

**EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME
ON CANCER CERVIX AMONG WOMEN WHO ARE ATTENDING
OPD IN MELMARUVATHUR ADHIPARASAKTHI INSTITUTE OF
MEDICAL SCIENCES AND RESEARCH**

**By
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**A Dissertation submitted to
THE TAMILNADU Dr.M.G.R MEDICAL UNIVERSITY,
CHENNAI.**

**IN PARTIAL FULFILMENT OF THE REQUIRMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING**

APRIL 2011

CERTIFICATE

THIS IS TO CERTIFY THAT EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON CANCER CERVIX AMONG WOMEN WHO ARE ATTENDING OPD IN MELMARUVATHUR ADHIPARASAKTHI INSTITUTE OF MEDICAL SCIENCE AND RESEARCH AT MELMARUVATHUR is a bonafide work done by Ms.N.Umamaheswari, Adhiparasakthi College of Nursing, Melmaruvathur-603319, in partial fulfillment for the university rules and regulations towards the award of the degree of master of science in nursing, Branch III Obstetrics and Gynaecological Nursing, under our guidance and supervision during the academic year 2009-2011.

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requirement for the Degree Of **Master Of Science in Nursing**
April - 2011.

INTERNAL EXAMINER

EXTERNAL EXAMINER

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MELMARUVATHUR ADHIPARASAKTHI INSTITUTE OF MEDICAL SCIENCE
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CHAPTER - I

INTRODUCTION

Cancer of cervix is the most common cancer among women in India. Cervical cancer is the leading causes of death in women world wide about 5, 00,000 women were diagnosed with cervical cancer and more than 2,70,000 women die due to cervical cancer (WHO 2010).

Cancer affects everyone the young, old, rich, poor, men, women and children and represents a tremendous burden to patients, families and societies. Yet many of these deaths can be avoided if detected early and treated promptly.

For too many people “Cancer means death” since the diagnosis is often made at the late stage of the disease. Ignorance, fear and anxiety play an important role in seeking medical advice at the early stage. It is believed that 75% of cervical cancer could be prevented if primary prevention was initiated against known causative factors. Prevention and early detection of cancer cervix must be a high priority to further decrease in cancer morbidity and mortality rates (Ruth Dun Leavey, 2009).

In the light of present knowledge, advanced science and technologies, early detection and prompt treatment of cancer and pre cancerous conditions provided the best possible protection against cancer for the individual and for the community. Many mass programmes are being conducted to detect early and to prevent cervical cancer. Nurses have a major role in encouraging the women to undergo regular screening to detect and prevent cervical cancer from the early stage.

Total incidence of cervical cancer in the world population around one fifth is occurring in India. Globally there are around 5,00,000 women being diagnosed with cervical cancer and out of which more than 2,70,000 women die. Every 2 minute a women dies of cervical cancer somewhere in the world (WHO 2010).

Cervical cancer is the most common cancer of the female genital tracts and accounts for about two hundred and fifty thousand deaths yearly most of which occur in developing countries. A significant drop in its incidence has been recorded in the developed countries as a result of intensive program of cervical screening. The study determines the level of knowledge and uptake of cervical screening in Owerri, south eastern part of Nigeria. The most common reasons given for not doing the test were lack of knowledge, feeling of

no need to do the test and fear of bad result. The study concludes that the level of knowledge of cervical screening is low and work (Ezem BU, 2010).

Cancer develops in several phases, depending on the type of tissue affected. Typically these phases are dysphasia, cancer insitu, localized invasive cancer, regional lymph node involvement and distant materials. Cancer in all forms causes 12 percent of death. In developing countries 80 percent cases are cured because of early detection.(WHO 2005)

NEED FOR THE STUDY

On a global brand, breast cancer and cervical cancer are the two most common female malignancies. Cervical cancer is a second most common type in women world wide after breast cancer. The incidence of cervical cancer is on the higher side in the developing nations as compared to the developed countries (Capalash N. et.al., 2010)

Every year cervical cancer is diagnosed in about 5,00,000 women globally and is responsible for more than 2,80,000 death annually. There is a wide variation in the incidence of cervical cancer across the globe. In the last 8 years in the United States, the pap

smear test have reduced the deaths related to cervical cancer by three-quarters. At one time cervical cancer was one of the most dreaded cancer and the leading causes of death in women in the US. But now it is the eighth most common cancer there. 80% of the new cervical cancer occurs in developing countries, like India, which reports approximately one fourth of the world's cases of cervical cancer estimated in the year (2010).

In the United States, it is only the eighth most common cancer of women. The incidence of new cases of cervical cancer in the United States was 7 per 1, 00,000 women in 2009.

In the United Kingdom, the incidence is 9.1 / 1,00,000 per year (2009), similar to the rest of Northern Europe and mortality is 3.1/ 1,00,000 per year (2009) (cancer research UK cervical cancer statistics for the UK).

In Canada as estimated 1300 women will be diagnose with cervical cancer in 2008 and 380 will die.

In Australia there were 734 cases of cervical cancer (2008) the number of women diagnosed with cervical cancer has dropped on average by 4.5 % each year since organized screening begun in 1991 (1991 to 2005).

Worldwide it is estimated that there are 4,73,000 cases of cervical cancer and 2,53,500 deaths per year .

The number of deaths due to cervical cancer is estimated to rise to 79,000 by the year 2010. The cancer mostly affects middle-aged women (Between 40-55 years), especially those from the lower economic status who fail to carry out regular health check ups due to financial inadequacy.

Eastern and South Africa, Central and South America and the Caribbean too report very high incidence of cervical cancer. This report provides key information for India on cervical cancer, screening practices, HPV vaccine introduction and other relevant immunization indicators.

India has the population of 366.58 millions women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 1,32,082 women are diagnosed with cervical cancer and 74,118 die from the disease. Cervical cancer ranks as the first most frequent cancer among women in India, and the first most frequent cancer among women between 15 and 44 years of age. About 7.9 % of women in general population are estimated to harbor cervical cancer is attributed to HPV s 16 or 18.

Early detection of cancer of cervix by Pap smear at the age of 20 years is useful as regular screening by pap smear having brought down the incidence of invasive disease and their problem in younger women.

Routine screening has decreased the incidence of invasive cervical cancer in united states where approximately 13,000 cases of invasive cancer and 59,000 cases of cervical carcinoma in situ are diagnosed.

Investigator from the past experience found that most of the women do not present themselves for early detection and they seek treatment only in the advanced stage. So there is need to improve the knowledge and attitude of women regarding cancer cervix, which is possible only by health education. So the investigator has decided to impart structured teaching programme on early detection and prevention of cancer cervix.

There are so many mass programmes are being conducted to detect early and to prevent cancer cervix. so the nurses has the major responsibility to encourage the women to undergo regular screening to detect and prevent cancer cervix from the early stage.

STATEMENT OF THE PROBLEM

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON CANCER CERVIX AMONG WOMEN WHO ARE ATTENDING OPD IN MELMARUVATHUR ADHIPARASAKTHI INSTITUTE OF MEDICAL SCIENCES AND RESEARCH.

OBJECTIVES

1. To assess the level of knowledge of women regarding cancer cervix.
2. To evaluate the effectiveness of teaching programme on cancer cervix among women.
3. To determine the association between the effectiveness of teaching programme on cancer cervix with the selected demographic variables.

OPERATIONAL DEFINITIONS

Effectiveness

It refers to the extent to which the structured teaching programme in women regarding cancer cervix has achieved the effect in improving the knowledge, attitude of women.

Structured teaching programme

It refers to the information gained by women regarding cancer cervix as measured by structured questionnaire.

Women

Women in the age group of 30 to 55 years.

Cancer cervix

An abnormal growth of cancer cells present in the neck of the uterus.

ASSUMPTIONS

Women will have inadequate knowledge about cancer cervix.

1. Women need education regarding cancer cervix.
2. Structured teaching programme will enrich their knowledge regarding cancer cervix.

LIMITATION OF THE STUDY

1. The study was limited to women who are willing to participate.
2. Sample size was limited to hundred women.
3. Period of study was limited to 6 weeks.

PROJECTED OUTCOME

Findings of the study will help to identify the knowledge of women which helps to plan the health education programme about cancer cervix and thereby to create knowledge among women regarding cancer cervix.

CONCEPTUAL FRAMEWORK OF THE STUDY

Conceptual models are made up of concepts, which are words describing mental images of phenomena and preposition. A conceptual frame work for a research study helps to organize the study and provide a context for the interpretation of the study findings.

The conceptual framework for this study was derived from the general system theory with input, throughput ,output and feedback. This was first introduced by Ludwig Von Bertalanffy in 1968.

According to this theory, a system is a group of elements that interact with one another in order to achieve the goal. An individual is a system because she receives input from the environment. This input when processed provides an output. All living systems are open . There is a continual exchange of matter ,energy information the system is cyclical in nature and continues to be so long as the four parts input, throughput , output and feedback keep interacting with each other. If there are changes in any of the parts, there will be alterations in all parts , feedback from within the system or from the environment provides information , which helps the system to determine its effectiveness.

Input

It consists of information, material or energy that enters the system. In this study women in a system with inputs from self and that acquired from the environment. The input includes learner's background like age, education, occupation, socio-economic status and existing knowledge about cancer cervix. The input also includes administration of structured teaching programme regarding cancer cervix among women, such as risk factors, etiology, diagnostic evaluation, pathophysiology, signs and symptoms, treatment and prevention of cancer cervix.

Throughput

The throughput is the transformation of knowledge by structured teaching programme regarding cancer cervix among women with the use of audio-visual aids.

Output

The output is the result of changes in knowledge found among the women regarding cancer cervix, interrupted as inadequate knowledge moderately adequate knowledge and adequate knowledge.

Feedback

It is the process that enables a system to regulate itself provides information about the systems output and it feedback as input accordingly higher knowledge scores obtained by the subjects in the post test indicate that the planned structured teaching programme is effective and gain in knowledge regarding cancer cervix. A lower score in post test indicates the need for repeating the structured teaching programme to women regarding cancer cervix.

CHAPTER – II

REVIEW OF LITERATURE

Review of literature is a written summary of the state of the art on a research problem. It helps researcher to familiarize themselves with the awareness base. It includes the articles involved in identifying and searching comprehensive picture of a state of awareness on that topic (Polit and Hungler, 1995).

This review of literature is an essential step in the development of research project. It helps the researcher to design the proposed study in a scientific manner to as to achieve the desired result.

Literature Review has been discussed under the following headings:

Part-I : Research studies related to etiology & risk factors of cancer cervix.

Part-II : Research studies related to diagnosis of cancer cervix.

Part-III : Research studies related to management of cancer cervix.

Part-IV : Research studies related to prevention and complication of cancer cervix.

Part-I: Research studies related to etiology & risk factors of cancer cervix.

Campbell.M. (2010), reports that cancer of the uterine cervix is second largest cause of cancer deaths in women and its toll is greatest in populations that lack screening program to detect precursor lesions. Persistent infection with high risk genotypes of human papilloma virus (HPV) is necessary, although not sufficient, to cause cervical carcinoma.

Eliav Barr.T. (2009), concluded that senior director of clinical research at Merck Research laboratories, explained the 2 types of HPV most commonly associated with cervical cancer, as well as the types that cause genital warts and many abnormal pap smears. Barr said his hope was to reduce the burden from HPV – related disease as much as possible.

Laurie Markowitz.E. (2009), a medical epidemiologist for the centers for disease control found that human Papilloma virus (HPVS) are responsible for the most cases and a relatively limited number of

HPV genotypes are classified as high risk which are isolated from almost all cervical cancers.

Neeta Singh. (2008), cervical cancer is the second most common cancer in women. The world wide incidence is 5,10,000 new cases annually, with India accounting for 1,32,000 cases. The mortality rate of cervical cancer is 2,88,000 world wide and 74,118 deaths occur per annum in India. 80% of cervical cancer occurs among women in developing countries where access to screening and treatment of precancerous lesions are limited. Thus cervical cancer remains a pervasive public health problem.

John L.Zeller et.al.,(2007), reported that cervical cancer occur in women between the age of 35 and 55 years. Cervical cancer is preventable and curable if detected early. The risk factors of cervical cancer are human papilloma virus infections, multiple sexual partners, sexually transmitted disease like Chlamydia, gonorrhoea, syphilis, HIV/ AIDS increase the chance of acquiring HPV, weak immune system such as from HIV infection, low socio-economic status, long term use of oral contraceptives, cigarette smoking and tobacco use increases the risk of precancerous changes.

Kohl. I. (2007), reports that the persistent infection with high risk (oncogenic) HPV types is the necessary cause of cervical cancer. HPV types 16 and 18 are the most important of the high-risk types all around the world. The low risk HPV types include type 6,11. The majority of deaths, around 80% occur in developing countries. The main reason for variation in incidence is probably the availability of screening programmes in many developed countries, but not in poorer developing countries. Pap smear testing forms the basis of cervical cancer screening programmes round the world. A well implemented screening program can reduce the incidence of cervical cancer in a country by approximately 80%.

Shasi Sharma. et. al., (2006), conducted a study on development of a risk scoring systems for cervical neoplasia showed that twenty-one risk factors representing the risk of developing cervical precancerous and cancerous lesions of cervix were considered for development of scoring systems. The risk factor is based on a case control study carried on precancerous and cancerous lesions of cervix at the institute of cytology and preventive oncology, New Delhi. Two scoring systems were employed to score all the risk factors. The sensitivity computations revealed that the

scoring methodology enabled identification of 64.8%, 73.9% and 87.1% mild, moderate, severe dysplasia.

Shen.et.al., (2006), conducted a population based study of human papilloma virus infection in high risk area for cervical cancer in shanxi province., China showed that there were 9,683 women participated in this study. Local women welcomed this study and population compliance rate was 75.4%. In tested population we found 2,666 subjects of HPV DNA positive and HPV prevalence was 27.5% the rate in mountain area was higher than that in half mountain areas.

Cancer prevention society (2005), reported that participation by women in screening programmes for cervical cancer is far from optimal and many lives are lost because of this. Cervical cancer is common and is early detected and treated. It has a good prognosis for cure if detected early in its course, effective screening has been shown to have a major role in decreasing morbidity and mortality associated with cervical cancer.

Part-II : Research studies related to diagnosis of cancer cervix

Ault. H. et. al., (2010), reports that cervical cancer was once the most common cause of cancer death for American women. But the increased use of pap screening has helped to reduce the death rate by 75% as the test can detect precancerous changes in the lining of the cervix at a stage where the cancer is most curable. Still it is estimated that over 10,000 cases of cervical cancer will be diagnosed this year, resulting in over 3,000 deaths.

American cancer society (2009), recommends that all women begin getting annual pap smears as soon as they become sexually active, but no later than 21 years of age. If three normal pap smears have been taken by the time a woman is 30, she may go three years between tests.

Ken . R. et. al., (2008), reviewed that regular screening has meant that precancerous changes and early stage cervical cancers have been detected and treated early. Figures suggest that cervical screening is saving 5,000 lives each year in the UK by preventing cervical cancer. Regular two-yearly pap test can reduce the

incidence of cervical cancer by up to 90%. In Australia 1700 women dying from the disease each year.

Sushil K.et.al., (2008), reported that cervical cancer was one of the most common cause of cancer death for American women. But the increased use of pap screening has helped to reduce the death rate by 75% as the test can detect precancerous changes in the lining of cervix at a stage where the cancer is most curable. Still it is estimated that over 10,000 cases of cervical cancer will be diagnosed this year, resulting in over 3000 deaths per year, the rest of the cases are treated by an early diagnosis.

Cathy J.Brodley.et.al.,(2007), conducted a comparative study regarding the cervical cancer incidence, stage of diagnosis and survival in medicated, insured and non medical insured populations. It concluded the importance of cervical cancer screening programs targeted at low income women.

Vicki. B. Benard . et.al., (2006), conducted cervical screening in the National Breast and cervical cancer early detection program. In this nation wide screening program only 7% of all biopsy confirmed high grade cervical lesions (CIN 2 or worse) were invasive cancer. Nearly 85% of the women were aged 40 years or older. Almost half were members of racial ethnic minority groups. Overall the percentage of the

abnormal pap test results decreased with increasing age. The rates of cervical intra epithelial neoplasia (CIN) were highest in the younger age groups but the rate of invasive cancer increase with age. White women has the highest age-adjusted percentage of abnormal pap test results and highest rate of biopsy confirmed CIN 2 or worse.

L.Stewart.et.al., (2006), conducted a study on national history of grade and cervical intraepithelial neoplasia in woman with HIV. It found grade 1 intraepithelial neoplasia infrequently progresses in woman with HIV.

Ralph.P. Insinga .et.al., (2005), conducted an observational cohort study among women at Portland. It found overall 5% of routinely screened women found to have an abnormal cervical smear with an annual incidence of cervical intraepithelial neoplasia (CIN) across all female enrols of 2.7 per 1000.

Louis.C.Walter.et.al.,(2005), conducted a study to determine whether screening mammography and pap smears high among older women in California. It suggest although screening rates drop with advancing age, women in poor health do not avoid screening should be better targeted to healthy older women and should be avoided in women with limited life expectations.

Part-III : Research studies related to management of cancer cervix.

Richmond Virginia (2010), studied image-guided adoptive radiotherapy for cervix cancer. Impact of erythropoietin administration during definitive cervix cancer radiotherapy on treatment outcome. The purpose of this study is to determine whether an increase of blood hemoglobin levels through the substitution of erythropoietin during radiotherapy treatment of cervix cancer.

International federation of Gynecology and Obstetrics,(2009), reports that survival improves when radiotherapy is combined with cisplatin-based chemotherapy. As the cancer metastasizes to other parts of the body, prognosis drops dramatically because treatment of local lesions is generally more effective than whole body treatments such as chemotherapy.

Nicholas G (2009), reports that prognosis depends on the stage of the cancer with treatment, the 5-year relative survival rate for the earliest stage of invasive cervical cancer is 92% and the overall (all stages combined) 5-year survival rate is about 72%. These statistics may be improved when applied to women newly diagnosed, bearing

in mind that these outcomes may be partly based on the state of treatment.

Oreud L.et.al., (2008), suggested the three treatments methods are commonly used to treat cervical cancer, surgery, chemotherapy and radiation therapy. Sometimes they are used alone & there are times when they are used in conjunction with one another. The treatment methods chosen depend on several factors like type of cervical cancer, stage of the disease, general health of the patient and if other treatments have been utilized.

Peterson C.et.al.,(2008), suggested that chemotherapy is prescribed to treat cervical cancer and also to help radiation therapy be more effective chemotherapy drugs work by killing cancerous or preventing them from multiplying. Several chemotherapy drugs are available to treat cervical cancer and will be prescribed according to the stage of cancer, type of cervical cancer and other health factors.

Qiricell. F. (2008), concluded that radiation therapy use high energy beams to reduce the size of a tumor or to kill cancer cells. This type of treatment can be done internally with radioactive materials that are implanted in the uterus or externally with the use of a radiation therapy machines. Often prescribed with chemotherapy,

radiation therapy is an effective method of treating cervical cancer. It can however, Radiation treatment plans depend on stage of cervical cancer, other treatment methods used & the general health of the patient.

Rogers K.et.al., (2008), explained about the radiation may be used to treat cancer that has spread beyond the pelvis, or cancer that has returned. Radiation therapy is either external or internal. Internal radiation therapy uses a device filled with radioactive material, which is placed inside the woman's vagina next to the cervical cancer. The device is removed when she goes home. External radiation therapy beams radiation from a large machine onto the body where the cancer is located. It is similar to an x-ray.

Ruder.K.et.al.,(2007), evaluated the patient after therapy is imperative. Recurrent cervical cancer detected its early stages might be successfully treated with surgery, radiation, chemotherapy or a combination of these. 35% of patients with invasive cervical cancer have persistent or recurrent disease after treatment.

Ruth.K.et.al., (2007), suggested that three treatment methods are commonly used to treat cervical cancer, surgery, chemotherapy and radiation therapy. Treatment of cervical cancer depends on the

stage of the cancer. The size & shape of the tumor, the age & general health of the woman, and her desire to have children in the future.

Susan.L.et.al., (2007), reported the types of surgery for early cervical cancer include: LEEP (Loop Electrosurgical Excision Procedure) uses electricity to remove abnormal tissue. Cryotherapy – freezes abnormal cells. Laser therapy – uses light to burn abnormal tissue.

Zuvarine. G .et.al., (2006), suggested the more advanced disease, a radical hysterectomy may be performed. This type of hysterectomy may be performed. This type of hysterectomy surrounding tissues including internal lymph nodes and upper part of the vagina, In the most extreme surgery, called a pelvic examination, all of the organ of the pelvis including the bladder and rectum are removed.

Wright.et.al.,(2006), stated the American society for Colposcopy and cervical pathology guidelines for the management of women with abnormal cervical cancer screening tests noted that HPV testing is incorporated into the management of their initial evaluation with colposcopy is recommended for women who subsequently test positive for HPV,DNA, or who found to have greater on heir report

cytologic tests both tests are negative, women can return to routine cytologic testing.

Anjos A.C.et.al., (2005), high lighted the importance of nursing care throughout the whole chemotherapy treatment as well as the importance of nurses recognizing socio cultural influences and including them in the care of plan.

Keller.J.S.,(2005), reported that a 30 minute educational intervention provided by nurses before the start of chemotherapy may assist in women in increasing their knowledge of chemotherapy treatment, enhancing their ability to manage side effects and improving their coping strategies.

Part-IV : Research studies related to prevention and complication of cancer cervix.

George C.Cotzias., (2010), reported patients with cancer cervix can suffer from a bewildering variety of neurologic science and symptoms. The neurologic symptoms are often more disabling than the primary cancer. The symptoms included is confusion.

American cancer society (2009), recommends that all women begin getting annual pap smears as soon as they become sexually active, but no later than 21 years of age. If three normal pap smears have been taken by the time a woman is 30, she may go three years between tests.

Journal of Adolescent health (2008), showed that up to 80 percent of parents were in favor of having their child vaccinated against treatable sexually transmitted infections like HPV. (90% were in favor of vaccinations against HPV and herpes, STD s that have no cure). And in a recent survey, only 11% of doctors felt that immunizing against the virus would encourage promiscuous sexual behavior.

Gardasil.Y.et.al., (2008), reveals that vaccine works by preventing infection with the human papilloma virus (HPV) a common

sexually transmitted disease (STD) that causes most cases of cervical cancer. Excitement for the vaccine has been building since researches announced that one early version, was 100 percent effective in blocking HPV infection.

Sushil.J.et.al., (2007), reports about HPV vaccination provides an opportunity to profoundly affect cervical cancer incidence worldwide. A recently licensed HPV sub unit vaccine protects women from a high proportion most genital warts. Here we examine the ramifications and remaining questions that surround preventive HPV vaccines.

Varsha.D. et.al., (2007), revealed a idea of vaccine to protect against HPV existed for long and the wide spread availability of an effective vaccine against the high-risk sub types of HPV will offer the potential to greatly reduce global mortality due to cervical cancer.

Yarshed.et.al., (2007), reported 36 of the unvaccinated women had developed either precancerous growths on cervical cancer. In this more “real world “sample, the risk of developing precancerous growths was reduced by 97% after vaccine regularly.

Wiwarikit .V (2006), conducted a study on, screening for cervical cancer. Pap smears are recommended as general screening

methods to early diagnosis of cervical cancer in order to decrease morbidity and mortality. These results document the importance of cervical cancer in Thailand and the high detection rate of precancerous lesion supports the utility of screening program for secondary prevention for cervical cancer. Health education seems to play an important role in success of the cervical cancer screening program for the females.

Hall.et.al., (2005), increasing readiness to stop smoking in women undergoing cervical screening showed that providing women with written information about the link between smoking and cervical cancer increases their readiness to stop smoking. The impact on smoking cessation of combining such information with advice from health professionals conducting cervical screening needs to be evaluated.

CHAPTER – III

METHODOLOGY

INTRODUCTION

Research methodology is a method to solve the research problem systematically. It includes description of research approach, research design, study setting, target population, sample, sampling technique, development and description of tool, data collection and plan for data analysis.

RESEARCH DESIGN

One group pre test and post test design as a subtype of experimental research design was used for assessing the knowledge of women regarding cancer cervix.

SETTING

The study was conducted in Gynaecology OPD of Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research.

POPULATION

All the women who were attending the Gynaecology OPD of Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research.

SAMPLE SIZE

The sample of the study comprised of 100 women who fulfilled the inclusion criteria, Gynaecology OPD in Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research.

SAMPLING TECHNIQUE

A simple random sampling technique was used.

CRITERIA FOR SAMPLE SELECTION

INCLUSION CRITERIA

- ❖ Women who are attending Gynaecology OPD in Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research.
- ❖ Women between the age group of 30 to 55 years.
- ❖ Women who are willing to participate in the study.
- ❖ Women who can understand Tamil.

EXCLUSION CRITERIA

- ❖ Women who have the history or evidence of being diagnosed to have carcinoma of cervix.
- ❖ Women who underwent hysterectomy.
- ❖ Women who cannot communicate in Tamil.
- ❖ Women who were not willing to participate in study.

DESCRIPTION OF THE TOOL

The study was conducted by using structured interview schedule. Based on the review of books and related journals, the tool was developed. The tool consists of two parts.

Part: I

It consists of information about demographic variables as age, educational status, religion, income, and marital status, methods of contraception, parity & source of health information.

Part: II

It consists of structured multiple choice questionnaire to assess the knowledge regarding cancer cervix among women.

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with statistical analysis. Statistical analysis is a method of rendering quantitative information in meaningful and intelligent manner. Statistical procedure enables the researcher to analyze, organize, evaluate, interpret and communicate numerical information meaningfully. The data collected from the women were tabulated, analyzed and interpreted under the following headings.

DESCRIPTION OF THE TOOL

It consists of Part I and Part II

Part-I: The demographic data includes age in years, educational status, Religion, income, marital status, methods of contraception, parity, and source of health information.

PART-II: Questionnaire related to knowledge level, which consists of 20 questions to assess the level of knowledge of women regarding cancer cervix.

SCORING PROCEDURE

In structure interview schedule, each question has one best answer with 3 other responses. For best answer a score of “1” was given and for wrong of ‘0”was given. The maximum score of structured interview schedule was 20.

The percentage is calculated by using the formula as follows

$$\text{Score interpretation} = \frac{\text{Obtained score}}{\text{Total score}} \times 100$$

The score was categorized as follows

Inadequate level of knowledge	-	below 50%
Moderately adequate level of knowledge	-	50 - 75%
Adequate level of knowledge	-	75% above

REPORT OF THE PILOT STUDY

The pilot study was conducted to assess the reliability, practicability consent value and feasibility of the tool. This study was conducted in Gynaecology OPD Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research. Ten women who met inclusion criteria were selected by simple random sampling

technique. The level of knowledge regarding cancer cervix among women were assessed with the structured questionnaires. The structured teaching programme was given to enhance level of knowledge of women with the help of educational model such as flashcards, handouts and charts through lecture cum discussion method. After 7 days post test was conducted. The structured teaching programme was given to the women. The result of the pilot study showed that there was a positive correlation between level of knowledge regarding cancer cervix among women

RELIABILITY

The reliability was checked by inter-rater method. The reliability was 0.77 after the structured teaching programme was provided and then paired "t" test used to assess the effectiveness of structured teaching programme.

VALIDITY

The tools were provided by the investigator which were assessed, evaluated and accepted by the experts of research committee. Content validity was obtained from Obstetric and Gynecologic experts.

INFORMED CONSENT

The dissertation committee prior to the pilot study approved the research proposed permission was obtained from the head of the Obstetric & Gynaecology department at Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research was obtained from the medical superintendent and staff nurse in charge. The oral consent from each when was obtained before starting the data collection procedure. Assurance was given that confidentiality would be maintained.

DATA COLLECTION PROCEDURE

The main study was conducted for six weeks among women who were attending Gynaecology OPD in Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research and who met the inclusion criteria were selected by using simple random sampling technique method.

PLAN FOR DATA ANALYSIS

The data were organized, tabulated and analysed by using descriptive statistics.

Mean, standard deviation and paired to 't' test was carried out to assess the effectiveness of structured teaching programme.

Chi-square test was used for the association of demographic variables with level of knowledge regarding cancer cervix among women.

STATISTICAL METHODS

Sl. NO	Data analysis	Methods	Remarks
1	Descriptive statistics	Numbers, percentage, mean and standard deviation	To describe the demographic variables. To assess the level of knowledge of the pre and post test
2	Inferential statistics	Paired 't' test	To assess the effectiveness of structured teaching programme.

3	Inferential statistics	Chi-square test	To determine the association between the effectiveness of teaching programme on cancer cervix with the selected demographic variables.
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Section – A: Frequency and percentage distribution of demographic variables of women

Section – B: Comparison between pre and post test scores of level of knowledge regarding cancer cervix among women

Section – C: Association between the demographic variables in relation to level of knowledge regarding cancer cervix among women

SECTION – A

Table 4.1 : Frequency and percentage distribution of demographic variable of women

N = 100

Sl. NO	DEMOGRAPHIC VARIABLES	NUMBER	PERCENTAGE
1	AGE a. 30 - 35 years b. 35 - 40 years c. 40 - 45 years d. Above 45 years	39 33 16 12	39.00% 33.00% 16.00% 12.00%
2	EDUCATION a. Illiterate b. Primary and middle school c. Higher secondary school d. Graduate	8 66 25 1	8.00% 66.00% 25.00% 1.00%
3	RELIGION a. Hindu b. Muslim c. Christian	75 13 12	75.00% 13.00% 12.00%

4	INCOME		
	a. Upto RS 3000	17	17.00%
	b. RS 3000 - RS 6000	56	56.00%
	c. RS 6000 - RS9000	27	27.00%
	d.above RS 9000	0	0.00%
5	MARITAL STATUS		
	a. married	90	90.00%
	b. unmarried	0	0.00%
	c. widow	10	10.00%
6	CONTRACEPTION		
	a. Temporary	42	42.00%
	b. Permanent	58	58.00%
7	PARITY		
	a. Nil	0	0.00%
	b. One	44	44.00%
	c. Two	56	56.00%
	d. More than two	0	0.00%
8	SOURCE OF HEALTH INFORMATION		
	a. Health personnel	63	63.00%
	b. Television / radio	28	28.00%
	c. News paper	9	9.00%
	d. neighbors	0	0.00%

Table 4.1 reveals that out of 100 women, 39(39%),were between 30-35 years of age , 33(33%),were between 35-40 years of

age , 16(16%),were between 40-45 years of age and 12(12%),were above 45 years of age ,

Regarding education, it shows that out of 100 women 8(8%) were illiterate, 66 (66%) had finished Primary and middle school, 25(25%) had finished Higher secondary school and 1(1%) had completed graduate programme.

In religion, it reveals that out of 100 women 75(75%) were Hindu, 13 (13%) were Muslim and 12(12%) were Christians.

Regarding income, it reveals that out of 100 women 17(17%) were earning upto Rs.3000, 56 (56%) were earning between Rs 3000 - Rs6000, 27(27%) were earning between Rs 6000 - Rs9000 and 0(0%) were earning above Rs 9000.

Regarding marital status, it shows that out of 100 women 90(90%) were married, 0 (0%) were unmarried and 10(10%) were widow.

Regarding contraception, it reveals that out of 100 women 42(42%) were using temporary methods and 58 (58%) were underwent permanent family planning.

Regarding parity, it shows that out of 100 women 0(0%) were not having children, 44(44%) were having one child, 56(56%) were having two children and 0(0%) were having more than 2.

Source of health information, it reveals that out of 100 women 63(63%) were received information through health personnel, 28 (28%) were received information through television/radio, 9(9%) were received information through newspaper and 0 (0%) were received information through neighbors.

SECTION – B

COMPARISON BETWEEN PRE AND POST TEST SCORES OF LEVEL OF KNOWLEDGE REGARDING CANCER CERVIX AMONG WOMEN.

**TABLE 4.2 : Level of knowledge regarding cancer cervix
among women.**

N= 100

SI. No	LEVEL OF LEVEL OF KNOWLEDGE	PRETEST		POST TEST	
		No	%	No	%
1	Inadequate	52	52	0	0
2	Moderately adequate	48	48	32	32
3	Adequate	0	0	68	68

Table 4.2 reveals that in the pre test 52% of women had inadequate level of knowledge , 48% of women had moderately adequate level of knowledge . In the post test only 32% had moderately adequate level of knowledge , 68 % had adequate level of knowledge and no one had inadequate level of knowledge in post test.

Table -4.3 : Mean and Standard deviation of pretest and post test scores of level of knowledge regarding cancer cervix among women

N = 100

Sl. No	VARIABLES	PRETEST		POST TEST	
		Mean	S.D	Mean	S.D
1	Level of knowledge	9.45	1.16	15.44	1.54

Table – 4.3, depicts that in the pre test overall mean of level of knowledge was 9.45 with the standard deviation of 1.16.in the post test overall mean of level of knowledge was 15.44 with the standard deviation of 1.54.

Table- 4.4 : Improvement mean and standard deviation of pre and post test score level of knowledge regarding cancer cervix among women.

N=100

Sl. No	VARIABLES	IMPROVEMENT		PAIRED 't' TEST
		Mean	S.D	
1	Level of knowledge	5.99	1.75	34.24

Table – 4.4 exhibits that the improvement Mean and standard deviation in the level of knowledge mean was 5.99 with the standard deviation of 1.75.

The paired 't' test value of overall score of level of knowledge is highly significant at $p < 0.05$ level.

SECTION – C

ASSOCIATION BETWEEN THE DEMOGRAPHIC VARIABLES IN RELATION TO LEVEL OF KNOWLEDGE REGARDING CANCER CERVIX AMONG WOMEN.

Table – 4.5 : Association between the demographic variables and level of level of knowledge regarding cancer cervix among women.

N= 100

Sl. No	Demographic Variables	Level of level of knowledge									
		Pre test				Post test					
		Inadequate		Moderately adequate		Moderately adequate		Adequate		χ ²	
		NO	%	NO	%	NO	%	NO	%		
1	Age in years										
	a) 30 - 35 years	22	22	17	17	13	13	26	26	0.890 NS	
	b) 35 - 40 years	14	14	19	19	9	9	24	24		
	c) 40 - 45 years	6	6	10	10	5	5	11	11		
	d) Above 45 years	10	10	2	2	5	5	7	7		
2	Educational status										
	a) Illiterate	8	8	0	0	4	4	4	4	5.025 NS	
	b) Primary & middle school	33	33	33	33	22	22	44	44		
	c) Higher secondary school	11	11	14	14	5	5	20	20		
	d) Graduate	0	0	1	1	1	1	0	0		

3	Religion									
	a) Hindu	40	40	35	35	24	24	51	51	0.019 NS
	b) Muslim	5	5	8	8	4	4	9	9	
c) Christian	7	7	5	5	4	4	8	8		
4	Income									
	a) Upto Rs 3000	11	11	6	6	3	3	14	14	1.987 NS
	b) Rs 3000 - Rs 6000	28	28	28	28	20	20	36	36	
	c) Rs 6000 - Rs9000	13	13	14	14	9	9	18	18	
d) Above Rs 9000	0	0	0	0	0	0	0	0		
5	Marital Status									
	a) Married	45	45	45	45	31	31	59	59	2.471 NS
	b) Unmarried	0	0	0	0	0	0	0	0	
c) Widow	7	7	3	3	1	1	9	9		
6	Contraception									
	a) Temporary	21	21	21	21	13	13	29	29	0.037 NS
b) Permanent	31	31	27	27	19	19	39	39		
7	Parity									
	a) Nil	0	0	0	0	0	0	0	0	0.218 NS
	b) One	23	23	21	21	13	13	31	31	
	c) Two	29	29	27	27	19	19	37	37	
d) More than two	0	0	0	0	0	0	0	0		
8	Source of health information									
	a) Health personnel	28	28	35	35	23	23	40	40	2.544 NS
	b) Television / radio	18	18	10	10	8	8	20	20	
	c) Newspaper	6	6	3	3	1	1	8	8	
d) Neighbors	0	0	0	0	0	0	0	0		

NS-Non significance

S-Significance

Table – 4.5 shows that there was no significant association between the level of level of knowledge with the demographic variables such as age, educational status, religion, income, marital status, method of contraception, parity and source of health information.

CHAPTER - V

RESULTS AND DISCUSSION

The aim of the study was to assess the effectiveness of structured teaching programme on level of knowledge regarding cancer cervix among women.

A total number of 100 women were selected for the study. The pre test was conducted using structured instrument. The duration of the interview ranged from 20 to 30 minutes for each woman. After the pre test a structured teaching programme was conducted by the investigator. After 7 days the post test was conducted by using the same instrument in the same manner.

The study was proved that structured teaching programme has brought about excellent changes in the level of knowledge of women regarding cancer cervix.

The first objective of the study was to assess the level of knowledge of women regarding cancer cervix.

The data analysis showed that in pre test 52(52%) of women had inadequate level of knowledge and 48(48%) of women had

moderate level of knowledge regarding cancer cervix. In post test 68(68 %) of women had adequate level of knowledge and 32(32%) of women had moderate level of knowledge .

.This result showed that the structured teaching programme to the women regarding cancer cervix was effective and brought about the excellent changes in their level of knowledge .

The second objective of the study was to evaluate the effectiveness of structured teaching programme on cancer cervix among women.

Table – 4.3, depicts that in the pre test overall mean of the level of knowledge was 9.45 with the standard deviation of 1.16.

In the post test overall mean of the level of knowledge was 15.44 with the standard deviation of 1.54.

The paired 't' test value of overall score of the level of knowledge is highly significant at $p < 0.05$ level.

The third objective of the study was to determine the association between the effectiveness of teaching programme on cancer cervix with the demographic variables.

Chi square value of overall level of knowledge was significant at $p < 0.10$ level. It reveals that knowledge level of women had a great impact on their health status and their level of knowledge regarding cancer cervix increases by giving structured teaching programme.

CHAPTER- VI

SUMMARY AND CONCLUSION

The study was a quasi experimental study to evaluate and to find effectiveness of structured teaching programme on knowledge regarding cancer cervix among women.

An interview guide was used to assess the knowledge regarding cancer cervix, before and after structured teaching programme. After pre test the structured teaching programme was conducted by the investigator. Seven days after the structured teaching programme the posttest was conducted by using the same interview guide. The data was grouped and analysed using the descriptive and inferential statistics.

In the post test out of 100 women in post test 68(68 %) of women had adequate knowledge and 32(32%) women had moderately adequate knowledge regarding cancer cervix.

This result showed that the structured teaching programme to the women regarding cancer cervix was effective and brought about the excellent changes in their level of knowledge .

In relation to the effectiveness of structured teaching programme, the paired 't' test was statistically significant at $p < 0.001$ and there is association between the knowledge has been markedly increased after the administration of structured teaching programme.

The implication drawn from the present study is of vital concern to health team including nursing services, nursing education, nursing administration and nursing research.

Nursing practice

As the study revealed that varying degrees of knowledge deficit exist among women regarding causes, risk factors, pathophysiology, signs & symptoms, treatment and prevention of cancer cervix. They need to be educated in this matter it was found the education was an effective method to aid the women to gain knowledge regarding cancer cervix.

The investigator as nurse felt the need that the nurse, multipurpose health workers should be educated on this, so that they could be used as resource personnel to impart this knowledge to the community. So nursing personnel in the community should be equipped with adequate knowledge to educate the women individually and in groups regarding cancer cervix.

The nurse has a responsibility to guide the women regarding papanicolou smear examination for early detection of cancer cervix. The teaching programmes regarding cancer cervix given by the nurse should include the young girls and all women. Embarrassment, misconceptions, false beliefs and ignorance must be removed from the society by planned education with scientific basis.

Nurse should improve the mass media programme through radio, television and teleconference regarding prevention of cancer cervix.

Nursing personnel who are working in the hospital or community should carry out individual health teaching and group teaching regarding prevention of cancer cervix.

Nursing education

The current trends in the health care delivery system emphasize more on prevention than curative aspect. The study also implies that health personnel have to be properly trained as how to teach the women regarding prevention of cancer cervix.

Nursing curriculum should be such that if prepared the prospective nursing student to assist women in hospital and community in all aspects of preventive, promotive and curative care. Since the cancer cervix is one of the major health problems in the community, the nursing curriculum should include more control on cancer cervix mortality and morbidity rate.

The holistic health care approach should be emphasized more during the training period of nursing students. The student nurse should have greater involvement in the current workshop; seminar and symposium related to prevention of cancer cervix organized by WHO, etc. journals should be made available in nursing colleges and schools related to prevention of cancer cervix.

Nursing administration

The health administrator of nursing at the national, state, district, institutional and local level should focus their attention on making the public conscious about the prevention of cancer cervix.

She should arrange seminars and symposiums for the nurses working under her in order to highlight the magnitude of the problem among women.

She should recommend to the superior for the supply of suitable poster, pictures, pamphlets, model, flash card etc can be displayed in the hospital and community centre's related to prevention of cancer cervix.

Nursing administrator should co-ordinate with other health team administrator in planning, implementing and evaluating the health programme related to prevention of cancer cervix at various level.

Nursing research

The findings of the study help the professional nurse and students to develop inquiry by providing a baseline. The general aspect of the study result can be made by further replication of the study helps the nurse researchers to develop insight in to the

development of teaching module and set of information for various aspects of prevention of cancer cervix at various levels.

Recommendations for further study

In order to reduce the mortality and morbidity in cancer cervix the following recommendations are suggested

Women education should be improved by self help group and could be motivated by nursing personnel as part of the health care services.

Coverage by mass media like doordharshan and news paper to highlight the prevention of cancer cervix and health problem in the form of songs, drama, short stories to the general public.

Health education module related to importance of prevention of cancer cervix can be imparted to all the women. Health education about prevention of cancer cervix can be given to the college students because they are the future care giver.

Suggestions for the further study

1. A comparative study can also be done between urban and rural women.
2. A similar study can be conducted by using experimental and control groups.
3. A retrospective study can be conducted on cancer cervix patient to identify the other risk factors.
4. A study can be conducted to find out the prevalence of cancer cervix among high risk women.
5. The present study can also be conducted among women with the uptake of papanicolou smear after receiving structured teaching programme.

APPENDIX- I

STRUCTURED INTERVIEW GUIDE

PART- 1: DEMOGRAPHIC VARIABLES

1. Age in Years

- a) 30-35
- b) 35-40
- c) 40-45
- d) 45 and above

2. Educational Status

- a) Illiterate
- b) Primary & Middle school level
- c) Secondary school level
- d) Graduate

3. Religion

- a) Hindu
- b) Muslim
- c) Christian
- d) Others

4. Income per Month (in Rupees)

- a) 1000 – 3000
- b) 3001 – 6000
- c) 6001 – 9000
- d) Above 9000

5. Marital status

- a) Married
- b) Unmarried
- c) Widow

6. Methods of contraception

- a) Temporary methods
- b) Permanent methods

7. Parity

- a) Nil
- b) One
- c) Two
- d) > Three

8. Source of health information

- a) Health staff
- b) Tension / Radio
- c) Newspaper
- d) Neighbours

**PART – II: MULTIPLE CHOICE QUESTIONARE TO ASSESS THE
KNOWLEDGE REGARDING CANCER CERVIX AMONG WOMEN**

	PRE TEST	POST TEST
1. Cervical cancer means a) Hereditary disease b) Infectious disease c) Communicable disease d) sexually transmitted disease.	<input type="checkbox"/>	<input type="checkbox"/>
2. Cervical cancer is an abnormal growth present in a) Mouth of the Uterus b) Body of the Uterus c) Outside of the Uterus d) Inside of the Uterus	<input type="checkbox"/>	<input type="checkbox"/>
3. Cancer cervix is a) Preventable b) Curable c) Not curable d) Communicable	<input type="checkbox"/>	<input type="checkbox"/>
4. Common organism causing cancer cervix is a) Bacteria b) Virus c) Fungi d) Insects	<input type="checkbox"/>	<input type="checkbox"/>
5. Cervical cancer is more common in woman age group between a) 15 – 25 yrs b) 25 – 35 yrs c) 35 – 45 yrs d) 45 yrs and above	<input type="checkbox"/>	<input type="checkbox"/>

6. Following group of women are more prone to get cancer cervix

- a) Women having multiple sexual partners
- b) Unmarried women
- c) Married after 25 yrs
- d) First coitus after 25 yrs

7. The major cause of cervical cancer is

- a) Sexually transmitted infection
- b) Respiratory tract infection
- c) Urinary tract infection
- d) Nosocomial infection

8. Prolonged use of contraceptive method causing cancer cervix is

- a) Copper "T"
- b) Condom
- c) Oral pills
- d) Natural method

9. Early symptom of cervical cancer is

- a) Menstrual irregularities
- b) Back pain
- c) Loss of appetite
- d) Cachexia

10. Specific symptom of cervical cancer is

- a) Nausea & vomiting
- b) Back pain & abdominal pain
- c) Post coital & post menopausal bleeding
- d) Anemia & cachexia

11. Late complication of cervical cancer is
- a) Anemia
 - b) Vomiting
 - c) Back pain
 - d) Menstrual irregularities
12. Early detection of cervical cancer is by
- a) Education of all women
 - b) Physical Examination
 - c) Pap smear test
 - d) Blood test
13. Most vulnerable group of women need frequent cervical screening is
- a) Early marriage before 18 years
 - b) Women who have had many sexual partners
 - c) High parity
 - d) All women between the age group of 35-55yrs
14. The simplest, painless & lowest test for cancer cervix is
- a) CT scan
 - b) MRI
 - c) Pap smear test
 - d) Blood test
15. Cervical cancer screening to be performed at least
- a) Once in a year
 - b) Two years interval
 - c) Three years interval
 - d) Four years interval
16. When the abortion is advised if cervical cancer is diagnosed in the pregnant women
- a) at 24 weeks

- b) at 26 weeks
- c) at 28 weeks
- d) at 32 weeks

17. The health practices during menstruation to be followed is
- a) Cleaning of perineum with soap and water
 - b) Changing of pads or cloth at least thrice daily
 - c) Washing of undergarments
 - d) Drying undergarments in sunlight

18. The foods to be taken to prevent the cancer cervix is
- a) Bland diet
 - b) Green leafy vegetables and fruits
 - c) Fiber foods
 - d) Fatty foods

19. The Vitamin has got a protective effect against cancer cervix is
- a) Vitamin A & C
 - b) Vitamin K & D
 - c) Vitamin B & E
 - d) Vitamin B6 & B12

20. Concept regarding outcome of cancer cervix is
- a) No treatment for cancer cervix
 - b) No life after cancer cervix
 - c) No cure after treatment
 - d) Can cure if detected early

PART-III

STRUCTURED TEACHING PROGRAMME

Topic	:	cancer cervix
Group	:	women (35-55years)
Method of teaching	:	lecture cum discussion.
Place of teaching	:	Gynaecology OPD, Melmaruvathur
Time	:	45 mts.
Instructor	:	Ms. N. UmaMaheshwari MSc(N) II Year Student
AV aids	:	charts Flash cards Handouts posters

CENTRAL OBJECTIVES

Help the women to acquire their knowledge and understanding regarding causes, early detection and prevention Of cancer cervix and help them to utilize their knowledge in day today life.

CONTRIBUTORY OBJECTIVE

The women will be able to

- discuss the anatomy of uterus.
- state the meaning of cancer cervix.
- mention the etiology and risk factors of cancer cervix
- explain the pathophysiology of cervical cancer.
- list out the signs and symptoms of cervical cancer.
- enlist the diagnostic evaluation of cervical cancer.
- describe the management of cervical cancer.
- list down the preventive measures of cancer cervix.

INTRODUCTION

Good morning. Cancer cervix is more common among female between the age group of 30-55 years. Among females 80% of cancer occurs in mouth of the uterus i.e. cervix. Today am going to discuss about the etiology, risk factors, signs and symptoms, pathophysiology, diagnostic evaluation, management and prevention of cancer cervix.

SI. NO	TIME	CONTRIBUTORY OBJECTIVES	CONTENT
1.	5mts	discuss the anatomy of uterus	Anatomy of the uterus The uterus is a hollow muscular pear shaped It lies in the pelvic cavity between the urinary bladder and the rectum when the body is in the upright position uterus lies in an almost horizontal position. It is about 7.5 cm long, 5 cm wide and its walls are about 205 cm weight from 30 to 40 grams. The cervix (neck of the uterus): this protrudes through the anterior wall of the vagina opening into the external os.

2.	3 mts	state the meaning of cancer cervix	<p>Meaning of cancer cervix</p> <p>Cancer cervix means an abnormal growth pre the neck of the uterus. the mean age for developin cancer cervix is 30-55 years</p>
3.	7 mts	mention the etiology and risk factors of cancer cervix	<p>Etiology and risk factors</p> <p>Exact cause is unknown. some of the risk factors a</p> <ul style="list-style-type: none"> ❖ Early marriage: marriage before the age of 20 y ❖ Coitus: first coitus before the age of 20 years ge spermatozoa considered to act as carcinogens cervical epithelium of a women married before 2 years their cervix may be more vulnerable to ca severe potent immuno suppressive agent are pi in human seminal plasma. It may reduce the loc immune response to viral infection. ❖ Virus:- <ul style="list-style-type: none"> I) human papiloma viruses (HPVs) some sexual transmitted HPVs cause genital warts. Some of the viruses may cause growth of abnormal cell in the c and may play a higher than average risk of develop cervical cancer. II)herpes simplex III) Human immuno deficiency virus: women wh immune system is weakened one more likely th others to develop cervical cancer. Women have HIV which causes AIDS are at increased risk of cervical cancer. ❖ Multiple sexual partners: Women who had many sexual partn have an increased risk of developing cervical ca

			<p>Women also are at increased risk if their partner began having sexual intercourse at a young age, had many sexual partners or were previously infected with HPV. This is more true for women who had cervical Cancer.</p> <ul style="list-style-type: none"> ❖ High parity: Multiparity with poor birth spacing between pregnancies. ❖ Low socio economic status: Imbalanced diet leads to inadequacy of nutrition. ❖ Drugs: I) long term use of contraceptive pills can favour cervical changes. II) Women whose mothers were given the drug diethylstilbestrol (DES) during pregnancy to prevent miscarriage also are at increased risk. ❖ Nutritional deficiency Vitamin A and C deficiency have an increased risk of developing cervical cancer. ❖ Poor genital hygiene. ❖ Poor penile hygiene ❖ History of Sexually Transmitted Diseases. ❖ Post-coital bleeding. ❖ Frequent douching ❖ Smoking. <p>Pathophysiology</p> <p>Sexual activity or the human papilloma virus infection</p> <p style="text-align: center;">↓</p> <p>Affects the epithelial cells lining the surface of the cervix leading to cervical cell dysplasia</p>
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4.	10 mts	explain the pathophysiology of cervical cancer	<p style="text-align: center;">Cervical intraepithelial neoplasia(CIN)</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Abnormal vaginal bleeding</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Repeated injuries to the cervical with the etiolo factors and if left untreated</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Invasive cervical cancer</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">clinical signs and symptoms</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">if left untreated</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">spreads deeper through blood and lymph invasi cervix,vagina,ureters,bladder,rectum,lungs,media liver and to another adjacent tissues.</p> <p>Signs and symptoms of cervical cancer</p>
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5.	10 mts	list out the signs and symptoms of cervical cancer	<p>1. Hemorrhage: Irregular menstrual bleeding, spotting, post bleeding, post menopausal bleeding, spouting and straining such as defecation and urination.</p> <p>2. leucorrhoea: Excessive vaginal discharge sometimes it be blood stained or will be having offensive odor</p> <p>3. cachexia: It is a condition of extreme debility. It is well marked in advanced growth. The patient is emaciated the skin being loose and wrinkled from rapid weight loss, sunken eyes, pale mucus membrane, anemia, loss of appetite.</p> <p>4. Thin watery vaginal discharge and foul smelling discharge.</p> <p>5. Pain: it is a late symptom; person will have back pain, leg pain, pelvic pain and knee pain.</p> <p>6. Other symptoms: it occurs in late stage such as painful and frequent micturition, incontinence of urine, pruritis, vaginal discharge, weight loss, anemia and anorexia.</p> <p>Diagnostic evaluation</p> <p>✓ The pap smear test- thin prep (a new technique Pap smear). The patient is placed in a dorsal position the speculum is inserted into the vagina to visualize cervix, the cervix is exposed and it is scraped with instrument called Ayris spatula.</p> <p>The scrapings are spread on to a glass slide.</p>
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6.	10 mts	enlist the diagnostic evaluation of cervical cancer	<p>and it is fixed by a fixative spray. A pap test can detect 98% of cancer of the cervix.</p> <p>Annual papanicolaou smear examination should be necessary for women who are at risk. It can be done screening every 3-5 years interval.</p> <ul style="list-style-type: none"> ✓ The schiller iodine test. ✓ HPV testing. ✓ Colposcopy: the doctor uses a colposcope to examine the cervix. The colposcope combines a bright light with a magnifying lens to make tissue easier to see. It is not inserted into the vagina. A Colposcopy is usually done in the doctor's office or clinic. ✓ Biopsy: <ul style="list-style-type: none"> ❖ Punch biopsy: the doctor uses a sharp, hollow device to pinch off small samples of cervical tissues. ❖ Laser cone excision and loop electro surgical excision procedure (LEEP): the doctor uses an electric wire loop to slice off a thin, round piece of tissue. ❖ Conization: the doctor removes a cone-shaped sample of tissue. A Conization, or a cone biopsy, lets the pathologist see if abnormal cells are present in the tissue beneath the surface of the cervix. The doctor may do this test in the hospital under general anesthesia. Conization also may be done to remove a precancerous area. ❖ Endocervical curettage: the doctor uses a curette (a small spoon-shaped instrument) to scrape a small sample of tissue from the cervical canal. Some doctors may use a thin, soft brush instead of a curette. <p>Management of cancer cervix</p> <p>Medical management:</p> <ul style="list-style-type: none"> ❖ Cryotherapy (freezing with nitrous oxide) ❖ Laser cone vaporizations.
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			<ul style="list-style-type: none"> ❖ HPV vaccine – Gardasil has been evolved to treat cancer cervix. ❖ Radiation therapy: Also called as radiotherapy) uses high energy rays to kill cancer cells. It affects cells only in the treated area. <p>Women have radiation therapy alone, with chemotherapy, or with chemotherapy and surgery. A doctor may suggest radiation therapy instead of surgery for the small number of women who cannot have surgery for reasons. Most women with cancer that extends beyond the cervix have radiation therapy and chemotherapy. For cancer that has spread to distant organs, radiation therapy alone may be used.</p> <p>Doctors use two types of radiation therapy to treat cancer. Some women receive both types.</p> <ul style="list-style-type: none"> • External radiation: the radiation comes from a large machine outside the body. The woman has treatment as an outpatient in a hospital clinic. She receives external radiation five days a week for several weeks. • Internal radiation: (intra-cavitary radiation): the tubes (also called implants) containing a radioactive substance are left in the vagina for a few hours up to 3 days. The woman may stay in the hospital during that time. To protect others from the radiation, the woman may not be able to have visitors or have visitors for only a short period of time while the tubes are in place. Once the tubes are removed, no radioactivity is left in her body. Internal radiation may be repeated two or more times over several weeks.
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7.	10 mts	describe the management of cancer cervix	<p>❖ Chemotherapy Chemotherapy uses anticancer drugs to kill cancer cells. It is called systemic therapy because the drugs enter the blood stream and can affect cells all over the body. For treatment of cervical cancer, chemotherapy is generally combined with radiation therapy. For cancer that has spread to distant organs, chemotherapy alone may be used.</p> <p>Surgical management</p> <ul style="list-style-type: none"> • Surgery treats the cancer in the cervix and the uterus close to the tumor. • Most women with early cervical cancer have to remove the cervix and uterus (total hysterectomy). However, for very early (stage I) cervical cancer, a hysterectomy may not be necessary. Other ways to remove the cancerous tissue include cryoablation, conization, cryosurgery, laser surgery, or LEEP. • Some women need a radical hysterectomy. A radical hysterectomy is a surgery to remove the uterus, cervix, and a part of the vagina. • With either total or radical hysterectomy, the surgeon may remove both fallopian tubes and ovaries. (This procedure is a salpingo-oophorectomy). • The surgeon may also remove the lymph nodes near the tumor to see if they contain cancer. If cancer cells have reached the lymph nodes, it means the disease may have spread to other parts of the body. <p>Prevention</p> <ol style="list-style-type: none"> 1. The most factors for preventing cervical cancer are to avoid sexual contact with multiple partners. 2. Marriage before 18 years and sexual intercourse before 18 years should be discouraged. 3. Maintain good hygienic practices. 4. Genital hygiene
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			<ul style="list-style-type: none">• Menstrual hygiene.• Wash the perineal area after each voidi• Wear cotton under garments.• Daily washing of under garments.• Barrier methods of contraceptives like n <p>5. If you have any following symptoms immedia contact doctor</p> <ul style="list-style-type: none">• Spotting.• Irregular menstruation.• Increased menstrual bleeding.• Post menstrual bleeding.• Post coital bleeding. <p>6. Diet: Take vitamin A and vitamin C rich foods</p>
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8.	5mts	list down the preventive measures of cancer cervix	
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Conclusion

Thank you for your kind cooperation. I hope you would have understood the meaning, etiology and risk factors, pathophysiology, signs and symptoms, diagnostic evaluation, management and prevention of cancer cervix. I hope you will use this knowledge in your daily life in preventing yourself from the development of cancer cervix.

HANDOUT

SIGNS AND SYMPTOMS OF CERVICAL CANCER

7. Hemorrhage:

Irregular menstrual bleeding, spotting, post coital bleeding, post menopausal bleeding, spouting after straining such as defecation and urination.

8. leucorrhoea:

Excessive vaginal discharge sometimes it may be blood stained or will be having offensive odour.

9. cachexia:

It is a condition of extreme debility. It is well marked in advanced growth. The patient is emaciated the skin being loose and wrinkled from rapid wasting, sunken eyes, pale mucus membrane, anemia, loss of appetite.

10. Thin watery vaginal discharge and fowl smelling discharge.
11. Pain: it is a late symptom; person will have back pain, leg pain, pelvic pain and knee pain.
12. Other symptoms: it occurs in late stage such as painful and frequent micturation, incontinence of urine, pruritis , vaginal discharge, weight loss, anemia and anorexia.

PREVENTION OF CANCER CERVIX

The most factors for preventing cancer cervix are to avoid sexual contact with multiple partners.

7. Marriage before 18 years and sexual intercourse before 18 years should be discouraged
8. Maintain good hygienic practices.
9. Genital hygiene
 - Menstrual hygiene.
 - Wash the perineal area after each voiding.
 - Wear cotton under garments.
 - Daily washing of under garments.

10. Barrier methods of contraceptives like nirodhs. If you have any following symptoms immediately contact doctor

- Spotting.
- Irregular menstruation.
- Increased menstrual bleeding.
- Post menstrual bleeding.
- Post coital bleeding.

11. Diet: Take vitamin A and vitamin C rich foods.

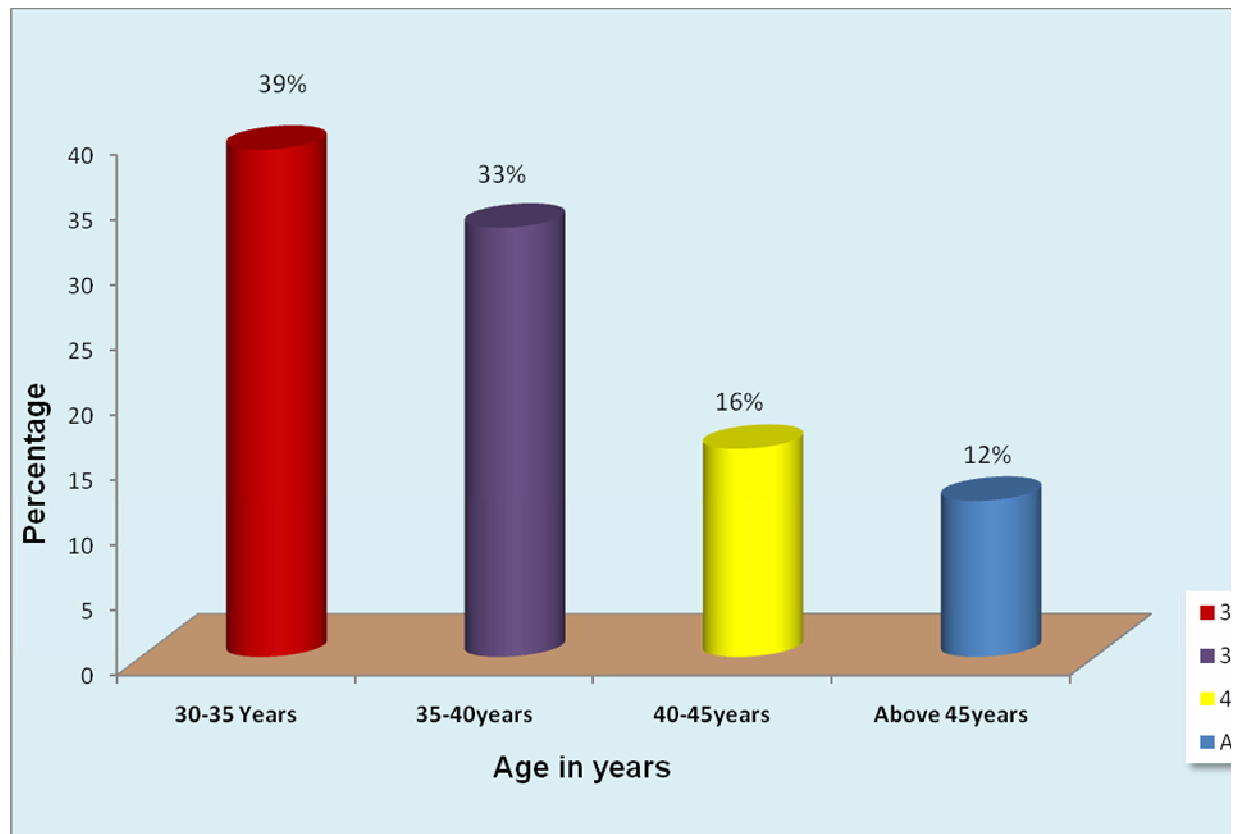


Fig 4.1 :Percentage Distribution Of Women based on Age

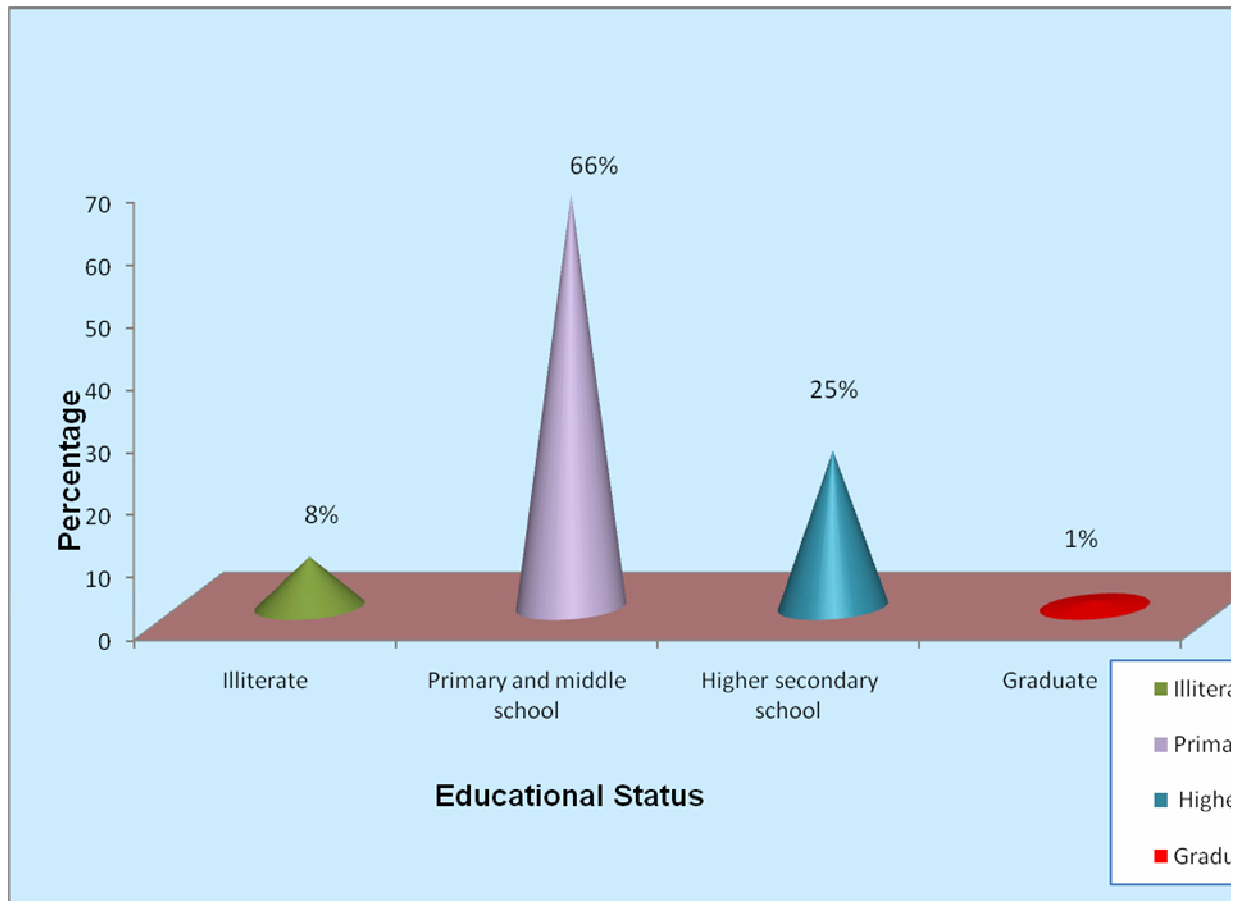


Fig 4.2 :Percentage Distribution of Educational Status Of Women

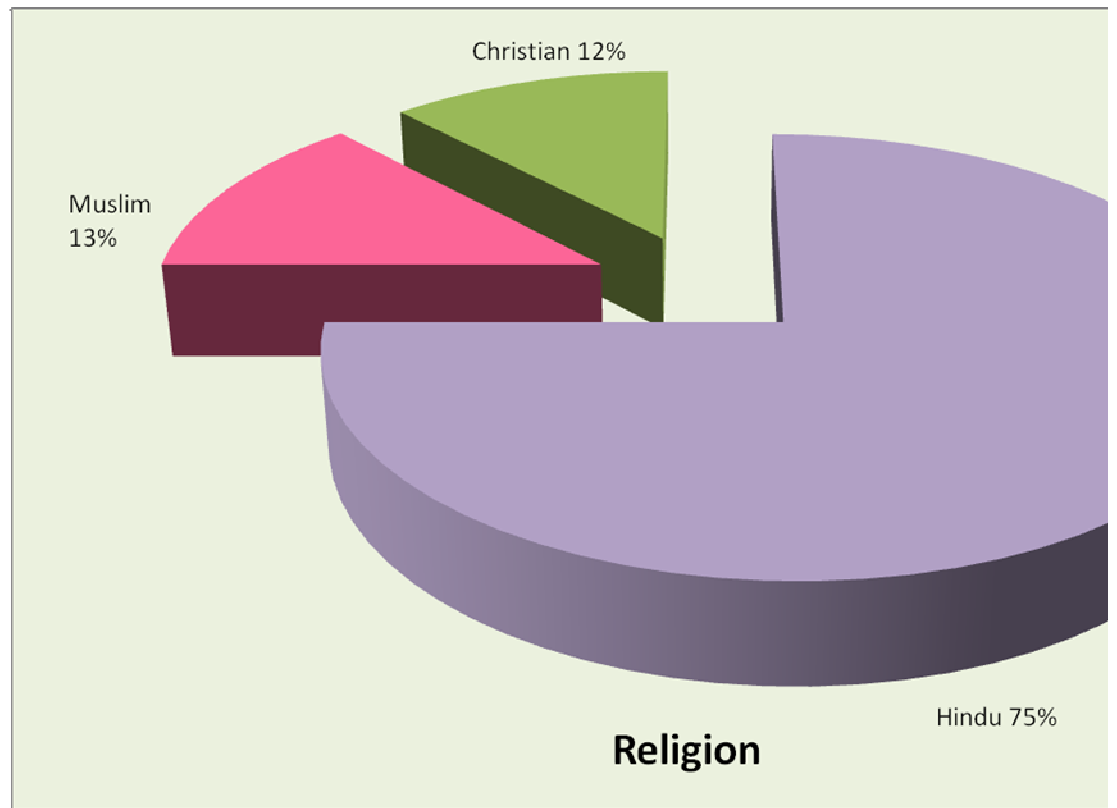


Fig 4.3: Percentage Distribution of women based on r

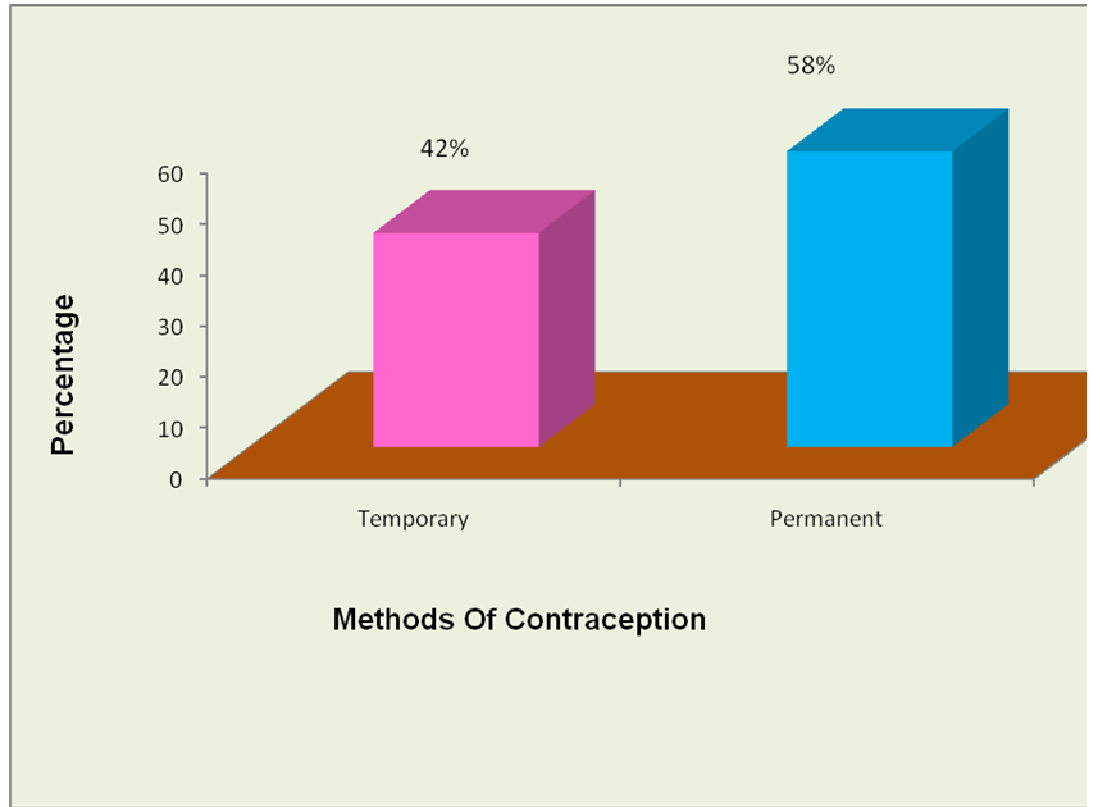


Fig 4.4 : Percentage Distribution Of Women on Contracept

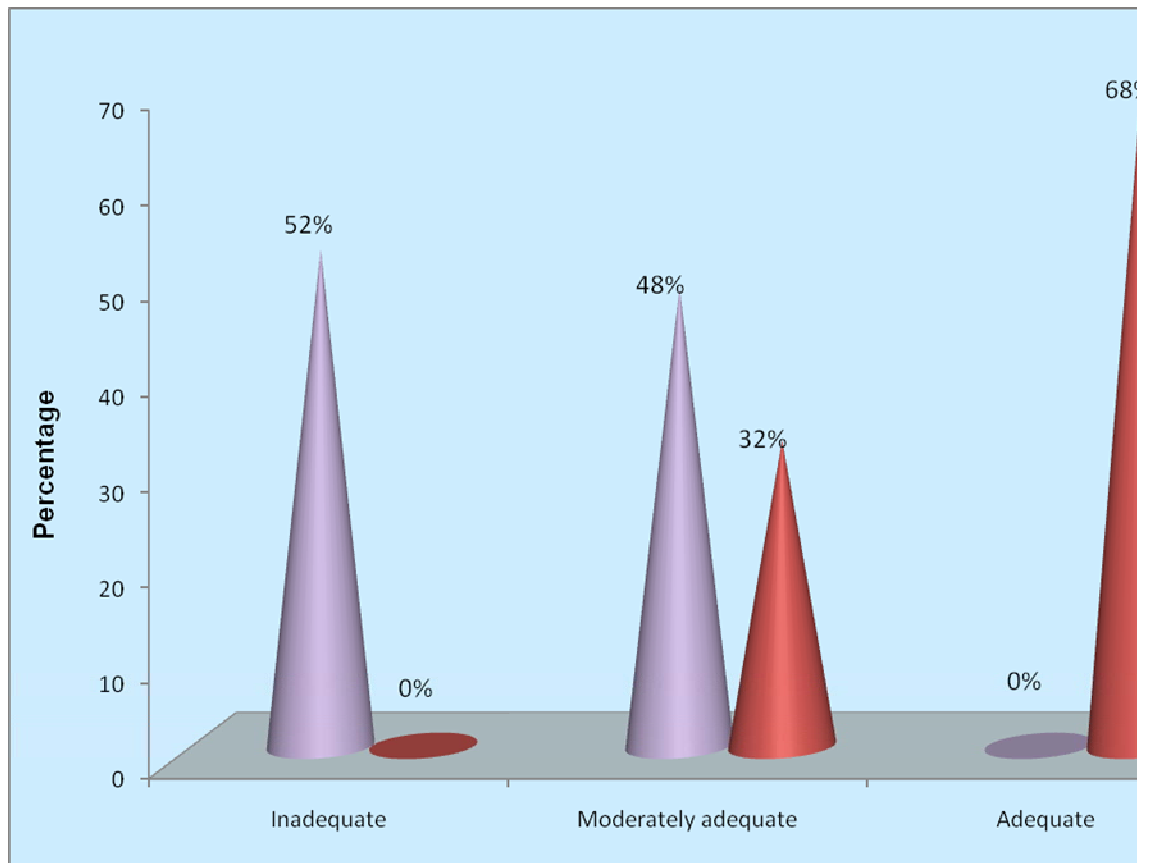


Fig 4.5: Percentage Distribution Of Pre test and Post test knowledge regarding Cancer Cervix among Wom

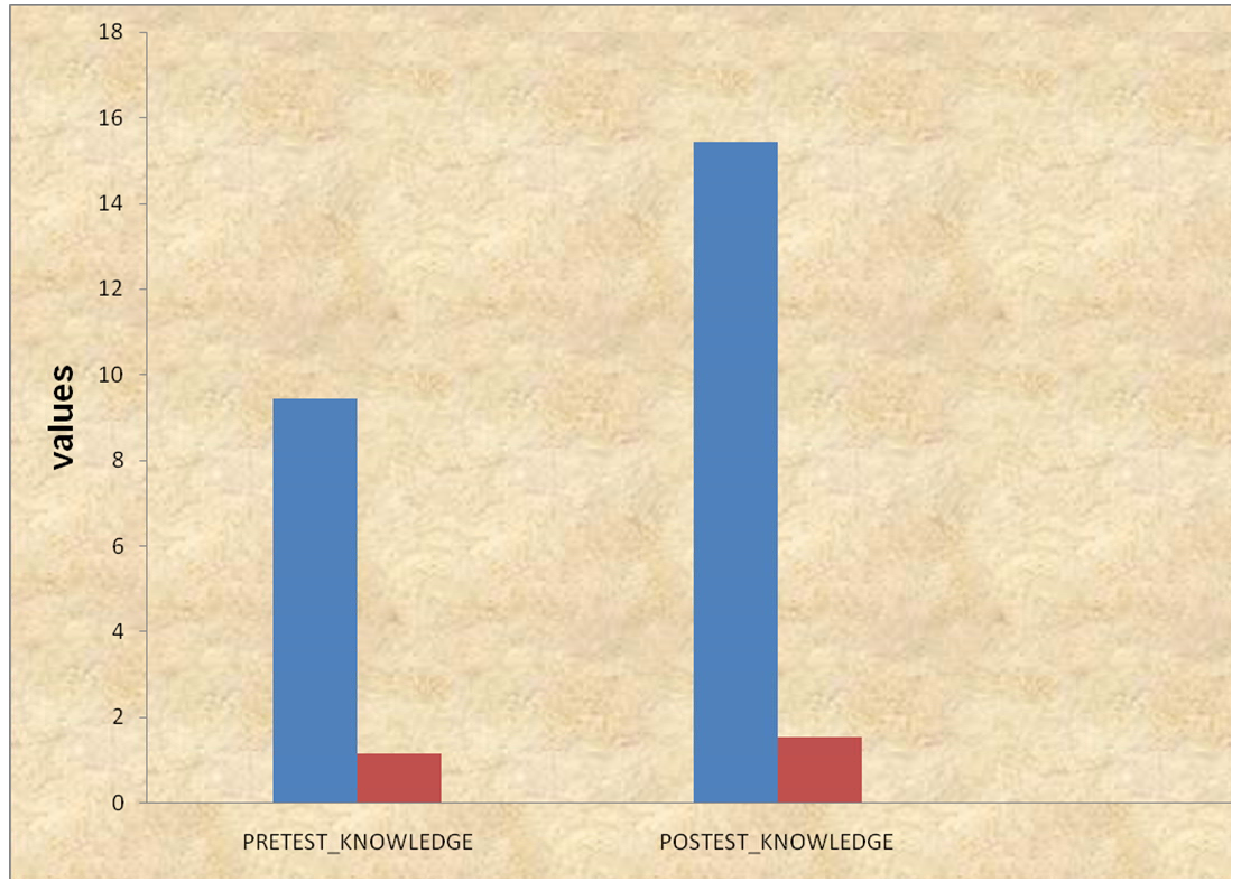


Fig 4.6: Percentage distribution of mean and standard deviation of knowledge regarding cancer cervix among women

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