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Assessing the Knowledge and Attitude of Nurses Regarding Cervical Cancer Screening in a Public Hospital of Lahore

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ABSTRACT

Cervical cancer is a fatal illness that strikes women all over the world. In developing countries, it is the leading cause of cancer mortality among women. **Objective:** To Assess the Knowledge and Attitude of Nurses Regarding Cervical Cancer Screening in a Public Hospital of Lahore. **Methods:** A descriptive cross-sectional study design was conducted to collect data from 122 registered nurses of Sir Gangaram Hospital, Lahore. Data was collected through a self-administered questionnaire to obtain data about knowledge and attitude of respondents about cervical cancer screening. Data was analyzed through SPSS V.21 using descriptive statistics. Chi square test was applied. **Results:** A total of 122 nurses participated in the study. From 122 total respondents, 45(37%) were aged between 25-30 years and 67(54.9%) had more than 5 year of work experience. 55(44.3%) had diploma nursing and 62 (50.8%) had less than one year of work experience in gynae. Hypothesis testing (p=0.192) shows that mean age has no significant association with participant's knowledge. While Job experience and education revealed statistically significant associations with participant knowledge (p=0.04 and p=0.003). Similarly, age also has no significant association with participant's attitude (p=0.384). Job experience and education, on the other hand, exhibited a statistically significant relationship with participants' attitudes (p=0.006 and p=0.000). **Conclusions:** It is concluded that there is no association between age of participants and cervical cancer screening knowledge and attitude. Similarly, as participants' educational and work experience levels rise, their knowledge and attitudes concerning cervical cancer improve.

INTRODUCTION

Cervical cancer is the second most frequent malignancy in women that kills women after breast cancer [1]. In 2018, there are projected to be 570 000 new cases worldwide, reflecting a 6.6 percent incidence and a 7.5 percent fatality rate [2]. In Pakistani women, cervical cancer is the fourth most prevalent malignancy, with an incidence of 6.5 per 100,000 [3]. Cervical cancer is a malignancy of cervix that happens when the cells of it grow without control. Infection with HPV is the primary cause or risk factor, and the Pap smear is used to identify it in its early stages [4]. Cervical carcinoma occur in sexually active women and primary risk factor for cervical cancer is human papilloma virus infection [5]. The most typical signs of cervical cancer are abdomen pain, bleeding before and after sex, chronic back pain, urgency during urination, white vaginal discharge, odorous vagina, etc. [6]. Women can experience HPV infection for many years without experiencing any symptoms, but several screening techniques can identify any pathological alterations that occur over this time [7]. Population-based screening with Pap smears is a crucial secondary preventative strategy for cervical cancer and has a good cure rate for cervical cancer patients [8]. Unfortunately, Cervical cancer screening statistics in Pakistan is often ambiguous due to a lack of epidemiological data. Organizational and municipal illness records provide self-contained data, which may or may not be indicative of true burden [9]. Nurses must play a critical role in teaching, promoting, and alerting women about the need of getting checked for cervical cancer. Therefore, this study is aimed to assess the knowledge and attitude of nurses towards Cervical Cancer screening in the health Centers. In 2020, more than 500,000 women had cervical

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cancer diagnoses globally; 342 000 of them died as a result, primarily in poor or impoverished countries. The WHO states that screening coverage is necessary for accurate early detection of cervical cancer [10]. In contrast, more than 85% of fatalities in developing countries are caused by cervical cancer. In Wolaita Zone, Southern Ethiopia, this research was conducted to assess knowledge, attitudes on cervical cancer screening. Through a multi-stage sampling process, 520 individuals were chosen. Nearly a quarter of the women had received a cervical cancer screening. About 154 (43.1 percent) of the women had good knowledge, and 235 (45.5 percent) had an optimistic perspective. The study's findings showed that there was little understanding, attitude, and behavior about cervical cancer screening [1].

METHODS

It was a descriptive cross-sectional study design. The setting was medical units, surgical units, intensive care units, and accident and emergency department of Gangaram hospital, Lahore. It consisted of 122 nurses with a 95 percent confidence interval and a 6 percent margin of error [11]. Knowledge of cervical cancer screening was measured with 20 questions adopted from previous literature. The total maximum acceptable answer = 40. Modified the knowledge was classified according to Bloom's cut-off criteria. Good Knowledge = >30scores = > 75%, Average Knowledge = 20-30scores = 50%–75%, Poor Knowledge = 20scores = 50% [11]. Attitude towards cervical cancer screening was evaluated through 10 questions adopted from literature. It was measured using Likert Scale scoring system. The total possible response is 30. Using Modified Bloom's, cut off points was measured as: Good Attitude = > 24 scores = > 80%, Average Attitude = 18 – 24 scores = 60 – 80 %, Poor Attitude = < 18 scores = < 60 % [11]. The participants (Female Nurses) were provided with a self-administered questionnaire to gather data on respondents' attitudes and knowledge on cervical cancer screening. The questionnaire is divided into three sections: participant socio demographic characteristics, knowledge of cervical cancer screening, and attitude toward cervical cancer screening. The administration of the questionnaire typically took 20 to 30 minutes, and all completed forms were sent straight to the investigators. Data was analyzed through SPSS V.21 using descriptive statistics. The chi square test was used for hypothesis testing to assess bivariate relationships between patient knowledge and category demographic traits. A p value of less than 0.05 was considered statistically significant in all statistical tests [11]. The institutional review board (IRB) committee provided ethical approval. Furthermore, before delivering the data, the subject completed an informed consent form. Privacy and anonymity were preserved and guaranteed.

RESULTS

A total response of 122 female nurses was recorded and analyzed in this study. Majority of nurses were aged between 25-30 years, 45 (36.8%) followed by 31-35 years, 40 (32.8%). Most of nurses were married, 83(68%). More than two-third, 67(54.9%) of participants had more than 5 year of work experience. Most of, 55(44.3%) held diploma nursing, while 36(29.5%) had generic BSN degree. More than half, 62 (50.8%) had less than one year of work experience in gynae, while one- third, 40(32.8%) held 1-5 year of gynae experience. Only 14(11.5%) respondents reported family history of cervical cancer. Table 1 shows what people know about cervical cancer. More than half of the participants (55.1%) have insufficient information about cervical cancer screening. About cervical cancer screening, 32% have moderate knowledge and 14% have good knowledge. Table 1 depicted the participants' attitudes on cervical cancer screening. Twenty-six of the participants (21%) have a negative attitude toward cervical cancer screening. Over half (57%) have an average attitude toward cervical cancer screening. Only 20% of individuals have a positive attitude about cervical cancer screening.

Variables	Frequency (%)
Poor Knowledge	66 (54.1%)
Average Knowledge	39 (32%)
Good Knowledge	17 (13.9%)
Poor Attitude	26 (21.3%)
Average Attitude	69 (56.6%)
Good Attitude	27 (22.1%)

Table 1: Knowledge and Attitude of participants towards cervical cancer

Attitude and knowledge regarding cervical cancer screening association with participants' demographics were analyzed using chi square test at alpha level of 0.05. In hypothesis testing of knowledge, p value of age was higher than alpha value, (p=0.182) which mean age has no significant association with participant's knowledge. While Job experience and education had statistically significant association with knowledge of participants at alpha value, (p=0.03 and p=0.003), respectively. In other words, as educational level and job experience increases, participant's knowledge towards cervical cancer also increases (Table 2).

Variable	Knowledge			P-Value
	Poor	Average	Good	
Age				
25-30 year	30	11	4	0.182
31-35 year	19	15	6	
36-40 year	12	7	3	
41-45 year	05	4	4	
46-50 year	0	2	0	

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Job Experience				
less than one year	20	01	02	0.03
1-5 years	14	10	07	
greater than 5 years	32	28	08	
Education				
Master degree	10	07	10	0.003
Generic BSN	22	07	04	
Post RN	09	07	02	
Diploma Nursing	25	18	01	

Table 2: Association of knowledge with Age, job experience and education

In hypothesis testing of attitude, p value of age was higher than alpha value, (p=0.394) which mean age has no significant association with participant's attitude. Job experience and education, on the other hand, had a statistically significant relationship with participants' attitudes at alpha value (p=0.006 and p=0.000, respectively). In other words, as participants' educational and work experience levels rise, so does their attitude regarding cervical cancer(Table 3).

Variable	Attitude			P-Value
	Poor	Average	Good	
Age				
25-30 year	09	25	11	0.394
31-35 year	09	23	08	
36-40 year	06	14	02	
41-45 year	01	06	06	
46-50 year	01	01	0	
Job Experience				
less than one year	01	19	03	0.006
1-5 years	11	10	10	
greater than 5 years	14	40	14	
Education				
Master degree	02	07	07	0.000
Generic BSN	06	24	24	
Post RN	02	15	15	
Diploma Nursing	16	23	23	

Table 3: Association of attitude with Age, job experience and education

DISCUSSION

The purpose of this study was to determine the nurse's knowledge and attitude toward cervical cancer screening methods at Gangaram hospital in Lahore, Pakistan. In term of demographic characteristics of participants, majority of participant's age was between 25-30 (36.9%) and 31-35 (32.8%) years old, which made approximately three-fourth of total population. Our study findings are consistent with a study conducted in Nigeria, in which 69.6% of participants were in range of 26-35 [12]. In our study, married nurses made 68% of total participants, while a study conducted in India in 2015, married nurses made only 26.8% of total participants [13]. About half of participants had experience of more than 5 years and 25.4% had experience between 1 to 5 years. However, a study conducted in southern Ethiopia, more than three-quarter (82.8%) of participants had experience of 1 to 5 years [14]. In term of education, about half (44.3%) of participants had diploma in nursing followed by generic BSN (29.5%). While post RN and master's degree holder made, (17.2% and 9%) respectively. Our study is consistent with a study conducted in Saudi Arabia on healthcare professional, in which 17.5% participants were holding diploma and 13.2% had master or higher degree [15]. According to the current study, the majority of registered nurses knew little to nothing about cervical cancer and cervical cancer screening. In this poll of nurses, 54% of them reported having never heard of cervical cancer screening. This was especially true among diploma-holding nurses who demonstrated a lack of fundamental understanding. Research undertaken in India revealed similarly low levels of understanding conducted by [16]. However, the majority of the participants (32%) had a basic understanding of cervical cancer screening. Research conducted in South Africa, on the other hand, found that just 42.9 percent of the participants had even heard of cervical cancer [17]. In term of attitude association with demographics characteristics, our study shows that there is no significant association between nurse's attitude and age as p value is greater than 0.05 (p=0.384). However, our study findings countered by an Ethiopian study, in which attitude were found to be significant factors for cervical cancer screening [18]. However, nurse's attitude had significant association with their job experience and education level (p= 0.006, p=0.000), respectively. In a comparable study conducted in southwest Nigeria, it was discovered that education (p = 0.001) was connected with screening attitudes. Furthermore, participants with a higher degree were more likely to have a positive attitude toward screening than those with a secondary or lower' level of education; this study is congruent with a study conducted in Nigeria [19, 20].

CONCLUSIONS

It is concluded that there is no association between age of participants and cervical cancer screening knowledge and attitude. Similarly, as participants' educational and work experience levels rise, their knowledge and attitudes concerning cervical cancer improve.

Conflicts of Interest

The authors declare no conflict of interest.

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