KNOWLEDGE, ATTITUDE, AND PRACTICE REGARDING CERVICAL CANCER SCREENING AMONG FEMALE HEALTH PROFESSIONALS OF A TERTIARY CARE HOSPITAL IN KATHMANDU DISTRICT

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ABSTRACT

Cervical cancer is the cancer that forms in the tissue of cervix. It is usually slow growing cancer that may not have symptoms but can be found with regular Pap tests and proper screening. Hence it is absolutely necessary for the health workers especially female workers to have proper knowledge about cervical cancer and have a positive attitude to getting screening tests done as per the Cervical Cancer Screening guidelines so that early detection and diagnosis can be done leading to decrease in the incidence of the disease. We have conducted this study to see the knowledge, attitude and practice regarding cervical cancer screening among female health professionals of a tertiary care hospital in Kathmandu District. Overall score for adequate knowledge about cervical cancer among different health professionals was not significantly different ($\chi^2 = 1.118$, p-value = 0.572). However, there was a significant association between knowledge and those who underwent screening ($\chi^2 = 8.481$, p-value = 0.004). There was no association between Knowledge and attitude towards cervical cancer ($\chi^2 = 3.144$, p-value = 0.076). However, there was significant association between attitude and profession ($\chi^2 = 4.568$, p-value = 0.033).

KEYWORDS

Cervical Cancer, screening, knowledge, attitude, practice, female health workers

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INTRODUCTION

Cervical cancer is one of the most common cancer among women in southeast area. Nearly, half a million of women are newly diagnosed with invasive cervical cancer per year. However, most of them were never screened for the disease. Over 80% of these women are from developing countries. Globally, there are 570,000 cases of cervical cancer. Among them, 311,000 deaths from the disease occurred in 2018. Cervical cancer ranks as the fourth common type of cancer in women, after breast cancer (2.1 million cases), colorectal cancer (0.8 million), and lung cancer (0.7 million).

The incidence rises at 30–34 years of age and peaks at 55–65 years, with a median age of 38 years (age 21–67 years). Estimates suggest that more than 80% of the sexually active women acquire genital HPV by 50 years of age. Cervical cancer is the most common cancer and leading cause of death among Nepalese women. According to the 2018 WHO report, the age-adjusted incidence rate of cervical cancer in Nepal is 21.5 per 100,000 population with 2,942 new cases and 1,928 deaths. Screening with Papanicolaou (PAP) test led to significant reduction in mortality in developed countries. Studies have shown that screening with visual inspection with acetic acid reduces mortality due to cervical cancer in developing countries. Utilization of screening in Asian countries varies from 50% in Singapore to just 2.6%–5% in India.

National Guideline for Cervical Cancer Screening and Prevention program in 2010 in Nepal had the objective to screen at least 50% of women aged 30 to 60 years to reduce 10% cervical cancer burden within 5 years.

MATERIALS AND METHODS

We obtained a list of all the female health professionals from both the clinical and basic science Departments of Nepal Medical College Teaching Hospital. Using lottery method, equal proportions of doctors and nurses i.e., 75 doctors and 75 nurses were selected from all the departments. Participants were interviewed using a self-administered questionnaire.

Knowledge about cervical cancer and its screening was assessed using 26 knowledge-related questions that carried 20 correct responses. Each correct response was given 1 point and wrong answer was given 0. The maximum points expected were 20 and the minimum was 0. Bloom's cut-off points were used to categorize knowledge levels, where 80%–100% correct responses comprise score of 16-20 and meant good knowledge, 60%–79% correct response comprise score of 12-15 and meant moderate knowledge, and <60% correct responses comprise score of < 12 and meant poor knowledge.

We assessed attitudes using 8 statement items measured on 5 – point Likert scale (1 strongly disagree, 2 disagree, 3 neutral, 4 agree and 5 strongly agree). The participants' score from all the 8 statements were summed-up and the average score was calculated. Participants' who scored equal or above the mean (32.4) were considered as having positive attitudes while participants who scored below the mean were considered as having negative attitude.

Practice was assessed by response towards ever undergone cervical screening in past. Finally, all participants who had never undergone screening were asked to state the most important reasons for not undergoing screening.

The collected data was entered in Excel sheet and analyzed with IBM SPSS Statistics 16. Descriptive statistics such as mean, standard deviation (SD), frequency, and proportion was used for socio-demographic data and KAP of study population. Association between categorical variables was tested using Chi-square test. P value less than 0.05 was taken as significant.

RESULTS

Fig. 1 shows the demographic profile of participants among total of 150 female health professionals aged 19-57 years that were surveyed. The mean age was 31.3 years. Equal no. of nurses and doctors were taken in the study. The average years of experience was 6.59 (ranges 0-30 years) with less than half participants having less than 5 years (n = 71, 47.3%) followed by between 5-10 years (n = 39, 26%) of experience.

Fig. 2 showed that based on Bloom's cut off scoring, more than half had poor knowledge (55%), followed by moderate level (36%) and less than one tenth had good knowledge (9%) for cervical cancer.

Overall score for adequate knowledge about cervical cancer among different health professionals was not significantly different ($\chi^2 = 1.118, p-value = 0.572$). However, there was a significant association between knowledge and those who underwent screening ($\chi^2 = 8.481$, p-value = 0.004).
Table 1: Knowledge about cervical cancer and its screening among study participants

<table>
<thead>
<tr>
<th>Questions</th>
<th>Response</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females can develop cervical cancer who have (n = 150)</td>
<td>Multiple sexual partners</td>
<td>129 (86.0)</td>
</tr>
<tr>
<td></td>
<td>Young age of onset of sexual intercourse</td>
<td>95 (63.3)</td>
</tr>
<tr>
<td></td>
<td>HPV virus infection</td>
<td>128 (85.3)</td>
</tr>
<tr>
<td></td>
<td>Poor genital hygiene</td>
<td>75 (50.0)</td>
</tr>
<tr>
<td></td>
<td>Tobacco and smoking habit</td>
<td>56 (37.3)</td>
</tr>
<tr>
<td></td>
<td>Eat high fatty food</td>
<td>15 (10.0)</td>
</tr>
<tr>
<td></td>
<td>History of STD</td>
<td>88 (58.7)</td>
</tr>
<tr>
<td></td>
<td>Use of OCPs</td>
<td>43 (28.7)</td>
</tr>
<tr>
<td></td>
<td>Multiparity</td>
<td>63 (42.0)</td>
</tr>
<tr>
<td></td>
<td>Family history</td>
<td>90 (60.0)</td>
</tr>
<tr>
<td>Which of the following are the signs and symptoms of cervical cancer?</td>
<td>Intermenstrual bleeding</td>
<td>92 (61.3)</td>
</tr>
<tr>
<td></td>
<td>Foul smelling discharge P/V</td>
<td>103 (68.7)</td>
</tr>
<tr>
<td></td>
<td>Postmenopausal bleeding P/V</td>
<td>87 (58.0)</td>
</tr>
<tr>
<td></td>
<td>Postcoital bleeding P/V</td>
<td>100 (66.7)</td>
</tr>
<tr>
<td></td>
<td>Excess vaginal discharge</td>
<td>72 (48.0)</td>
</tr>
<tr>
<td></td>
<td>Itching in vagina</td>
<td>37 (24.7)</td>
</tr>
<tr>
<td></td>
<td>Pain in lower abdomen</td>
<td>87 (58.7)</td>
</tr>
<tr>
<td>Who can undergo cervical cancer screening?</td>
<td>All females irrespective of age and marital status</td>
<td>67 (44.7)</td>
</tr>
<tr>
<td></td>
<td>All married females age above 30 years</td>
<td>89 (59.3)</td>
</tr>
<tr>
<td></td>
<td>All married females of any age</td>
<td>40 (26.7)</td>
</tr>
<tr>
<td></td>
<td>Only females above 50 years of age</td>
<td>13 (8.7)</td>
</tr>
<tr>
<td></td>
<td>Only those women who have any problem</td>
<td>6 (4.0)</td>
</tr>
<tr>
<td></td>
<td>Don’t know</td>
<td>2 (1.3)</td>
</tr>
<tr>
<td>What are the methods of screening cancer cervix, if any</td>
<td>PAP or VIA as a method</td>
<td>144 (96.0)</td>
</tr>
<tr>
<td></td>
<td>HPV DNA Test as a method</td>
<td>53 (35.3)</td>
</tr>
<tr>
<td></td>
<td>Don’t know</td>
<td>3 (2.0)</td>
</tr>
</tbody>
</table>

Fig. 3 shows that there were 96 (64%) health professionals who had positive attitudes i.e., they scored equal or above mean (32.4).

There was no association between Knowledge and attitude towards cervical cancer ($\chi^2 = 3.144$, p-value = 0.076). However, there was significant association between attitude and profession ($\chi^2 = 4.568$, p-value = 0.033).

Fig. 4 shows that there were 28 (18.7%) female health professionals who self-reported to have ever been screened for cervical cancer; while others 122 (81.3%) were not screened. The following figure summarizes reasons not undertaking cervical cancer screening by 122 female health professionals.
DISCUSSION

This study focused on finding out about Knowledge, Attitude and Practice about Cervical Cancer screening among health care workers in Nepal Medical College and Teaching Hospital, a tertiary health care center in Kathmandu, Nepal.

In Nepal, various studies have been done to assess the knowledge, attitude and practice methods regarding carcinoma of cervix.

Study done by Shrestha et al showed 65.7% respondents had heard about cervical cancer. However, only 42.9% and 18.1% had knowledge about screening for cervical cancer and Pap smear test respectively while more than 85% of women had positive attitude towards screening but the practice of Pap smear test in the respondents was only 10.5%.13

In our study in tertiary center of Kathmandu shows a total of 150 female health professionals aged 19-57 years were surveyed with a mean...
age of 31.27 years. Equal number of nurses and doctors were taken in the study.

Knowledge: The study conducted in 150 health care professionals, showed that the knowledge about cervical cancer and its screening in most of the health care workers was poor (55%) with only 9% having a good knowledge. However, the knowledge about PAP and VIA being the screening tools for cervical cancer was present in 96% respondents. The findings were better in comparison to the study conducted by Shrestha et al 16 in 2016 which demonstrated that only 42.9% had knowledge regarding cervical cancer and its screening and 18.1% had knowledge about PAP smear.

There were several misconceptions about cervical cancer risk factors, signs and symptoms. Most participants believed that Tobacco and smoking habit was a risk factor for cervical cancer (n = 56, 37.3%) and few (n = 15, 10%) believed that consumption of high fatty food was also a risk factor for cervical cancer. There was also a misconception regarding the signs and symptoms of cervical cancer. Some believed itching in vagina was a sign of cervical cancer (n = 37, 24.7%).

Attitude: Majority of the healthcare workers had a positive attitude towards cervical screening (64%). The respondents believed that cervical cancer is one of the most important cancer in Nepal and any adult woman including themselves can develop cervical cancer (n = 76, 50.7%).

Most of the responds agreed that all married women age 30-65 years should undergo screening (n = 112, 74.7%) along with 88% of the respondents believing that screening can lead to early detection and better treatment. Only 6% of the respondents considered screening procedure to be embarrassing. Overall the attitude among the healthcare workers in this study was very positive towards screening.

In Nepal, the majority (about 95%) of women still never d cervical cancer screening according to the report by Ranjit et al 16 in 2016. Moreover, the proportion of unscreened women for cervical cancer is much higher among the illiterate women and living in the rural region. It can be concluded that level of knowledge regarding cervical cancer is quite poor while screening is met with positive attitude and enthusiasm, which unfortunately in real life practice doesn't translate to a large group of women undergoing screening for cervical cancer via Pap Smear or VIA testing i.e., a vast majority of women in Nepal have never undergone any screening procedure.

Practice: Despite the fact that majority of health care workers had a positive attitude towards cervical screening, only 18.7% participant have ever been screened for cervical cancer throughout their life. Among 81.3% who never got screened, 58.2% mentioned the reason for not undergoing screening was that they never had a problem and 12.3% mentioned about the requirement of screening only in presence of symptoms. This finding is consistent with the study by Khanna et al 19 conducted in India where despite of positive attitude about cervical cancer screening in community health care workers, only less than 10% of workers had undergone screening.
In conclusion, health workers are the pillars of health care system of the country. However, the study shows that there is a significant requirement for awareness programs to increase active participation in screening which directly reduces the mortality due to cervical cancer. If awareness and education regarding Cervical Cancer and its screening can be provided to this population, they can act as a powerful resource to increase awareness in the general public. Research findings may vary depending on sample size. A recommended approach is to generalize findings after performing the research on updated sample size, location and/or demography.

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