

Effect of Structured Teaching Programme on Knowledge, Attitude and Practice on Prevention of Uterine and Cervical Cancer among Female In-Patients at Raja Muthiah Medical College Hospital

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Abstract

In this study, to assess the effectiveness of structured teaching programme (STP) on knowledge, attitude and practice on prevention of uterine and cervical cancer, 50 patients were selected by using convenience sampling technique. The pre-test was conducted using a structured interview questionnaire. STP was conducted and a booklet was given to each patient following the STP. Seven days later post-test was conducted using the same structured interview questionnaire. Most of the patients had inadequate knowledge (74%) in pre-test after STP 74 percent had adequate knowledge and 26 percent of them had moderately adequate knowledge. Regarding the attitude level 34 percent of patients had moderately unfavourable attitude and 46 percent of patients had neither unfavourable nor favourable attitude in pre-test. In post-test 8 percent patients had highly favourable attitude and 81 percent had moderately favourable attitude. The level of knowledge regarding practice on prevention of uterine and cervical cancer of patients increased upto 78 percent after STP. Paired 't' test was applied to compare pre-test and post-test mean and standard deviation. Knowledge, attitude and practice level of patients on prevention of uterine and cervical cancer was statistically significant ($p < 0.001$). There was a significant association between pre-test knowledge, attitude and practice with demographic variables such as education and domicile ($p < 0.05$) which was statistically confirmed with Kruskal-Wallis test / Mann-Whitney 'u' test. This study demonstrated that STP on prevention of uterine and cervical cancer is effective in improving the knowledge, attitude and practice level of patients.

Cancer, an umbrella term for more than 200 types of neoplastic diseases, is characterised by abnormal growth and spread of cells. Uterine cancer is quite common in women aged 50 to 70 but women of all ages can be affected. Carcinoma of the uterine cervix is the most common cancer in south Indian women and it occupies the top rank among cancers in women in developing countries, constituting 34 percent of all women's cancers. To an estimated annual global incidence of 5,00,000 cervical cancers, India contributes 1,00,000, that is one-fifth of the world burden. The burden of cervical cancer in India, taken in the context of the additional problems of advanced disease at presentation, the country's limited resources and health infrastructure, and the paucity of trained personnel emphasise the urgent need for a control programme.

Objectives

The purpose of this study was (i) to assess the existing knowledge, attitude and practice on preven-

tion of uterine and cervical cancer, and (ii) to assess the effectiveness of STP on prevention of uterine and cervical cancer.

Background and Need of the Study

Worldwide, the incidence and mortality from cancer has been increasing, despite recent advances in the understanding and treatment of many diseases. This emphasises the need to define the etiology and molecular basis of cancer and to prevent the development of cancer.

Noted national daily, The Hindu, on 22 Nov 2008, reported that every year 1.5 lakh women are handed a report with two disquieting words – cervical cancer – printed on it. Nearly 74,000 women in India succumb to cervical cancer annually. India adds 27 percent new cases every year to the global incidence.

Cervical cancer is the second most prevalent cancer among women worldwide and the fifth leading cause of cancer deaths. In the developing countries the increased detection of pre-invasive lesions and decreased cancer death rates due to Pap smear. Eighty percent of all cases of cervical cancer are

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found in developing countries, where early detection methods are often not available.

In the modern world the lifestyle changes are quite dangerous to the health, and most of the food items contain some type of carcinogens. These directly affect the women's health, especially reproductive health. Cancer mortality can be reduced only with heightened public awareness and a multidisciplinary approach involving health care professionals and researchers.

Review of Literature

Katherine & Jackyung (2011) conducted a study to examine cervical cancer screening knowledge and practices. The sample consisted of 159 women, 40 to 69 years of age. The 1,987 cancer control supplements questionnaire was used to collect data; 26 percent of the respondents never heard of the Pap smear test. Only 34 percent were reported having had a Pap smear test for screening. The most frequently cited reason for not having had a Pap smear test was absence of disease symptoms. Results indicated that education and usual sources of health care were significant factors related to having heard of or having taken Pap smear test.

Lenehan, et al (2010) assessed women's knowledge, attitude and behaviours related to human papilloma virus and HPV vaccination. A self-administered questionnaire was completed by 98 women attending a hospital-based obstetrics & gynaecology outpatient clinic. Results showed that women had a moderate level of knowledge of general HPV-related issues but lacked information about the ability of barrier contraception to prevent HPV about characteristics of HPV vaccinations. HPV-related knowledge level of education and number of previous sexual partners were unrelated to women intentions to receive vaccination.

Schmeink et al (2008) suggested that the use of oral contraceptives leads to an increased Relative Risk (RR) of cervical cancer. This relative risk increased with the duration of oral contraceptive use.

Thekkekk & Korturo (2008) stated that optimal technologies can improve accuracy and availability of cervical cancer screening. For example, battery-powered digital cameras can obtain multi-spectral images of the entire cervix, highlighting the suspicious areas, and high resolution optical technologies can further interrogate such areas providing in vivo diagnosis with high sensitivity and specificity. In addition targeted contrast agents can highlight in biomarkers of cervical neoplasia. Vrscaj et al (2008) conducted a study to

determine the level of knowledge and awareness of women about cervical cancer, Pap test, HPV infection and preventive vaccination. The investigation was executed by computer-aided telephone inquiry with the 500 women aged from 18 to 55 years. It was concluded that there is an urgent need to provide the lay population and medical community with relevant and accurate information on HPV infection, on early detection of cervical cancer and preventive vaccination.

Methodology

Research Design: A pre-experimental design, one group pre-test – post-test design was adopted for this study.

$O_1 \times O_2$

O_1 - Pre-test

x - Intervention

O_2 - Post-test

Variables Under Study

Independent variable was, Structured teaching programme on prevention of uterine and cervical cancer. *Dependent variables* were, knowledge, attitude and practice on prevention of uterine and cervical cancer. *Extraneous variables* included individual differences in subjects, influence of personnel and teaching programme on uterine and cervical cancer.

Setting of the Study

The study was conducted in medical wards at Raja Muthiah Medical College Hospital, Annamalai University, Chidambaram and included female patients admitted in medical wards. Convenience sampling technique was adopted. Reliability was tested using Cronbach Alpha method, and 'r' value was found to be reliable $r = 0.676$. Fifty samples were taken for the main study.

Criteria for selection of the sample

Inclusion criteria: Female patients [20 -55 years] admitted in medical wards at RMMCH; Patients who know Tamil; Patients willing to participate in the study.

Exclusion criteria : Patients attending medical OPD; Patients admitted in other wards; Clients with serious illness.

Description of the data collection instrument

The instrument consisted of 4 parts:

Section I – Demographic data

Table 1: Frequency and percentage distribution of demographic variables among the patients (n=50)

S.No	Demographic variables	Frequency	Percentage
1	Age		
	Below 30 years	5	10
	31 – 40 years	7	14
	41 – 50 years	24	48
2	Religion		
	Hindu	39	78
	Muslim	7	14
	Christian	4	8
3	Education		
	Non-literate	22	44
	Primary school	21	42
	Middle school	6	12
4	Occupation		
	House wife	30	60
	Coolie	19	38
	Employed	1	2
5	Monthly income		
	Below Rs.1000	25	50
	Rs. 1001-3000	23	46
	Above Rs.3000	2	4
6	Domicile		
	Urban	6	12
7	Marital status		
	Single	2	4
8	Family history of uterine or cervical cancer		
	Yes	3	6
9	Sources of information		
	Relatives / friends	1	2
10	TV / Radio	1	2
	Magazines and news paper	1	2
11	No information	47	94

Table 2 : Comparison of knowledge, attitude and practice between pre-test and post-test (n=50)

Group	Mean	Standard deviation	't' value	'p' value
Pre-test knowledge	3.5	2.3	-27.90	<0.001 *
Post-test knowledge	10.5	2.3		
Pre-test attitude	24.4	6.1	-23.57	<0.001*
Post-test attitude	41.18	4.3		
Pre-test practice	4.5	1.31	-21.93	<0.001*
Post-test practice	8.1	0.88		

* Significant

Section II – Structured interview questionnaire on knowledge

Section III – Statements expression attitude related to prevention of uterine and cervical cancer.

List of beliefs regarding uterine and cervical cancer were prepared to assess the attitude using five- point Likert scale.

Section IV – Practice questions related to prevention of uterine and cervical cancer.

Results

Out of 50 patients, 37 (74%) had inadequate knowledge and 13 (26%) patients had moderately adequate knowledge. Seventeen (34%) of patients had moderately unfavourable attitude, about 23 (46%) patients had neither unfavourable nor favourable attitude and 10 (20%) patients had moderately favourable attitude. Twenty-seven (54%) patients had inadequate practice and 23 (46%) patients had moderately adequate practice in pre-test. After STP 37(74%) patients had adequate knowledge, 43 (86%) had highly favourable attitude and 39 (78%) patients had adequate practice.

Discussion

After STP, 37 (74%) patients had adequate knowledge, 43 (86%) patients had highly favourable attitude and 39 (78%) patients had adequate practice. The effectiveness of STP was statistically tested. Findings of this study brought out that there was an improvement in the level of knowledge, attitude and practice as tested by paired 't' test. Results were found to be statistically significant ($p < 0.001$).

A significant association was found between pre-test knowledge with demographic variables such as education and domicile ($p < 0.003$ and $p < 0.004$ respectively). There was a significant association between pre-test attitude with demographic variables such as education and domicile ($p < 0.004$ and $p < 0.010$) and there was a significant association between pre-test practice with demographic variables such as education and domicile ($p < 0.005$ and $p < 0.007$) which was statistically confirmed with Kruskal-Wallis test / Mann-Whitney 'u' test.

The statistical value supported the research hypothesis that "the post-test knowledge, attitude and practice about prevention of uterine and cervical cancer will be significantly higher than the

pre-test knowledge, attitude and practice of patients who had structured teaching programme”.

The present study findings are supported by those of Shiela, Shiu and Hdroyd (2006) who concluded that the level of knowledge about risk factors as well as general facts about gynaecological cancer in women is low. Only 47 percent of women knew the difference between the sites of origin of cervical and endometrial cancer.

Soliman et al (2008) who found that 58 percent women were not aware that obesity increased the risk of endometrial cancer. Patient education regarding risk factors may increase awareness of the relationship between obesity and endometrial cancer among women.

Nursing Implications

Nursing Service

1. Nurses need to take up the responsibility to create awareness among the patients to improve their knowledge, attitude and practice regarding prevention of uterine and cervical cancer; and conduct a planned ward teaching on prevention of reproductive tract infection and importance of screening test among female population.
2. Nurses should use wide variety of interventions to prevent uterine and cervical cancer like motivating the female population for regular gynaecological check-up and Pap smear to reduce the incidence of uterine and cervical cancer.

Nursing Education

1. This study emphasises the need for developing skills to provide health education to the public on prevention of uterine and cervical cancer.
2. The nursing curriculum should emphasise on the care of patients with reproductive tract infections and sexually transmitted diseases; and provide clinical experience for conducting STP in various settings.

Nursing Research

1. Evidence-based nursing practice must take higher profile in order to increase awareness among the female patients on prevention of uterine and cervical cancer.
2. Research work needs to be conducted on uterine and cervical cancer, which could provide current information on prevention of uterine and

cervical cancer.

Nursing Administration

1. The nurse administrator should assess the learning needs and encourage to organise and conduct some programmes in the hospital to create an awareness among the public about prevention of uterine and cervical cancer.
2. In-service education programme should be organised for nurses to update their knowledge about prevention of uterine and cervical cancer.
3. Nurses working at various levels should be promoted to give health education on prevention of uterine and cervical cancer in an effective and efficient manner.

Recommendations

1. A similar study may be undertaken (i) on a large sample or (ii) in the community settings.
2. A comparative study may be conducted (i) between the knowledge of the patients and their practices; (ii) on knowledge, attitude and practice about (a) uterine and cervical cancer may be conducted between patients with uterine or cervical cancer and general population and (b) on prevention of uterine and cervical cancer may be conducted between urban and rural population.

Conclusion

The study revealed that the structured teaching programme was effective in improving knowledge, attitude and practice of patients regarding prevention of uterine and cervical cancer.

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