A study of knowledge attitude regarding cervical cancers among nursing professionals at tertiary health care center

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Abstract
Background: Cervical cancer is the second most common cancer among women worldwide. **Aims and Objectives:** To study Knowledge attitude regarding cervical cancers among nursing professionals at tertiary health care center. **Methodology:** The present study was conducted in KLES Dr. Prabhakar Kore Hospital and Medical Research Centre and District Hospital Belgaum during the period of January 2010 to December 2010. The present study consisted of 400 participants done by convenient sampling. Female nursing working at KLES Dr. Prabhakar Kore Hospital and Medical Research Centre and District Hospital Belgaum during the study period were included into the study. Participants were randomized into two groups based on institution they were working for that is Group A (Consisted of female nurses working at KLES Dr. Prabhakar Kore Hospital and Medical Research Centre and District Hospital Belgaum) and Group B (consisted of female nurses working at District Hospital, Belgaum). The data obtained was tabulated and analyzed using rates, rations and percentages. The comparisons of change in knowledge, attitude and barrier was done using paired 't; test. **Result:** In our study we have seen that in this study most of the participants had age between 25 to 35 years (72% in group A and in group B). participants of group A significant gained knowledge about the condition (11.5%) and treatment option (21%), of the cervical cancer (p<0.05). Participants of Group A had better Knowledge about HPV infection (27% vs 24%) where as Group B outnumbered Group A about the role of HPV infection in cervical cancer. However this difference was statistically not significant (p>0.05). The change in knowledge about risk factors like Sex at early age was statistically significant (p<0.000); OC pills (p<0.000), HIV co-infection (p<0.05) but not changed significantly In Multiple partners(p>0.070); Smoking/Tobacco (p>0.120); Mosquito bite (p>0.357). **Conclusion:** In this study knowledge, attitude and awareness towards cervical cancer screening were poor among the health professionals from both tertiar care centre. After the health education participants of group A, who underwent a health talk session regarding cervical cancer screening gained more knowledge. But these health educational sessions should be conducted more often to have better level of recall.
Key Word: Knowledge, attitude, cervical cancer, risk factors of cervical cancer

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INTRODUCTION

Cervical cancer is the second most common cancer among women worldwide.[1] Eighty-six percent of all cervical cancer diagnosed and 88% of death due to cervical cancer occur in developing regions of the world.[1,2] In India, cervical cancer is the most frequent cancer among women between 15 and 44 years of age.[1] Multiple social barriers in accessing basic screening and treatment services have posed Indian women at greater risk of developing the disease.[3,4] Human papilloma virus, a common sexually-transmitted infection, is the

primary underlying cause of cervical cancer. Multiple sexual partners, early age of onset of sexual activity, increasing parity, use of hormonal contraceptives for 5 years or longer,[4] current or previous sexually-transmitted infection[5] and smoking[6] are the risk factors for cervical cancer. Cervical cancer has a very long precancerous period, which provides a considerable window of opportunity to detect and treat it completely. If regular screening is made a part of the routine check-up for all women, the onset of cancer can be detected at an early stage and combated effectively. However, implementing effective screening programs for detecting carcinoma of cervix has been difficult in our country.[7,8]

METHODOLOGY

The present study was conducted in KLES Dr. Prabhakar Kore Hospital and Medical Research Centre and District Hospital Belgaum during the period of January 2010 to December 2010. The present study consisted of 400 participants done by convenient sampling. Female nursing working at KLES Dr. Prabhakar Kore Hospital and Medical Research Centre and District Hospital Belgaum during the study period were included into the study. Female nurses between 25 to 60 years were included while not willing to participate were excluded from the study. The ethical clearance was obtained from Institutional Ethical committee Jawaharlal Medical college Medical research centre, Belgaum and District

hospital, Belgaum during the study period were screened for eligibility. The eligible participants were briefed about the nature of the study and written informed consent was obtained. Participants were randomized into two groups based on institution they were working for that is Group A (Consisted of female nurses working at KLES Dr. Prabhakar Kore Hospital and Medical Research Centre and District Hospital Belgaum) and Group B (consisted of female nurses working at District Hospital, Belgaum). The demographic data like age, educational qualification and years of service were recorded on predesigned and pretested proforma. In group A, pre test questionnaire about cervical cancer was given to study participants. A health talk was given regarding cervical cancer and cervical cancer screening. Then a post test questionnaire was given after the educational program to analyze the change in knowledge and attitude about cervical cancer. In group B, a pretest questionnaire about the knowledge, attitude cervical cancer was given to study participants. Further they were provided with pamphlet about the knowledge, attitude and barrier for the cervical screening. Then post test questionnaire was given after providing pamphlet to analyze the change in knowledge and attitude about cervical cancer. The data obtained was tabulated and analyzed using rates, rations and percentages. The comparisons of change in knowledge, attitude and barrier was done using paired t test.

RESULT

Table 1: Age distribution

Age (Yrs.)	Group A(n=200)		Group B (n=200)	
25 to 35	144	72.00	131	65.50
36 to 45	39	19.50	29	14.50
46 to 55	17	8.50	40	20.00
Total	200	100	200	100

In this study most of the participants had age between 25 to 35 years (72% in group A and in group B).

Table 2: Changes in basic knowledge

Knowledge	Group A(n=200) Pretest	Group B (n=200) Post test	z-value	p-value
Fatal condition	23 (11.50)	5 (2.50)	3.52	0.000
Major problem	18(9.00)	9(4.50)	1.79	0.070
Can be treated	8(4.00)	3(1.50)	1.53	0.120
Treatment option	42(21.00)	20 (10.00)	3.04	0.002

In this study, participants of group A significant gained knowledge about the condition (11.5%) and treatment option (21%), of the cervical cancer ($p<0.05$)

Table 3: Changes in knowledge

Knowledge	Group A(n=200) Pretest	Group B (n=200) Post test	z-value	p-value
HPV infection	54(27.00)	48(24.00)	0.69	0.69
Progression to cancer	48(24.00)	63(31.50)	1.67	0.095

In this study, participants of Group A had better Knowledge about HPV infection (27% vs 24%) where as Group B outnumbered Group A about the role of HPV infection in cervical cancer. However this difference was statistically not significant ($p>0.05$)

Table 4: Changes in knowledge about risk factors

Risk factor	Group A(n=200) Pretest	Group B (n=200) Post test	z-value	p-value
Sex at early age	22 (11.00)	17(8.50)	**3.52**	0.000
Multiple partners	11(5.50)	3(1.50)	1.79	0.070
Smoking / Tobacco	9(4.50)	4(2.00)	1.53	0.120
OC pills	48(24.00)	10(5.00)	5.39	0.000
HIV co-infection	16(8.00)	28(14.00)	1.92	0.055
Mosquito bite	12 (6.00)	8(4.00)	0.92	0.357

The change in knowledge about risk factors like Sex at early age was statistically significant (p<0.000); OC pills (p<0.000), HIV co-infection (p<0.05) but not changed significantly In Multiple partners(p>0.070); Smoking / Tobacco (p>0.120); Mosquito bite (p>0.357)

Table 5: Changes in knowledge about screening

Risk factor	Group A(n=200) Pretest	Group B (n=200) Post test	z-value	p-value
Regularity	21 (10.50)	6(3.00)	**2.99**	0.000
High risk groups	34(17.00)	42(21.00)	1.02	0.070
Discontinuing screening	25(12.50)	7(3.50)	3.31	0.120
Interval of screening	7(3.50)	7(3.50)	0.00	1.00

In this study , participants of group A became significantly more aware about the regularity (10.5% vs3.0%) and age for discontinuing screening (12.5% vs 3.5%) for screening of cervical cancer (p<0.05) whereas , among the participants of Group B awareness was better with high risk groups for cervical screening (21% vs 17%) but difference was statistically not significant (p>0.05)

Table 6: Changes in knowledge about screening

Risk factor	Group A(n=200) Pretest	Group B (n=200) Post test	z-value	p-value
Prevention	27 (13.50)	13(6.50)	**2.33**	0.019
Administration	65(32.50)	41(20.50)	2.72	0.007

In present study, participants of group A had significantly gained more knowledge about prevention (13.5 vs 6.5 %) and administration (32.5% vs 20.5%) of vaccination for cervical cancer (p<0.05)

DISCUSSION

Worldwide, cervical cancer is the second most common (12%) cancer in women, however, in developing countries; it is the most common cancer among women.[9] With 528,000 new cases detected every year, cervical cancer is most notable among lower resource countries of sub-Saharan Africa. It is also the fourth most common cause of cancer death in women worldwide with 266,000 deaths in 2012. Almost 70% of the global burden falls in areas with lower levels of development.[10] India bears about one fifth of the world's burden of cervical cancer, and >100,000 new cases are detected every year in India, which causes 20% of all female deaths in India.[10,11] According to 3 year report (2009-2011) of population based cancer registries in India, cancer cervix continues to be leading site of cancer in India and Sikkim, and two-thirds of the cases are reported in advanced stage.[12] The key to reducing cervical cancer morbidity and mortality is early detection and treatment of cervical precancerous lesions. Among all malignant tumors, cervical cancer is the one that can be most effectively controlled by organized screening programs.[13] An organized screening program can reduce incidence and mortality by 80% as shown in developed countries.[14] Despite being effective, most of the women in developing and under-developed countries do not have access to Pap smear screening. The major problem is low participation in the screening program.[15,16] In India also, both early detection and screening remains a major area of concern coupled with poor literacy and low level of awareness amongst Indian women. Because of low doctor patient ratio in India, nursing staff are the major workforce in rural public health centers and Sub centers of India. The staff nurses are responsible, as primary gate keepers for giving information about cervical cancer and creating and conducting Pap smear screening tests among rural Indian women.[17]In our study we have seen that In this study most of the participants had age between 25 to 35 years (72% in group A and in group B). In this study, participants of group A significant gained knowledge about the condition (11.5%) and treatment option (21%), of the cervical cancer (p<0.05) In this study, participants of Group A had better Knowledge about HPV infection (27% vs 24%) where as Group B outnumbered Group A about the role of HPV infection in cervical cancer. However this difference was statistically not significant (p>0.05) The change in knowledge about risk factors like Sex at early age was statistically significant (p<0.000);

OC pills (p<0.000), HIV co-infection (p<0.05) but not changed significantly In Multiple partners(p>0.070); Smoking / Tobacco (p>0.120); Mosquito bite (p>0.357) In this study, participants of group A became significantly more aware about the regularity (10.5% vs3.0%) and age for discontinuing screening (12.5% vs 3.5%) for screening of cervical cancer (p<0.05) whereas , among the participants of Group B awareness was better with high risk groups for cervical screening (21% vs 17%) but difference was statistically not significant (p>0.05) In present study , participants of group A had significantly gained more knowledge about prevention (13.5 vs 6.5 %) and administration (32.5% vs 20.5%) of vaccination for cervical cancer (p<0.05) Bhabani Pegu et al [18] seen that In this study, 79% of the respondents had knowledge about screening methods for cervical cancer and 91% had knowledge about HPV vaccine. Though 82% of them were aware of pap smear and 89% had good attitude towards it, 85.29% respondent knew about colposcopy as one of the screening techniques for cervical cancer. None of the respondent had undergone a pap smear themselves.

CONCLUSION

In this study knowledge, attitude and awareness towards cervical cancer screening were poor among the health professionals from both tertiary care centre. After the health education participants of group A, who underwent a health talk session regarding cervical cancer screening gained more knowledge. But these health educational sessions should be conducted more often to have better level of recall.

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