

Awareness regarding Cervical Cancer among Reproductive-Aged Women in Banke, Nepal

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ABSTRACT

Cervical cancer is the fourth most common cancer among women globally and is the leading cause of cancer-related deaths in low- and middle-income countries. Early detection through screening can prevent the disease, but a lack of knowledge about its risk factors and prevention remains a barrier. This cross-sectional descriptive study was done among 310 reproductive-aged women by using the method of purposive sampling to determine the awareness on Cervical Cancer among Reproductive-aged Women of in Kohalpur Municipality, Banke District, Nepal. The data was collected using semi-structured interviews, and descriptive statistics were used to analyze the results using SPSS software. It was found that the awareness regarding cervical cancer was poor in 67.09%. Awareness regarding risk factors such as multiple sexual partners (75.80%) and early sexual exposure (75.80%) was high, whereas the awareness related to prevention, that is, HPV vaccination (53.22%) and screening (59.68%) was low. Most of the participants (84.52%) were aware that cervical cancer is preventable; however, awareness regarding screening and vaccination age was limited. This study suggests the need for an effective awareness program in cervical cancer. It is important to educate the participants about screening and vaccination, especially in rural settings, to decrease the incidence of cervical cancer in Nepal.

Keywords: Cervical cancer, awareness, reproductive aged women, HPV vaccine

INTRODUCTION

Cancer is one of the major non-communicable diseases and is one of the causes of mortality in both developed and developing countries all over the world. Cervical cancer is one of the cancers that affect the cervix cells; this is the lower part of the uterus which joins the vagina (World Health Organization [WHO], 2012). Cervical cancer is the fourth most common cancer globally amongst women. Asia holds 51.6% of the cervical cancer burden in the world while 90% of deaths due to cervical cancer occur in low-and middle income countries (Baral et al., 2020).

In comparison to the developed nations, there are twice as many cases of cervical cancer in Nepal and a four times higher death rate. Nepal is one of the countries in South Asia with the highest mortality rate due to cervical cancer (Thapa et al., 2018). According to the International Agency for Research on Cancer (IARC, 2020), 2,942 women are diagnosed with cervical cancer annually in Nepal while 1,928 women succumb to cervical cancer each year. Cervical cancer can be prevented because precancerous lesions can be identified and treated in the early stages. Screening techniques, especially the Papanicolaou (Pap) smear test, help in early detection and play an essential role in decreasing the morbidity and mortality rates linked to cervical cancer (Elamurugan et al., 2019; Kashif et

al., 2021). According to the World Health Organization, women should undergo cervical cancer screening after 30 years of age and at least once between the ages of 30 and 49 years (2013).

Research studies that have been done in developing countries, like India and Nepal, on the screening practices of cervical cancer have indicated a lack of knowledge on this disease even though there is a positive attitude towards screening (Baral et al., 2020; Chhetri & Dhakal, 2019). There is a low level of awareness on this disease worldwide, which is especially low in developing countries with higher burden. Lack of awareness about this cancer and prevention strategies is among the most critical barriers to reduce the burden (WHO, 2013). In order to prevent and control the cervical cancer problem, the government of Nepal has put emphasis on screening programs and the provision of free screening tests, especially Visual Inspection with Acetic Acid (VIA). Nevertheless, cervical cancer screening services are not well covered because of lack of awareness and misinformation (Darj et al., 2019).

Cervical cancer is one of the few cancers that can actually be prevented. It is possible to avoid the risk of developing cervical cancer if it is diagnosed and treated early. However, even today, the mortality and morbidity rates of cervical cancer in Nepal remain high. It must be noted that there is provision for screening and vaccination against cervical cancer in Nepal. In addition, the Nepalese government has also prioritized prevention through providing free screening services in the form of VIA test, but the coverage remains very poor.

METHODS

This was cross-sectional descriptive research design in which the quantitative method was used to examine the level of awareness about cervical cancer in 310 women of reproductive age group (15-49 years) by using purposive sampling technique in Ward No. 11, Kohalpur Municipality, Banke District, Nepal. Data was collected by using face to face interview in Nepali by using semi-structured questionnaire for sociodemographic variables and awareness related questions. Ethical clearance was taken from IRB of Tribhuvan University IOM.

RESULT

Table 1

Socio-Demographic Characteristics of the Respondents (N = 310)

Variables	Frequency(n)	Percentage (%)
Age (in completed years)	248	80.0
15-32	62	20.0
33-49		
Educational status		
literate	288	92.90
Illiterate	22	7.10
Among literate education level(n=288)		
100		34.72
Basic level	156	54.17
Secondary level	32	11.11
University level		
Ethnicity		
Janajati	132	42.58
Brahmin/chhetri	128	41.29.
Dalit	42	13.55
Madhesi	8	2.58.
Occupation		
Student	90	29.03
Agriculture	80	25.81
Labor	75	24.19
Home maker	35	11.29
Service	15	4.83
Business	15	4.83
Marital status		
Unmarried	165	53.22
Married	135	43.55
Separated/divorce	10	3.23
Age of marriage (if married, separated/divorce) (n=145)		
85		58.62
60		41.38
< 20 years		
≥20 years	310	100
Family History of Cervical Cancer		
No		

Table 2

Awareness of Cervical Cancer Among Respondents (N = 310)

Responses	Frequency(n)	Percentage (%)
Meaning of cervical cancer Cancer in the cervix*	202	65.16
Causes of cervical cancer Virus infection**	150	48.39
Risk factor*		
Multiple sexual partners	235	75.80
Early marriage and sexual exposure	235	75.80
Multiple pregnancies	165	53.22
Cigarette/tobacco sexually transmitted infection	160	51.61
Sign and symptoms*		
Lower abdominal pain	145	46.77
Inter menstrual bleeding	230	74.19
Foul vaginal discharge	200	64.52
Post coital bleeding	170	54.84
Bleeding after menopause	160	51.61
Painful sex	161	51.94
Duration of metastasis Year**	135	43.54
	70	54.83
Cervical cancer preventable Yes**	262	84.52
Preventive measures*		
Avoid sexual contact at an early age	220	70.97
Use of safe sex practice	205	66.13
Screening	185	59.68
Avoid multiple pregnancies	185	59.68
Vaccination against virus causing cervical cancer	165	53.22
Maintain perineal hygiene	165	53.22
Avoid cigarette/tobacco	160	51.61
Heard about HPV (Gardasil) vaccine		
No	256	82.58
Appropriate age for giving HPV (Gardasil) vaccine 9-26 years**	116	37.42

Note: **correct answer *Multiple response

Table 2 revealed that most (65.16%) of the respondents had answered correctly the meaning of cervical cancer that is cancer in cervix. Nearly half (48.39%) of the respondents had answered viral infection. Most (75.80%) of the respondents answered both multiple sexual partner and early marriage and sexual exposure and nearly half (46.77%) of the respondents answer sexually transmitted infection as the risk factor of cervical cancer. Most (74.19%) of respondents had answered lower abdominal pain and nearly half (43.54%) of the respondents had answered painful sex as the sign and symptoms of cervical

cancer. Table 3b Shows more than half (54.83%) of the respondents answered correctly that it took years for metastasis. Majority (84.52%) of the respondents answered cervical cancer is preventable. Most (70.97 %) of the respondents answered avoiding sexual contact at an early age and half (51.61%) of the respondents answered avoiding cigarette/tobacco as the preventive measure of cervical cancer. Most (82.58%) of the respondents had not heard about HPV vaccine. Less than half (37.42%) of the respondents answered correctly that 9-26 years as the appropriate age for HPV vaccine.

Table 3

Awareness of Cervical Cancer Among Respondents (N = 310)

Responses	Frequency (n)	Percentage (%)
Appropriate age for starting cervical cancer screening 25-30 years**	200	64.52
Types of cervical screening test available *	200	64.52
Pap smear test	189	60.97
Visual Acetic acid test (VIA)/ Visual inspection with Lugol's iodine (VILI)	165	53.23
HPV DNA test	140	45.16
Colposcopy		
Screening test made free of cost in Nepal	150	48.39
VIA/ (VILI) **		
Appropriate time interval for screening	65	20.97
3-5 years**		
Best time for doing screening test		
Immediately after menstrual period**	165	53.23
Complication of cervical cancer*		
Pyometra	230	74.19
Ureteric obstruction	195	62.90
Vesico vaginal fistula	195	62.90
Recto vaginal fistula	135	43.55
Source of information*		
Health personnel	140	45.16
Mass media (Television, Radio, Internet, News paper, book)	130	41.94
Not heard	100	32.26
Relatives	60	19.35
Friends	45	14.52

Note: **correct answer * Multiple response

Table 3 Illustrate that most (64.52%) of the respondents answered correctly 25-30 years an

appropriate as for cervical cancer screening. Most (64.52%) of the respondents answered Pap smear as types of cervical cancer screening test available. Nearly half (48.39%) of the respondents had answered pap the cervical cancer screening test that government of Nepal had made free of cost. More than half (53.23%) of the respondents answered 1 years as an appropriate time interval for screening. More than half (53.23%) of the respondents answered correctly that immediately after menstrual. Most (74.19%) of the respondents answered Pyometra and more than half (43.55%) of the respondents answered recto vaginal fistula as complication of cervical cancer.

Nearly half (45.16%) of the respondents answered major source of information on cervical cancer was health personnel and least (14.52%) of the respondents answered friends as a source of information. A quarter (32.26%) of the respondents had never heard the term cervical cancer

Table 4
Level of Awareness of Cervical Cancer Among Respondents (N = 310)

Awareness level	Frequency(n)	Percentage (%)
Poor awareness (<60% of score)	208	67.1
Moderate awareness (60-80% of score)	60	19.4
Good awareness(>80% of score)	42	13.5

Table 4 Show most (67.10%) of the respondents has poor level of awareness whereas least (13.54%) of the respondents had good level of awareness.

DISCUSSION

Cervical cancer is one of the most common cancers among women and remains a major global public health concern. The burden of cervical cancer is disproportionately higher in developing countries, resulting in significant emotional and economic consequences for affected families (Seng et al., 2018). In Nepal, the levels of awareness of women regarding the disease are generally low especially in rural areas, where healthcare facilities and health education are limited. Many women do not have enough knowledge

about the risk factors, early signs of the disease, and methods of prevention (Zhetpisbayeva et al., 2023).

According to the current study, 67.09% of respondents had poor awareness about cervical cancer, while 13.54% of them showed good awareness about the disease. The above results are similar to the results obtained by Bhuvaneswari and Gayathri (2018) according to which more than half (55%) of respondents had poor awareness of cervical cancer, about 40% had moderate awareness, and only 5% of participants had good awareness of the disease. Also, according to Khadka et al. (2016), more than half (52%) of women in Rukum District, Nepal, had poor awareness of cervical cancer. Similar results were obtained in another study in Kathmandu, Nepal, according to which 88.7% of respondents had inadequate awareness of cervical cancer, and only 11.3% of respondents showed adequate awareness of the disease (Devkota et al., 2020). Different studies carried out in various regions of Nepal showed that there is a lack of knowledge of women regarding cervical cancer.

In the current study, the most common risk factors of cervical cancer among the participants were having multiple sexual partners (75.80%), getting married and getting exposed to sexual acts at an early age (75.80%), having multiple pregnancies (53.22%), and smoking and using tobacco products (51.61%). Nevertheless, findings are different from studies conducted in Jumla, Budhanilkantha, Kathmandu, and Chitwan where the major risk factors identified were early marriage, poor menstrual hygiene, Human Papillomavirus (HPV) infection, and prolonged use of oral contraceptive pills (Baral et al., 2020; Thapa et al., 2018; Shrestha et al., 2020).

The commonly reported clinical features of cervical cancer in the current study were lower abdominal pain (74.19%), intermenstrual bleeding (64.52%), foul smelling vaginal discharge (54.84%), post-coital bleeding (51.61%), bleeding after menopause (51.94%), and dyspareunia or painful sexual intercourse (43.54%). Findings differ from a study done in Attarkhel Jorpati, Kathmandu (Baral et al., 2020).

In regard to preventive methods, most of the participants knew that cervical cancer is preventable by abstaining from sexual activities at an early age

(70.97%), safe sex practices (66.13%), regular screening (59.68%), avoiding multiple pregnancies (59.68%), HPV vaccine administration (53.22%), perineal hygiene (53.22%), and avoiding cigarette and tobacco use (51.61%). Similar findings were found by Bajracharya & Chalise (2021) where 73.2% of participants identified cervical cancer as a preventable disease. However, only 24.7% of the participants knew about the importance of perineal hygiene and 28.4% of them had knowledge regarding the need for regular cervical cancer screening.

Based on these findings, the future interventions should seek to enhance the accessibility of information about cervical cancer through various means such as the mass media, healthcare professionals, and education programs at the community level. The public health awareness programs should promote the need for vaccinations against HPV infection and regular screening of cervical cancer.

CONCLUSION

The study revealed majority of respondents had a low level of awareness, highlighting the need to implement awareness programs. Educating women about the importance of early detection through screening and vaccination against HPV should be a priority and awareness creation about cervical cancer and providing information to women is vital to decrease the incidence and deaths related to this disease in Nepal.

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