

Knowledge, Attitude and Practice (KAP) of Women towards Cervical Cancer Screening at A Tertiary Care Institute in Kathmandu, Nepal

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ABSTRACT

Introduction: Cervical cancer is one of the most common cancers among women worldwide. It is preventable by early detection of precancerous lesions by various screening techniques. Considering the importance of the perceptions and practices of the women about the disease and its screening, this study was conducted with an aim to determine the knowledge, attitude and practice of women towards cervical cancer and its screening among Nepalese women visiting a tertiary care institute in Kathmandu.

Methods: A cross-sectional descriptive study was conducted among 390 outpatients in the gynaecological outpatient department of Tribhuvan University Teaching Hospital for a span of six months. Data were collected after obtaining ethical clearance from the institutional review board. A structured questionnaire covering the socio-demographic characteristics and knowledge, attitude and practice on cervical cancer and its screening was used.

Results: Among the 390 women who were interviewed, the mean age was 41.9 years, 37% of the respondents had an average knowledge and 16.5% had a good knowledge about cervical cancer and its screening. There was a positive attitude among 70% of the respondents, however the uptake of screening among them was less than 25% only. Embarrassment (72%), pain (71%) and lack of privacy (65.9%) were the main barriers of screening.

Conclusions: Knowledge regarding cervical cancer screening was found to be good and the attitude to undergo screening was positive. However, a significant number of barriers refrain women from seeking this service which is shown by the poor practice for screening.

Keywords: attitude; cervical cancer; knowledge; pap smear; screening.

INTRODUCTION

Cervical cancer is one of the most common cancers in women around the world.^{1,2} It is preventable if the precancerous lesions are diagnosed early using screening tools like the Pap smear test followed by prompt treatment.²

Screening is underutilized in the developing countries due to a number of factors like poor education, lack of knowledge regarding its benefits, unaffordability, cultural barriers and unavailability of facilities.^{3,4} Measuring the knowledge, attitude and practice of the female population regarding the awareness about cancer, the risks and its prevention would provide valuable information regarding the present status of women and their attitude towards cervical screening.⁴

This study is aimed at assessing the knowledge, attitude and practice of Nepalese women towards cervical cancer screening

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visiting the gynaecological outpatient department of a tertiary care centre. This study also aims to identify the barriers of under utilization of screening.

METHODS

This was a cross sectional descriptive study conducted in the outpatient department of Obstetrics and Gynecology, Tribhuvan University Teaching Hospital from February 2014 to July 2014 for a period of six months. This study was approved by the Institutional Review Board of Institute of Medicine, Tribhuvan University Teaching Hospital. The study participants were explained about the study and informed written consent was taken. The sample size of 390 was obtained based on 40% of prevalence of adequate knowledge using the formula $(n=z^2pq/d^2)$ after calculation with 5% allowable error at 95% confidence interval (CI).⁵ Women aged between 30 to 60 years, as per the National Guidelines on cervical cancer screening and prevention 2010, visiting the outpatient department of the department of Obstetrics and Gynecology who met the inclusion criteria for the study were included in the study.⁶ Women refusing to be interviewed or suffering from cancer or any psychiatric illnesses were excluded.

A structured, close ended questionnaire was used as the tool for data collection purpose. Its validity was established by extensive literature review and consultation with the subject and research experts. The reliability was maintained by pretesting in 35 respondents in the same setting. The questionnaire was divided into four parts. The first part covered the general characteristics of participants and their socio-demographic characteristics. The second part dealt with questions pertaining to the knowledge of the respondent regarding cervical cancer, its risk factors and its screening. The third part emphasized on the attitude of the respondent about cervical cancer and its screening and listed the barriers involved in the screening

process. The last part included the questions related to the practice of respondents regarding cervical cancer screening.

Data was entered and analysed by using SPSS (Statistical Product and Service Solutions). Each question was analysed individually to study the distribution of each variable on knowledge, attitude and practice.

RESULTS

Socio-Demographic Profile of the Participants:

The total number of respondents was 390. The mean age was 41.9 years. The youngest participant was 30 years old and the oldest was 60 years old.

Table 1. Socio-demographic profile of the participants:

Variables	Number (n=390)	Percentage (%)
Age (Years)		
30-39	157	40.3%
40-49	158	40.5%
50-59	68	17.4%
>=60	7	1.8%
Address		
Urban	355	91%
Rural	35	9%
Level of education		
Illiterate	38	10%
Primary level	61	16%
Lower Secondary level	96	24%
Higher secondary level	108	28%
University	87	22%
Employment status		
Employed	222	57%
Unemployed	168	43%
Duration of marriage		
Unmarried	25	6%
1-10years	89	23%
11-20years	148	38%
>20years	128	33%

Knowledge on Cervical Cancer screening:

A total of 7 questions were asked to assess the level of knowledge of the respondents.

Table 2. Proportion of correct answers to knowledge questions:

S. No.	Knowledge questions	No. of correct answers (n=390)	%
1.	Heard about Cervical Cancer?	312	80%
2.	Heard about Cervical Cancer Screening?	278	71%
3.	Heard about Pap Smear Test?	250	64%
4.	Heard about other screening techniques?	93	24%
5.	Why is Pap Smear done?	73	19%
6.	How often is Pap Smear done?	78	20%
7.	Who should do it?	44	11%

The level of knowledge was divided into three categories: (0 to 3) low score (<40%), (4 to 5) average score (40 to 70%) and (6 to 7) high score (>70%). Average score for knowledge of the respondents was 4 out of 7. About 46% of them had a score less than 4.

Attitude of cervical cancer screening: Regarding the necessity to do screening regularly, 274 (70.3%) responded positively. (Fig.1)

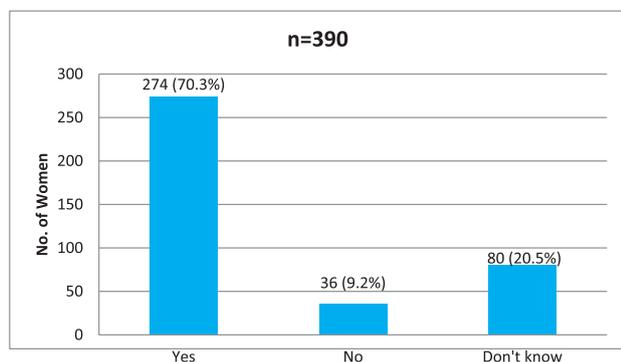


Figure 1. Attitude of cervical cancer screening

Barriers of Pap Smear screening:

Most of the participants never went for screening due to lack of privacy while conducting the test, whereas some found it embarrassing while others thought it would be a painful procedure.

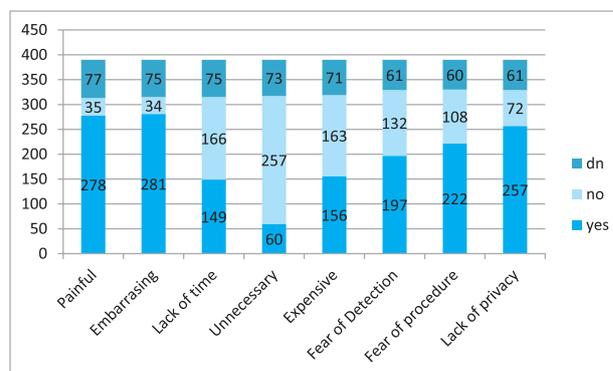


Figure 2. Barriers of Pap smear screening

Practice of Pap Smear Screening Technique:

Only 96 (25%) respondents had undergone a Pap smear screening test.

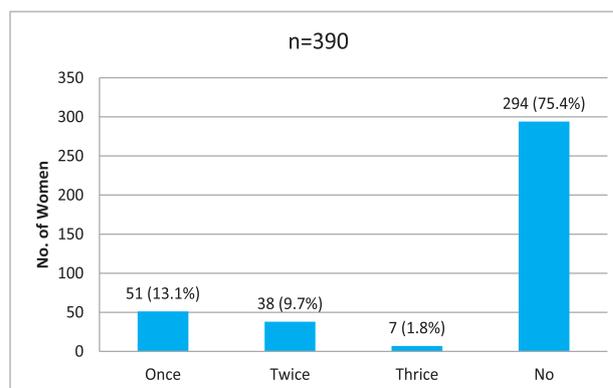


Figure 3. Practice regarding the frequency of Pap smear screening

Younger age group with an average to high level of knowledge practiced screening more than the older age group. (Table 3). Higher the level of education, the positive the attitude of the respondent as shown in Table 4. Likewise employment status of the respondent had a

strong association with attitude and practice of screening. (Table 5)

Table 3. Age Group vs Level of knowledge, attitude and practice:

Age Group (In years)	Level of knowledge			Attitude		Practice		Total
	Low	Average	High	Negative	Positive	No	Yes	
30-39	26 (16.6%)	86 (54.8%)	45 (28.7%)	24 (15.3%)	133 (84.7%)	114 (72.6%)	43 (27.4%)	157 (100%)
40-49	59 (37.3%)	79 (50%)	20 (12.7%)	61 (38.6%)	97 (61.4%)	117 (74.1%)	41 (25.9%)	158 (100%)
50-59	36 (52.9%)	32 (47.1%)	0 (0%)	28 (41.2%)	40 (58.8%)	57 (83.8%)	11 (16.2%)	68 (100%)
=>60	4 (57.1%)	3 (42.9%)	0 (0%)	3 (42.9%)	4 (57.1%)	6 (85.7%)	1 (14.3%)	7 (100%)
Total	125 (32.1%)	200 (51.3%)	65 (16.7%)	116 (29.7%)	274 (70.3%)	294 (75.4%)	96 (24.6%)	390 (100%)

P value <0.001

Table 4. Education level vs Level of knowledge, attitude and practice:

Education Level	Level of knowledge			Attitude		Practice		Total
	Low	Average	High	Negative	Positive	No	Yes	
Illiterate	35 (92.1%)	3 (7.9%)	0 (0%)	34 (89.5%)	4 (10.5%)	38 (100%)	0 (0%)	38 (100%)
Primary	31 (50.8%)	30 (49.2%)	0 (0%)	26 (42.6%)	35 (57.4%)	57 (93.4%)	4 (6.6%)	61 (100%)
Lower secondary	50 (52.1%)	42 (43.8%)	4 (4.2%)	46 (47.9%)	50 (52.1%)	80 (83.3%)	16 (16.7%)	96 (100%)
Higher secondary	7 (6.5%)	80 (74.1%)	21 (19.4%)	7 (6.5%)	101 (93.5%)	64 (59.3%)	44 (40.7%)	108 (100%)
University	2 (2.3%)	45 (51.7%)	40 (46%)	3 (3.4%)	84 (96.6%)	55 (63.2%)	32 (36.8%)	87 (100%)
Total	125 (32.1%)	200 (51.3%)	65 (16.7%)	116 (29.7%)	274 (70.3%)	294 (75.4%)	96 (24.6%)	390 (100%)

P value <0.001

Table 5. Employment status vs Level of knowledge, attitude and practice:

Employment status	Level of knowledge			Attitude		Practice		Total
	Low	Average	High	Negative	Positive	No	Yes	
Unemployed	121 (54.3%)	93 (41.7%)	9 (4%)	116 (52%)	107 (48%)	194 (87%)	29 (13%)	223 (100%)
Employed	4 (2.4%)	107 (64.1%)	56 (33.5%)	0 (0%)	167 (100%)	100 (59.9%)	67 (40.1%)	167 (100%)
Total	125 (32.1%)	200 (51.3%)	65 (16.7%)	116 (29.7%)	274 (70.3%)	294 (75.4%)	96 (24.6%)	390 (100%)

P value <0.001

DISCUSSION

Cervical cancer is one of the commonest cancers seen in the Nepalese population.^{5,6}

Pap smear is a considered as a reliable and convenient screening tool for cervical cancer screening purpose.⁶ In our study, 80% of women had heard about cervical cancer. This was similar to results reported by a study

conducted in Korea but was lesser than that reported by another study from Qatar.^{7,8} A study in India reported 58% of women having heard about cervical cancer.⁹ When asked about Pap smear, more than 35% knew about it.⁹ Considering the aggregate score for knowledge questions, 46.5% of the respondents had poor knowledge, 37% had an average knowledge, whereas, only 16.5% had a good level of knowledge about cervical cancer and its screening. This was similar to a study done in women in a general hospital in Malaysia.¹⁰ Around 50% of the younger age, namely the 30 to 39 age group, was seen to have an average level of knowledge and 28% with a high level of knowledge. This was similar to two studies done in Nepal where the younger age group had a better level of knowledge than the older age group.^{5,11} Regarding the level of education, 46% of university students had a good level of knowledge regarding cervical cancer and its screening. This was similar to a study done in Ethiopia which showed that the education level of women greatly affected the knowledge and the uptake of screening.¹¹

Around 70% of the women had positive attitude towards screening, however, more than 71% of the participants refrained from the screening test due to the fact that it was painful. 72% believed that it was embarrassing to get it done since 66% of the respondents emphasized on the fact that there was not much privacy in the health centres where these tests were being done. Almost 25% of respondents in another study stated their reason for not taking the test to be not being advised by the doctor. Lack of knowledge was the main reason for not utilizing the test in a study done in tertiary centre in Nigeria.¹² The younger age group had a positive attitude towards Pap smear screening whereas it gradually decreased as it approached the older age group. Similar results were seen in studies done in India where the younger lot seemed to have a very positive attitude towards screening.^{13,14}

Uptake of Pap smear test was only 25% in our respondents. Among the ones who had undergone Pap smear test, almost 50% of them had this test done only once, whereas more than 30% had done it twice. This result was similar to that reported by Roy B et al in India.¹³ In Nigeria still lower uptake of Pap smear test was reported in a study done in female health workers with only 14.6% of them undergoing Pap smear test.¹² Utilization of Pap smear test was better in a study in the women in Kuwait.¹⁵ In our study, better practice was seen among women of the younger age group falling between 30 to 49 years of age. The number of women practicing screening was almost nil among women who were illiterate or with only primary education.

There were a few limitations to the study. Almost all of the participants were interviewed at the outpatient department of the hospital. This could be biased in a way that we only sampled women with health-seeking behaviors as compared to the general population. Therefore our sample population may not be a true representative of the women population of Kathmandu valley. Secondly, this was a single-centered study. Such studies could be done in multiple centres so that the conclusion could be generalized for the total population of Kathmandu.

CONCLUSIONS

Knowledge regarding the screening for cervical cancer in the respondents visiting the outpatient department of a tertiary level hospital was good. The attitude of women to undergo the screening test was also positive. However, a significant number of barriers to screening tests refrain women from taking these facilities which is shown by the poor practice for screening. Therefore, though having a good level of knowledge, the perception of pain, the embarrassment during a pap smear test and the anticipation

of something wrong being detected are the barriers for women willing to do pap smear screening.

It is important that more awareness and education programs need to be implemented to target women about cervical cancer and pap smear screening in coordination with The Ministry of Health and Population and ensure accessibility of all targeted women to pap smear and follow-up clinics.

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CONFLICT OF INTEREST: None

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