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Original Research Article

Impact of Awareness Programme on Cervical Cancer among Women in Hofuf

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Abstract

Introduction: Cervical cancer is the second commonest malignancy among women worldwide and causing high mortality with about 500,000 new cases and 250,000 deaths each year. The mortality rate can be reduced by creating awareness among women on regular or earlier screening for precancerous lesion and by administration of human papilloma virus vaccine to adolescent girls. Hence a study conducted to assess the knowledge on cervical cancer among women, to determine the effectiveness on awareness programme and to associate between selected demographic variables and knowledge of cervical cancer. ***Methods:*** Pre-experimental research design was selected. Totally 100 women were selected by random sampling technique in health centres. After assessing the pre-test knowledge, the awareness was created to them and that was followed by post-test. The collected data was analysed by descriptive and inferential statistics. ***Results:*** The demographic data shows that out of 100 women, 42(42%) women were at the age group of 30 to 40 years, 84(84%) women were unemployed, 8(8%) women in low income group, 34(34%) women attained early menarche, 32(32%) women had early marriage, 44(44%) women having 3 and more children and 48(48%) women were received health information from family members. The overall pre-test adequate knowledge was 13% and post-test was 74%. There was no significant association between selected demographic variables and knowledge of cervical cancer**.** ***Conclusion:*** Most of the women had inadequate knowledge about cervical cancer and its prevention. After awareness programme, the knowledge score was improved. Hence the health educations highly needed to create awareness among women.

Keywords: Cervical Cancer, Women, Pap smear, HPV vaccine & Awareness Programme.

INTRODUCTION

Cervical cancer is the second most common cancer type and it has become a challenging and life-threatening problem in women worldwide and nearly half million new cancer cases occur in a year [1, 2]. It is believed that cervical cancer is closely related with many factors such as life style, cultural differences and fertility behaviours [3, 4].

Although the etiologic causes of cervical cancers are not known as in most cancer types, epidemiologic studies show that factors such as starting to have marital relationship at an early age, getting married before 18, giving birth at an early age, giving birth to more than three babies, poor genital hygiene, risky sexual behaviour, refractory reproductive tract infection caused by Human Papilloma Virus (HPV), smoking cigarettes, lack of fruit/vegetable intake in a diet are cervical cancer risk factors [5, 6]. Women with a late first pregnancy have a lower risk of developing cervical cancer than those with an early pregnancy [7].

Most women who develop cervical cancer tend to have one or more identifiable factors that increase their risk for the disease. Some risk factors such as smoking, and diet can be changed while other factors like such as age and race cannot be changed [8, 9]. Also, there are several misconceptions about cervical cancer and its screening program. Attitudes and beliefs about cervical cancer among the general population and health care providers can also present barriers to its control [10, 11].

A study on perception and risk factors for cervical cancer among women in northern Ghana was conducted with sample of 300 women and they were interviewed using a semi-structured questionnaire to inquire about risk factors and perception of risk of cervical cancer. Among them sixty-one per cent of women reported that they had no personal risk for cervical cancer. In more than half of the women, there were at least one of the risk factors assessed [12]. The underestimation of risk was women's lack of knowledge of cervical cancer (Cheryl Moyer).

During the active period of reproduction, Human papillomavirus infection is very common. The population wide prevalence of HPV varies from one country to other countries from 1.5 to 39% and according to the age and sexual activity [13].

The prevalence rate of cervical cancer is low when comparing with the global statistics. Among all the other cancers in women, cervical cancer accounts 2.4%. This is due to the inadequacy in National level programs for screening [14-18].

The incidence rate is extracted from the Saudi Cancer Registry. This is a population-based registry. But full coverage of all cancer cases cannot be ascertained. Nevertheless, in view of the lack of national screening programs, the actual reason for this low incidence is unknown. Still the closed society can reduce women's exposure to HPV infection [19].

The study on assessment of cervical cancer risk in women between 15 and 49 years of age was carried out in Izmir. The cross-sectional, descriptive study covered a population of 4319 women of reproductive age. Among them, only 1,637 women were included in the sample and they were given a four-part questionnaire through face-to-face interview by visiting the women in their homes to determine socio-demographic factors, obstetric history, genital hygiene and the use of family planning methods. The result of the study showed the number and percentage distributions of the data [20]. It was determined that among the cervical cancer related risks vaginal delivery, vaginal lavage and having three or more pregnancies had the highest rates, while having sexual intercourse before 16 years of age and having more than one sexual partner constituted lower rates. The rate of the women who stated not having a smear in the last three years was 82.4% (Sokupinar, Saydam).

Although cervical cancer is both preventable and curable, due to the lack of accessible screening in Saudi Arabia, most cases are presented at advanced stages, that require extensive chemo-radiation therapy. This is due to the lack of proper screening program as well as lack awareness among the women [11].

Awareness of the risk factors believed and known to lead to cervical cancer is quite significant for preventing the illness, for detecting the groups with risk and for the early diagnosis [19, 20]. Although our literature review has shown there are a lot of epidemiological studies and publications in other countries, we are not aware of any earlier investigation into risk factors for cervical cancer carried out. Hence the study was conducted to assess the impact of awareness on knowledge of cervical cancer among women

Objectives

A study was conducted to

- Assess the knowledge on cervical cancer among women in pre and post test
- Determine the effectiveness of awareness programme
- Associate the selected demographic variables and knowledge on cervical cancer among women.

MATERIALS AND METHODS

Research Design

In Pre-experimental research design one group pre-test and was post-test method was used.

Sample and Sampling Technique

Totally 100 women in the reproductive age group from 15 to 49 years, married and who were willing to participate in the research were selected by using random sampling technique, who visited health centres in Hofuf for various reasons. After obtaining the informed consent, the information sheet was provided to the samples to explain about the research.

Tool

The tool consists of two parts. Part one is about demographic variables consist of age in year, occupation, income group, age at menarche, marital status, if they married age at marriage, number of children and source of health information. Part two is structured questionnaire includes 20 multiple choice questions to assess the knowledge on cervical cancer among women. The scores are categorized as follows; they are less than 50% interpreted as inadequate knowledge, 50 – 75% as moderately adequate knowledge and above 75% as adequate knowledge.

Content Validity and Reliability

Content validity was obtained from nursing and medical experts. The reliability of the tool was computed and tested by split half method (r = 0.9).

Data Collection

Initially the pre-test was conducted to assess the knowledge on cervical cancer by using the structured questionnaire individually. Then the awareness was created to them as a group including 10 members on the topic of early identification and prevention of cervical cancer, about 30 minutes by showing the posters, providing handouts with adequate explanation, videos projection and that was followed by post-test. The women's doubts were clarified by the researcher. The study protocol was approved by the Institution research committee.

Data Analysis

The collected data was computed and analysed by descriptive like mean, standard deviation and inferential statistics such as paired t test and chi square by using SPSS package version 16.

RESULTS

The demographic data shows that out of 100 women, 42 (42%) women are at the age group of 30 to 40years, 84 (84%) women are unemployed, 8 (8%) women in low income group, 34 (34%) women attained early menarche, 32 (32%) women had early marriage, 44 (44%) women having 3 children and 48 (48%) women were received health information from family members.

Table-1: Frequency and percentage distribution of demographic variables of women (n=100)

Demographic variables	Frequency	Percentage
1. Age		
❑ 15-20	12	12
❑ 21-30	32	32
❑ 31-40	42	42
❑ 41-49	14	14
2. Occupation		
❑ Unemployed	84	84
❑ Employed	6	6
❑ Other type of job	10	10
3. Income		
❑ Low	8	8
❑ Middle	78	78
❑ High	14	14
4. Age at Menarche		
❑ <11 years	34	34
❑ 12-13	46	46
❑ 14-15	18	18
❑ >15 years	2	2
5. Age at Marriage		
❑ <18	32	32
❑ 18-25	62	62
❑ >25	6	6
6. Number of Children		
❑ None	2	2
❑ one	28	28
❑ Two	26	26
❑ Three and more	44	44
7. Source of health information		
❑ Health centre	26	26
❑ Mass Media	20	20
❑ Family members	48	48
❑ Friends	6	6

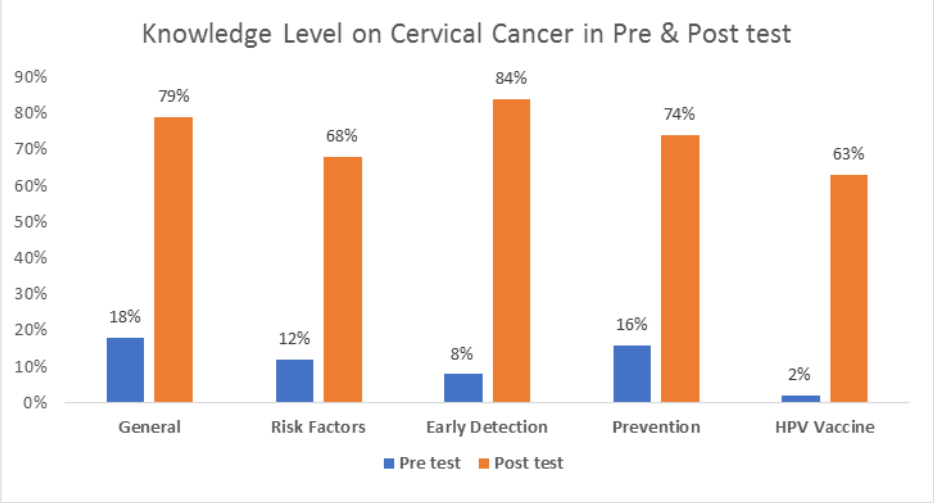

Fig-1: Frequency and percentage distribution of pre and post-test level of knowledge on Cervical cancer among women (n=100)

The overall pre-test knowledge score is showing that 13% women had adequate knowledge, 27% had moderate knowledge and 60% had inadequate knowledge. The overall post-test score is showing that 74% had adequate knowledge, 26% had moderate knowledge and none of them had inadequate knowledge.

Figure-1 is showing the aspects wise frequency and percentage distribution of pre and post-test adequate level of knowledge on cervical cancer among women.

Table-2: Paired 't' test knowledge on cervical cancer among women (n=100)

Level of Knowledge	Pre-test	Post-test
Mean score	23.4	36.2
Standard Deviation	9.3	10.8
Paired 't' Test	t = 6.3505 df = 98 standard error of difference = 2.016 P<0.000*	

The overall level of knowledge mean score for pre-test was 23.4 with standard deviation 9.3 and post-test mean was 36.2 with standard deviation 10.8.

Table-2 reveals the effectiveness of awareness programme on level of knowledge on cervical cancer.

The paired 't' test knowledge score was 6.35 with the standard error of difference 2.016 which was statistically significant at the level of P<0.001.

There was no significant association between selected demographic variables and knowledge of cervical cancer**.**

DISCUSSION

The cross-sectional, descriptive study on assessment of cervical cancer risk in women between 15 and 49 years of age was carried out in Izmir to determine socio-demographic factors, obstetric history, genital hygiene and the use of family planning methods by Sogukpinar *et al*., [21].

In the current study the demographic data shows that out of 100 women, 42 (42%) women are at the age group of 30 to 40years, 84 (84%) women are unemployed, 78 (78%) women in middle income group, 34 (34%) women attained early menarche, 32 (32%) women had early marriage, 44 (44%) women having 3 children and 48 (48%) women were received health information from family members.

Rupali Forta *et al.*, conducted a study on sociodemographic risk factors for cervical cancer in Jammu. This is a cross sectional hospital-based study conducted among unscreened population. The findings of history and clinical examination were recorded on the Performa. A total of 852 women participated in this study. Majority (37%) of the females belonged to the age group 51-60. Incidence of the disease was found to higher (49.1%) in women above Para four and 55% of the females belonged to the rural area. This data provides that the women of Jammu have limited knowledge about the susceptibility of cervical cancer and therefore there is an urgent need to upgrade the health standard of women of Jammu region [22].

The overall pre-test knowledge score is showing that 13% women had adequate knowledge, 27% had moderate knowledge and 60% had inadequate knowledge. The overall post-test score is showing that 74% had adequate knowledge, 26% had moderate knowledge and none of them had inadequate knowledge in the present study.

The finding of the study was supported by Ushadevi, Aru Anne Rose and Ashok Kumar [23]. In each category of risk factors knowledge, there was insignificant number of women who either responded with no or do not know: About increasing age (no - 57.3% and do not know - 12.5%), Infection with Human Papilloma Virus (no - 12% and do not know – 54.1%), early sexual life (no – 75.5% and do not know – 15.1%), Multiparity (no - 83.3% and do not know – 4.2%), Smoking (no – 13.5% and do not know – 6.3%) and Diethylstilbestrol (no - 12% and do not know – 17.1. Another study was conducted by Sornam G *et al*., on associated factors with cervical pre-malignant lesions among the married fisher women community at Sadras, Tamil Nadu [24].

The cross-sectional study on prevalence and risk factors of cervical cancer in Kwara State, North central Nigeria women. The findings from this study attest to the increasing burden of cervical cancer. The screening of women aged 25-64 years for cervical cancer was done by using Papanicolaou smear. Respondents were selected through systematic random sampling. The results proved that only 10 (5.0%) respondents had positive cytology result, while the rest were normal. Risk factors for cervical cancer identified included coitarche, tobacco smoking, and number of sexual partners and family history of cervical cancer. The high number of positive results obtained from the study coupled with the presence of risk factors was an indication of how useful regular screening will be in the early detection of cervical cancer [25]. Similar study also carried out on knowledge aspects about cervical cancer prevention [26-30].

In the present study the paired 't' test knowledge score was 6.35 with the standard error of difference 2.016 which was statistically significant at the level of P<0.001.

There was no significant association between selected demographic variables and knowledge of cervical cancer.

CONCLUSION

In order to prevent the cervical cancer, the women should have adequate knowledge. Hence, the study was conducted to assess the impact of awareness programme on cervical cancer. Hence, extensive health education to the public like awareness programme is needed to improve the knowledge of women with an emphasis on the fact that both vaccination and screening are the new standards for prevention of cervical cancer.

HPV vaccination prevents most of the cervical cancer and screening can detect precancerous lesions which can be mitigated by treatment. And, utilization of the services of media like television, and any social media can spread the message massive impact in increasing awareness to prevent morbidity.

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