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ASSESSMENT OF KNOWLEDGE ON CERVICAL CANCER AMONG WOMEN BETWEEN 18-50 YEARS

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ABSTRACT
Cervical cancer is the cancer arising from cervix and remains the second most common cancer in women worldwide and most frequent in developing countries. HPV strain 16 &18 are responsible for nearly 80% of high-grade cervical cancers causing74,000 deaths every year. The purpose of study was to assess knowledge on cervical cancer among women between 18-50 years of age of selected hospitals in Pathanamthitta, quantitative descriptive non-experimental approach was used for study. A sample of eighty women were selected using purposive sampling. The knowledge on cervical cancer was assessed using self-structured knowledge questionnaire. The present study revealed that there was adequate, moderate and poor level of knowledge and the study concluded that awareness programme must be conducted for women to promote right information and knowledge on cervical cancer. The study reported that there was a significant association between knowledge scores and demographic variables (χ^2=39.7261 at $p<0.05$). The study revealed majority of women had moderate knowledge 78.15%, whereas 18.75% had poor knowledge and 2.5% had adequate knowledge.

Keywords: Assess, knowledge, cervical cancer, women.

INTRODUCTION
Cervical cancer is the cancer arising from the cervix where cervix is the lower part of the uterus in human female reproductive system. It occurs due to abnormal growth of cells that have the ability to invade or spread to other parts of body. Cervical cancer remains the second most common cancer in women worldwide and most frequent in developing countries. Human papilloma virus causes more than 90% of cases. HPV strain 16 & 18 are responsible for nearly 80% of high grade cervical precancers. In India, cervical cancer is one of the leading malignancies among women, with about 130,000 new cases and 74,000 deaths every year accounting for 30% of global cervical cancer mortality. India's cervical cancer age standardized incidents rate and age-standardized mortality rate are highest south-central Asia.[1] Most of the majority registries have shown a decreasing trend of cervical cancer, however, the decrease was very small. In India, most of the cervical cancer cases are detected with regional spread of diseases, and very small proportion are diagnosed at localized stage. The pre-invasive and early stage of cervical cancer usually remains a symptomatic until the disease is locally advanced. Advanced disease presents with common symptoms such as abnormal vaginal bleeding which could be post coital, intermenstrual, or post-menopausal, or an increased duration and amount of menstrual flow or watery serosanguineous vaginal discharge. According to the World Health Organization the late symptoms may include dysuria, urinary retention, and haematuria as well as symptoms such as rectal bleeding, bowel obstruction and constipation which suggest tumor invasion of the bladder or the rectum, whilst edema of the lower extremities may be the result of lymphatic obstruction.[2]

1.1 BACKGROUND OF PROBLEM
Cervical cancer is a health problem of the developing world, as approximately 84% of all women diagnosed with cervical cancer live in developing regions. Literature focuses primarily on the prevention and treatment cervical cancer and qualitative work investigating the experiences of women living with cervical cancer is scarce. Infection with Human Papilloma Virus (HPV), a common virus, which is transmitted by close contact, including penetrative and non-penetrative sexual contact is responsible for 99% of cervical cancers. The persistence of the virus may cause precancerous and, later, cancerous changes by interfering with normal control of cell growth.[3] Human papilloma virus (HPV), a common sexually transmitted infection, is the primary underlying cause of cervical cancer. Preventing HPV transmission is very difficult. Barrier contraceptive methods are only partially effective

because the virus can exist throughout most of the anogenital area and can remain infectious for years. Although HPV cannot be treated, in the majority of cases, the infection becomes undetectable. In a small percent of women, however, HPV infection persists and leads to precancerous lesions, called dysplasia. Uncompromising women may be at particularly high risk of persistent infection. Detectable HPV infection is most common in younger women.[1] Although prevalence varies among regions, it generally reaches a peak of about 20 percent among women aged 20 to 24, with a subsequent decline to approximately 8 to 10 percent among women over age 30.[4]

Of the small percent of women whose HPV infection develops into dysplasia, the majority likely will develop only mild dysplasia, which usually regresses or does not progress, particularly among women under age 35. Few women who develop dysplasia will progress to cervical cancer. [3]

NEED AND SIGNIFICANCE OF THE STUDY

Cervical cancer is one of the most preventable and treatable form of cancer, as long as it is detected early and managed effectively. Cervical cancer is the fourth most common cancer in women.[1]

Cervical cancer is a global public health problem, with a particularly high burden in many low-income and middle- income countries (LMICs). The proven effectiveness of intervention measures, such as vaccination against the most oncogene human papilloma virus (HPV) types the central and screening, particularly with HPV-based methods, makes cervical cancer a largely preventable disease. However, progress in terms of a reduction in cervical cancer incidence and mortality, has thus far been observed predominantly in countries with a high Human Development Index (HDI), where high-quality screening, timely treatment, and follow-up care services are routinely available. In LMICs, where most cases and deaths occur, progress in reducing incidence and mortality has been slow, with a number of countries reporting increases in incidence or mortality rates in the past decade.[5] According to 2023 global cervical cancer awareness report among women on a global scale approximately 604,000 new cases of cervical cancer and leading to 342,000 deaths were reported. India has a population of 511.4 million women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 123907 women are diagnosed with cervical cancer and 77348 die from the disease. Cervical cancer ranks as the 2nd most frequent cancer among women in India and the 2nd most frequent cancer among women between 15 and 44 years of age with a crude rate in incidents and mortality of 18.7 and 11.7. About 5.0% of women in the general population are estimated to harbor cervical HPV-16/18 infection at a given time, and 83.2% of invasive cervical cancers are attributed to HPVs 16or 18. The ages standardized incidents and mortality rate of cervical cancer in India is 18.0 and 11.4.[6] Globally in 2020, there was an estimated 604,127 cervical cancer cases and 341,831 deaths, with a corresponding age-standardized incidence of 13·3 cases per 100,000 women-years and mortality rate of 7·2 deaths per 100,000 women years. Cervical cancer incidence ranged from in Iraq to in Eswatini. Mortality rates ranged from in Switzerland to in Eswatini. Age standardized incidence was highest in Malawi and Zambia in Africa, Bolivia and Paraguayin Latin America, Maldives and Indonesia in Asia, and Fiji and Papua New Guinea in Melanesia. A clear socio-economic gradient exists in cervical cancer with decreasing rates as HDI increased. Incidence was three times higher in countries with low HDI than countries with very high HDI, whereas mortality rates were six times higher in low HDI countries versus very high HDI countries. In 2020 estimates, a general decline in incidence was observed in most countries of the world with representative trend data, with incidence becoming stable at relatively low levels around 2005 in several high- income countries.[5] In India, cancer of the cervix uteri is the 3rd most common cancer with an Incidence rate of18.3% 123,907 cases and the second leading cause of death with a mortality rate of 9.1% as per GLOBOCAN 2020. The Age standardized incidence rate per 100,000 population was18 while the 5-year prevalence rate across all ages was 42.82 per 1 lakh population. As per the National Cancer Registry Program, cancer of breast and cervix uteri was the most common cancers among females. Cervical cancer accounted for 6-29% of all cancers among women in India. Papum Pare district in the state of Arunachal Pradesh, India had the highest incidence rate of cervical cancer 27.7 in Asia. The majority of the patients with cancer were diagnosed at the locally advanced stage for breast 57.0%, cervix uteri 60.0%, head and neck 66.6%, and stomach 50.8% cancer, where as in lung cancer, distant metastasis was predominant among males 44.0% and females 47.6%.[7]

RESEARCH METHODOLOGY

Research methodology is the science of studying how research is done scientifically.[8] It is a way to systematically solve the research problem. It includes the steps, procedures, and strategies for gathering and analyzing the data in a research investigation.[9] It deals with defining the problem, formulation of hypothesis, methods adopted for data collection and statistical techniques used for analyzing the data.[10]

3.1 RESEARCH APPROACH

Research approach involves the description of the plan to investigate the phenomenon under the study. Research approach is a frequently used term in research, which is an important element of the research design, which governs it. It is used to identify, explore and describe the existing phenomenon and its factors.[10]

The research approach used in the study was **Quantitative Research Approach.**

3.2 RESEARCH DESIGN

The term research design refers to researcher's overall plan for obtaining answers the research question and it spells out strategies that the researcher adopted to develop the information that is accurate, objective, and interpretable.[10]

Research design used in the study was **Descriptive Non-Experimental Research Design.**

3.3 SETTING OF THE STUDY

The physical location and condition in which data collection takes place in a study is called setting.[10]

Present study was conducted in selected hospitals in Pathanamthitta.

3.4 POPULATION

The entire set of individuals or objects having some common characteristics; sometimes called universe.[11]
In this study, population consist of women sample aged between18-50 years.

3.5 SAMPLEANDSAMPLING TECHNIQUES

Sample: Women between the age group of 18-50years.
Sampling size:80 samples.
Sampling technique: Purposive sampling technique.

3.6 INCLUSIONCRITERIA

1. Women who are able to read Malayalam and English.
2. Women those who are interested to participate.
3. Women those who are in the active reproductive age.
4. Women who are attending the hospital from the various departments.

3.7 EXCLUSION CRITERIA

1. Women aged below 18 years and above 50 years.
2. Women who are on treatment for cervical cancer.
3. Women who are taken HPV vaccination.

3.8 TOOLS/INSTRUMENTS

Instrument is the device used to collect data.[11] The tool used in the study consists of 2 sections
Section A: Socio demographic variables like age, educational qualification, occupation, residence, marital status, type of family, number of children, family history of cervical cancer, early screening test source of information.
Section B: Structured Knowledge Questionnaire on Cervical Cancer.

3.9 DESCRIPTIONOFTHETOOL

Section A: Sociodemographic variables
Section A consisted of items in demographic variables including age, education qualification, occupation, residence, marital status, type of family, number of children, family history of cervical cancer, early screening test source of information.

Section B: Structured questionnaire to assess the knowledge on cervical cancer.
Section B consisted of 30 questions related to knowledge regarding cervical cancer.
Scoring consists of:

0-6-Poor knowledge
7-12-Moderateknowledge
13-18- Good knowledge

1 was awarded for all correct responses and Score 0 was given for the wrong response. Thus, maximum possible score was 18.

3.10 DATA COLLECTION PROCESS

Data collection is a process of gathering and measuring information on variables of interest in an established systematic fashion that enables one to answer stated research question and the evaluate out comes.[12]Data collection is gathering the address of a research problem. The data collection period for this study was 31/07/2023 - 14/08/2023. The data was collected from MGM Muthoot Hospitals Kozhencherry. After obtaining a formal permission from the concerned authority from the hospital, OPDs and wards were selected as setting for data collection. Women between the age of 18-50 years were selected on the basis of inclusion and exclusion criteria by purposive sampling technique. The study was conducted among women between theageof18-50 years. The purpose of the study was explained. Data was collected using structured knowledge questionnaires. Written informed consent from the participants were obtained after explaining the need of the study. The confidentiality of the information was maintained. Demographic variables along with the questionnaire were administered by the investigator. Daily 20-25 samples were obtained. The subjects were co-operative during the study.

3.11 PLAN FOR DATA ANALYSIS

Data analysis is the technique used to reduce, organize, and give meaning to the data. It involves contrasting and comparing the final data to determine what pattern, themes, or threads emerge.[12] Data analysis is planned based on the objectives of the study. After data collection, data were organized, tabulated and summarized by preparing master data sheet and using descriptive and inferential statistics manually using MS Excel, 2007 version. Frequency and percentage were used to define baseline data and knowledge scores. As the knowledge was in the ordinal data, non-parametric test was adopted for the association of the knowledge scores with demographic variables Chi-square test was completed. Analysis was organized under the following headings:
Section A: Description of demographic variables.
Section B: Description of self-structured questionnaire to assess knowledge of women regarding cervical cancer.
The research methodology is making an overall plan for a research problem to solve it in a systematic and scientific manner. This chapter dealt with the description of the research approach and design, setting of the study, population and sample, sampling technique, sampling criteria, description of the tool and validity of the tool, data collection process and plan for data analysis.

RESULTS AND DISCUSSION

4.1 RESULTS

4.1.1 DISTRIBUTION OF SAMPLES BASED ON SOCIO DEMOGRAPHIC DATA

In the present study, distribution of women based on age revealed that 47.5% of the women were in the age group of 18-28 years, 30% were in the age group of 28- 38 years and 22.5 % were in the age group of 38-50 years.
Distribution of women based on education revealed that 60% were graduates, 16.25 % were having secondary education, 14.75% were post graduates and 8.75 % were having primary education.
Distribution of women based on occupation revealed that 67.5% were private employees, 25% of the women were homemakers and 7.5% were Government employees.
Distribution of women based on residence revealed that 55% were residing in the rural area, 26.25% were residing in the semi urban area and 18.75 % of the women were residing in the urban area.
Distribution of women based on marital status revealed that 62.5 % of the women were married, 37.5% were single and no one included in the category of divorce and widow.
Distribution of women based on type of family revealed that 62.5% were living in the nuclear family, 35% of the women were living in the joint family and 2.5 % were living in the extended family.
Distribution of women based on number of children revealed that 40 % were having two children, 37.5 % of the women were having no child, 18.75% were having one child, 2.5 % were infertile and 1.25 % where having more than two children.
Distribution of women based on family history revealed that 96.25% were not having the family history of cervical cancer and 3.75% of the women were having the family history of cervical cancer.
Distribution of women based on pap smear testing revealed that 95 % of the women were not done pap smear testing and 5% were done pap smear testing.
Distribution of women based on previous knowledge revealed that 82.5% were not having previous knowledge about cervical cancer and 17.5% of the women had previous knowledge about cervical cancer.

4.1.2 ASSESSMENTOFLEVELOFKNOWLEDGEOFWOMENREGARDINGCERVICAL CANCER.

The self-structured questionnaire which was distributed to assess the knowledge regarding cervical cancer revealed that among 80 samples, 78.75% had moderate knowledge, 18.75% had poor knowledge and 2.5% of the women had adequate knowledge on cervical cancer.

4.1.3 ASSOCIATION BETWEEN LEVEL OF KNOWLEDGE OF WOMEN WITH SOCIO DEMOGRAPHIC VARIABLES.

The chi-square test was used to find out association between knowledge scores and socio demographic variables. The chi- square value showed that there is a significant association between knowledge score of samples and number of children. But no association was found between the age of women, education, occupation, area of residence, marital status, type of family, family history of cervical cancer, pap smear testing and previous knowledge about cervical cancer.

4.2 DISCUSSION

Section I: Discussion of sociodemographic characteristics of the women.

Among 80 samples 38 (47.5%) were in the age group of 18 - 28 years and 48 (60%) were graduates. Majority of the women 54 (67.5%) were private employees and 44 (55%) were residing in rural areas. Out of 80 samples 50 (62.5%) were married, 50 (62.5%) were living in the nuclear family and 32 (40%) were having two children.
Among the sample,77 (96.25%) was not having the family history of cervical cancer, 76 (95%) were not done pap smear testing and 66 (82.5%) had no previous knowledge about cervical cancer.

Section II: Discussion of assessment of knowledge regarding cervical cancer among women.

The result of the present study revealed that among 80 samples only two women (2.5%) had adequate knowledge, 63 (78.75%) had average knowledge and 15 (18.75%) had poor knowledge.
The study showed that about 78.75% of women had average knowledge regarding cervical cancer. The findings of the present study were similar with another concordant study conducted among 256 female school teachers selected by using random sampling technique in selected school, Salem, Tamil Nadu. The tool used is structured questionnaire. The result too revealed that 60% had good knowledge and 66.8% had good attitude regarding cervical cancer.

Section III: Discussion of association between the knowledge score of women at selected hospital with socio demographic variable.

The findings of the present study revealed that there was an association between the knowledge score of women at selected hospital with socio demographic variable. This showed that there is a significant association between the knowledge score of samples and number of children. But there is no association was found between the age of women, education, occupation, area of residence, marital status, type of family, family history of cervical cancer, pap smear testing and previous knowledge about cervical cancer.

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