Archana A, Pariyar J, Onta S. Estimates of delays in diagnosis of cervical cancer in Nepal. BMC Womens Health. 2014;14:29. DOI https://doi.org/10.1186/1472-6874-14-29
9. Gilbert D. Human papilloma virus and cancer of the cervix: a challenge facing Nepal. Kathmandu Univ Med J. 2006;4:396–397
10. Sherpa AT. Time for an Organized Cervical Cancer Screening in Bharatpur, Nepal. Master's thesis. Oslo, Norway: University of Oslo; 2007
11. Eastern Development Region, Nepal"–news.newspapers.books. scholar.JSTOR (September2014)
12. https://countrymeters.info/en/Nepal
13. Shrestha S, Dhakal P. Knowledge, attitude and practice regarding cervical cancer screening among women attending a teaching hospital, Bharatpur, Chitwan. J Family Reprod Health 2017;11:18-23.PMID: 29114264
14. Yu CK, Rymer J. Women's attitudes to and awareness of smear testing and cervical cancer. Br J Fam Plann1998;23:127-33. PMID: 9882766
15. Shrestha P. Knowledge, attitude, and practice regarding Pap smear test among women in Ward no. 14, Dharan [master's thesis]. Tromsø: UiT The Arctic University of Norway; 2014
16. Singh E, Seth S, Rani V, Srivastava DK. Awareness of cervical cancer screening among nursing staff in a tertiary institution of rural India. J Gynecol Oncol 2012; 23: 141-6PMID: 22808355