

**A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF  
STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND  
ATTITUDE REGARDING CERVICAL CANCER AMONG WOMEN AT  
PRIMARY HEALTH CENTER KANNIVADI, DINDIGUL DISTRICT.**



**BY: 301423051**

**A DISSERTATION SUBMITTED TO THE TAMILNADU DR. M.G.R  
MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILMENT OF  
THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF  
MASTER SCIENCE IN NURSING.**

**OCTOBER – 2016**

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**EXTERNAL EXAMINER**

**INTERNAL EXAMINER**

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**APPROVED BY DISSERTATION COMMITTEE ON:**

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MASTER SCIENCE IN NURSING .**

**OCTOBER - 2016**

## **CERTIFICATE**

This is the bonafide work of **Mrs. ABIZHA M.sc., Nursing II<sup>nd</sup> Year** student from Jainee college of Nursing, Dindigul, submitted in partial fulfillment for the degree of Master of science in Nursing, under the Tamilnadu **Dr. M.G.R medical university, Chennai.**

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**Date :**

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# *CHAPTER - I*

## *INTRODUCTION*



# **CHAPTER I**

## **INTRODUCTION**

**"A WIFE OF NOBLE CHARACTER WHO CAN FIND? SHE IS WORTH FAR MORE THAN RUBIES ".**

**PROVERBS: 31:10**

**“I admit I’m weak, But I have a strong God “**

In the early nineties when revolution was occurring in health care system throughout the world, India was facing a lot of deaths due to communicable diseases. However after independence, the Government of India took lot of measures to improve the life expectancy of Indian population, these measures gave fruitful results by showing a massive control in mortality due to communicable diseases. World Health Report (1999) gives the main causes of mortality in India as non-communicable diseases (48 percent), communicable diseases (42 percent) and injuries (10 percent). This revealed the decrease in death rate and the better improvement of quantity and quality health services in India. A report from united nation world population prospects indicated a shift in demographic profile from 45 yrs in 1971 to 64 years in 2005-2010. It is estimated that life expectancy of the Indian population will increase to 70 years by 2021–25. In modern era where urbanization, industrialization, life style changes and population growth etc are influencing the disease pattern, we can see a paradigm shift from communicable disease to non-communicable diseases like cancer, diabetes and hypertension. Recent times have seen an increase in the incidence of cancer.

Cancer prevalence in India is estimated to be around 2.5 million, with over 8,00,000 new cases and 5,50,000 deaths occurring each year due to this disease.<sup>3</sup> The last fifty years have seen an exploration in our understanding of this most fundamental of diseases, and new discoveries are occurring on an almost weekly basis. A trend analysis of the data on cancer incidence for the period 1975-2008 has demonstrated that the overall occurrence of cancer is increasing among females. The greatest increase among females was for cancer of the cervix and breast.

Cervical cancer is a devastating disease for women around the world. Nearly 500,000 women suffer from the disease and more than 270,000 die each year. Globally, cervical cancer is the second-most-common cancer among women. It is the leading cause of female cancer deaths in developing countries, where 80% of cervical cancer cases and deaths occur. Tragically, this disease strikes women at a relatively young age. Many victims of cervical cancer die in their early 40s, while they are still contributing to the workforce and raising children. Over the past 50 years, many developed nations have achieved success in reducing cervical cancer by routinely screening women with Pap tests. Despite this progress, even in countries with well-established screening programs, many women continue to suffer and die from cervical cancer. The situation is direr in developing countries, many of which lack an infrastructure for cervical cancer screening and treatment. In these countries, most cases of cervical cancer are undetected, resulting in hundreds of thousands of deaths every year. As the global population ages — with more women reaching the age when they are at greatest risk for cervical cancer — cervical cancer rates, if not addressed, will continue to increase. Without a widespread and sustainable commitment to mobilize change, projections are that 700,000 cases of cervical cancer will occur worldwide in 2020, a 40% increase

from the number of cases in 2002. Over the past decade, dedicated scientists, researchers, clinicians, frontline health workers, community leaders and advocates have worked tirelessly to bring the scourge of cervical cancer to the world's attention and to develop and apply the necessary knowledge and technologies to reduce the number one cancer killer of women in most developing countries. From Mumbai to Mexico City, Kampala to Kathmandu, innovative programs have learned how to successfully deliver effective cervical cancer prevention programs to the women and girls who need them most.

High-risk regions are Eastern and Western Africa (ASR greater than 30 per 100,000), Southern Africa (26.8 per 100,000), South-Central Asia (24.6 per 100,000), South America and Middle Africa (ASRs 23.9 and 23.0 per 100,000 respectively). Rates are lowest in Western Asia, Northern America and Australia/New Zealand (ASRs less than 6 per 100, 000). Cervical cancer remains the most common cancer in women only in Eastern Africa, South-Central Asia and Melanesia. Between 1955 and 1992, cervical cancer mortality in the United States declined by nearly 70% and rates continue to drop by about 3% each year. In low- and middle-income countries, similar success has not yet been achieved. The disease continues to grow, fanned by gains in life expectancy and population growth. By 2030, cervical cancer is expected to kill over 474,000 women per year and over 95% of these deaths are expected to be in low- and middle-income countries. India has a population of 366.58millions women ages 18 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 134420 women are diagnosed with cervical cancer and 72825 die from the disease.

This shows that in spite of lots of effort put by health care sector still there is lack of knowledge and awareness regarding cervical cancer among women in our country. This outlook provoked me to take a glance in our society's female awareness and attitude regarding cervical cancer and what all measures can be implemented to shake the hands with the experts who are constantly lending their support and encouragement to have a women world without cervical cancer.

### **NEED FOR THE STUDY:**

The cervical cancer shows changes in the epidemiological pattern with a shift of incidence toward the younger age group. Due to this reason, cervical cancer ranks foremost among the health problems of women in the socially reproductive age group. The uterine cervix is the commonest site of malignancy among females in India, especially among the multiparous and women from socially background groups.

Awareness of women in rural areas regarding the cervical cancer is less. By educating them, their attitude can be changed and knowledge can be improved. Linder Michie (1993) suggest that population based health education campaigns can create awareness among the rural population regarding cervical cancer and its prevention through early detection.

It is reported that cancer is the cause for one tenth of all deaths and in developed countries it is 2<sup>nd</sup> most frequent cause of death. WHO reports that without rigorous control measures cancer will become the leading cause of death and there will be 300 million new cancer cases and 200 million deaths from cancer in the coming 25 years.

Cervical cancer is the 5<sup>th</sup> most common cancer worldwide with approximately 471,000 new cases diagnosed each year. Globally every 2 minutes a women dies of cervical cancer and accounts for up to 300,000 deaths annually.

In India 366.58 million women are at risk of developing cervical cancer. Currently every year 134420 women are diagnosed with cervical cancer and 72825 deaths from the disease. Cervical cancer ranks as the 1st most frequent Cancer among women in India, and the 1st most frequent cancer among women between 15 to 44 Years age group.

In most of the countries, the incidence of invasive cervical cancer is very low in women under age 25. Incidence increases at about 35 to 40 years, and reaches a maximum in women in their fifties and sixties. Data from cancer registries in developing countries indicate that approximately 80-90 percent of confirmed cases in these countries occur among women aged 35 or older.

About 80% of the new cervical cancer cases occur in developing countries, like India, which reports approximately one fourth of the world's cases of cervical cancer each year. There has been a regular campaign against cervical cancer for 30 years in India, but this has had little impact on the morbidity and mortality from the disease, with India ranking fourth worldwide. 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 and 55 years), especially those from the lower economic status who fail to carry out regular health check-ups due to financial inadequacy. In urban areas, cancer of the cervix account for over 40% of cancers while in rural areas it accounts for 65% of cancers as per the information from the cancer registry in Barshi. Eastern and South Africa,

Central and South America and the Caribbean's too report very high incidence of cervical cancer.

<b>PBRC(population based registries cancer)</b>	<b>Crude Incidence Rate</b>	<b>Age-Adjusted Incidence Rate</b>
Bangalore	18.8	21.7
Bharshi	22.7	20.2
Bhopal	42.17	22.4
Chennai	22.2	24.5
Delhi	16.3	22.7
Mumbai	14.6	18.0
Ahmadabad	16.2	13.4
Karunagapally	19.2	15.0
Kolkata	17.4	19.9
Nagpur	19.1	23.2
Pune	20.5	22.5
Thiruvananthapuram	13.1	10.9

### **Incidence of cervical cancer in India 2010.**

The available evidence for control of cervical cancer is through secondary prevention, namely--early detection through Pap smear. At present in India one life time screening for women should be done at the age of 45 years. During the Last 50 years in the United States, the Pap smear tests have reduced the deaths related to cervical cancer by three-quarters. But at one time cervical cancer was

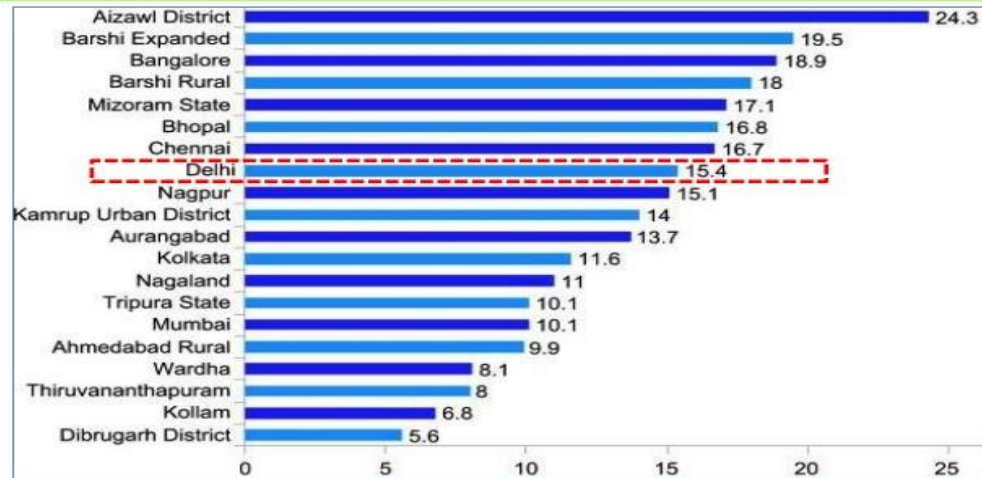
one of the most dreaded cancer and the leading causes of death in women in the US but now it is the eighth most common cancer.

The exploratory study was conducted to assess the knowledge and beliefs among 30 women about cervical cancer and Pap smear tests using the Health Belief Model by administering questionnaire, 18 women who had at least one Pap smear test in their lifetime, eight (44%) had opportunistic testing as a result of having gynaecological symptoms. Twelve women (40%) had never had Pap smear tests. The study revealed that Knowledge of cervical cancer and the Pap smear test was inadequate among women with low incomes. Pap smear utilization was also limited among low-income women.

A Cross-sectional study was conducted to find out the prevalence of perceived morbidity and its confirmation among 435 women who attended cervical cancer awareness camps. Majority (95.7%) of the women attending the camp were in the reproductive age group (15-44 years) and illiterate (64.4%). The study reported cervical erosion (22%), cervicitis (13.1%), vaginitis (8.4%) and cervical hypertrophy (7.9%) which showed there is a significant association between high parity and cervical cancer. The study recommended that cancer cervix screening among the women at regular intervals through camp approach in the community is needed.

With the evidence of above statistics and studies, the investigator felt the need to study the knowledge of community women regarding Pap smear as an early screening of cervical cancer with a view to develop an informational pamphlet. The present study will help the investigator to gain insight into the knowledge of Pap smear as an early screening of cervical cancer.

## Burden of CaCx: Latest Publication, 2015



Age adjusted incidence rates of CaCx in female (rate per 100,000)

Sreedevi A et al. Int J Womens Health 2015;7:405-14

Cervical cancer is the cancer of the area that connects the uterus to the external female genital tract. The malignancy generally spread through **Human papilloma virus** during sexual contact and it has been proved that even preventive measures like contraceptives cannot stop it from entering womens body.

**ACS (2011)** Recent estimates states that in the year 2011 about 12,710 new cases of invasive cancer will be diagnosed and of these about 4,290 deaths will be recorded.

**ACS (2010)** Cervical cancer was once known as the most deadly cancer in America until the years 1955-1992 when it rates decreased by 70% due to increase in pap smear screening and most awareness among society, it is said to decline by the year 3% but the numbers still high.



**TCHK PAKISTAN(2010)** cervical cancer is the one of the leading cause of mortality and morbidity amongst the gynaecological cancers world wide, especially in developing countries.It is imperative for atleast health professional in developing countries like Pakistan to have a sound knowledge about the disease.

**Ronald et al (2009)** Cervical cancer is a result of Human Papilloma Virus which is transmitted through sexual intercourse , in most cases the male is the carrier of papilloma virus that infects and generates in female. Despite the risk of the HPV virus both male and females are hardly aware of the virus and risk it carries.

**Godfrey (2007)** In America within an estimates of every six minutes a gynaecological cancer is diagnosed with the majority being cervical cancer among women of the ages 40-55 years of age. In 2007 the average of about 12,000 – 16,000 Females were diagnosed as cervical cancer.

**Powe (2006)** Cancer fatalism has continuedto increase among especially young women , this is the belief that women who have had that diagnosis of cancer directly translates to inevitable death therefore they find it better to avoid going for screening and are with no knowledge whatsoever on their health status. Education and knowledge on cervical cancer has continued to decrease as the cancer fatalism increases not because there is no available information but because the women who have been ignorant to enlighten themselves.

**WHO (2002)** In Finlad 2.23 million women aged 15 years and over are at risk of getting cervical cancer, current estimation states that out of 164 diagnosed with cervical cancer per year about 81 of them die as a result of the disease.It is

the 15 th most common cancer in Finland and the 4 th common cause among the women in Finland.

India, China, Brazil, Bangladesh, and Nigeria represent more than half of the “Global Burden of cervical cancer deaths” says the US based body basing its study on Global rankings.

Recent data released by Indias health ministry based on the National cancer registry programme (NCRP) report in 2009 the number of cervical cancer cases were 101938 which has increased to 107690 in 2012.

**In Uttarpradesh** a total of 17367 cases were reported in 2009 and it increased to 18692 in 2012. After Uttar Pradesh the number of cases of cervical cancer in 2012 which has shown an increasing trend are Maharastra (9892) , Bihar (9824) , West Bengal (8396) , Andra Pradesh (7907) , Tamil Nadu (7077), and others.

Cervical cancer can happen to anyone. Certain women are at greater risk. These include women who started sexual activity at an early age, had multiple pregnancies, had multiple partners themselves, or their partners have multiple partners, said Dr Neeraja Bhatla, professor Department of Obstetrics and Gynaecology at( AIIMS).

**Dr. Bhatla** said “Also women with STIs like Chlamydia, gonorrhoea, Herpes simplex, women with Immune suppression, for example, HIV or transplant recipients, smokers and prolonged use of oral contraceptives have a higher risk. There is thought to be a small element of genetic predisposition as well”.

“Cervical cancer, like all cancers, may be asymptomatic in its precancerous phase and while it is an early cancer.

Symptoms that point to the cancer include inter menstrual and post coital bleeding, postmenopausal bleeding and persistent vaginal discharge,” said **Dr. Bhatla**. of cervical cancer.

Recently, **Gulam Nabi Azad**, Minister of health and family welfare had responded to a starred question in Lok sabha.

“Data of **the Indian council of medical Research (ICMR)** of the number of cervical cancer cases among women has increased in the country. At present the Government of India is looking for alternative techniques and afford ability to implement test to be used for detection of cervical cancer.” “The Minister further added that while health is a state subject, the center has launched the national programme for prevention and control of cancer, diabetes, cardiovascular disease and stroke (**NPCDCS**) **in2010** in 100 districts across 21 states.

Strengthening of government medical college and erstwhile **regional cancer centers (RCC)** across the country as **Tertiary cancer center (TCC)** for providing comprehensive cancer care was also undertaken as well as campaigns are carried out through print and electronic media ,he said.

As infection with **HPV** is the most important factor for cervical cancer, it is important to avoid genital HPV infection. Life style changes to be blamed for rise in cervical cancer cases. In urban area promiscuous behavior, multiple sexual partner, overcrowding and bad hygiene. In rural areas early marriage (so early start sexual activity), poor socio economic status, and poorer health and

health care facilities. But mostly lack of knowledge and awareness across the strata of societies.

Investigator found only few studies was published regarding cervical cancer knowledge and attitude assessment among mothers. Hence the investigator felt the need to do a study on knowledge and attitude towards cervical cancer. Present women are the most important in all over development of family. So this present study will be useful to prevent the cervical cancer treat women.

### **STATEMENT OF PROBLEM**

A quasi experimental Study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding cervical cancer among women at Primary health center Kannivadi, Dindigul district.

### **OBJECTIVES:**

- To assess the knowledge and attitude regarding the cervical cancer among women.
- To determine the effectiveness of structured teaching programme on cervical cancer among women.
- To associate the post test knowledge and attitude on cervical cancer with their selected demographic variables.
- To correlate the knowledge and attitude, Pre test and Post test score on cervical cancer among women.

## **HYPOTHESIS:**

H1: There will be a significant difference between pre and post test knowledge and attitude score after structured teaching programme on cervical cancer among womens.

H2: There will be a significant correlation between Knowledge and attitude on cervical cancer among womens.

H3: There will be a significant association between the knowledge on cervical cancer and background features among womens .

H4: There will be a significant association between the attitude on cervical cancer and background features among womens.

## **OPERATIONAL DEFINITIONS:**

### **1) Effectiveness:**

The degree to which something is successful in producing a desired result success.

In this study the effectiveness was measured by post test score of knowledge and attitude regarding cervical cancer among womens.

### **2) Cervical cancer:**

It refers to cancer of cervix which is a part of babys bag ie female reproductive system.

### **3) Structured Teaching Programme:**

It refers to systematically organized series of teaching content on cervical cancer which is delivered through power point discussion method for womens in Kannivadi PHC.

### **4) Women:**

It refers to a female of age 25- 50 years who are attending OPD at selected Kannivadi PHC.

### **5) Knowledge:**

It refers to knowledge is a familiarity , awareness or understanding of someone or something such as facts information descriptions or skills which is acquired through experience or education by perceiving discovering or learning regarding cervical cancer a mean used by scoring the items in the structured knowledge questionnaire.

### **6) Attitude:**

It refers to the beliefs of women regarding cervical cancer can measured by their response to the items in the attitude scale.

### **ASSUMPTIONS:**

- ❖ Items in the questionnaire were be adequate to assess the knowledge and attitude of cervical cancer among womens.
- ❖ Womens were respond honestly to the questionnaire Employed for the data collection.
- ❖ Womens were participate in the study honestly.

- ❖ Information were be provide by the womens were closely reflect their knowledge and attitude level towards cervical cancer.

**LIMITATION:**

- ❖ A study settings selected was Kannivadi village in Dindigul district.
- ❖ Womens who were present at the time of data collection.
- ❖ Womens who were willingly participated in the study.

**PROJECTED OUTCOME:**

By giving structured teaching programme the womens were gained knowledge and attitude regarding cervical cancer.

# *CHAPTER - II*

## *REVIEW OF LITERATURE*



# CHAPTER II

## REVIEW OF LITERATURE

Review of literature is a broad, comprehensive in depth, systematic and critical review of scholarly publications unpublished scholarly print materials, audio visual materials and personal communications. It is a continuing process in which knowledge gained from earlier studies is an integral part of research in general. Review of literature in this study is organized under the following headings.

1. Review of literature related to cervical cancer.
2. Review of literature related to knowledge on cervical cancer.
3. Review of literature related to attitude on cervical cancer.
4. Review of literature related to cervical cancer screening.

### 1. REVIEW OF LITERATURE RELATED TO CERVICAL CANCER:

**Jemal et al (2014)** there were up to 47,100 new reported cases cervical cancers and 288000 of these ending up in deaths world wide. About 80% of these cases were from developing countries in 2008 there were 529,800 new cases of cervical cancer that were reported. Accounting for 9% of the world wide cancers and 275,100 deaths making 8% of the cancer deaths. In total 56% for these cases and 64% of the total deaths from developing countries. Differences between the mortality rates in deneloping countries compared to developed countries is highly notable in the table below, this is due to the response to cervical cancer campaigns that have been carried out. Women in developed countries are faily expired to much information, medical facilities and vaccines

are available. In developing countries however the social economic state does not allow the cervical cancer to be a lead consideration factor, however some significant decrease in mortality may be credited to available cheaper methods of screening.

**ACCP(2014)** Cervical cancer has continuously been striking hard on the poorest countries such as central and south America, the Caribbean, Sub-Saharan Africa, some parts of Oceania and Asia with rates as high as 30 per 100000 women, compared with North America and Europe that have reports of about 10 per 100,000 cases. approximately 1.4 million women worldwide living with cervical cancer and India may account for more than one fourth of the total reporting nearly 132,000 new cases annually. A small population of women from the poor and developed countries that receive cervical cancer treatments therefore having a window of 7 million women world wide inclusive of possible precancerous conditions that have not been identified.

**Leyden (2013)** cases of invasive cancer were analyzed among members of seven prepaid comprehensive health plans in the USA diagnosed between 1 January 1995 and 31 December 2000. Medical records were reviewed for the three years before diagnosis. Demographic characteristics were independently associated with the odds of a case being ascribed to failure to screen (patient has no pap test during the 4-36 months prior to diagnosis). The study identified these, 24% were age 50-64 and 17% age at diagnosis, older women diagnosis attributed (3.89-10.79).

**Bosch&Mounoz(2012)** The involvement of HPV in cancers of the vulva, anal canal, vagina and penis is currently being identified in addition to these, the possible infectivity of HPV in cutaneous cancer, oral cancers and other cancers

of the upper aero digestive tract is being investigated. In humans, specific papilloma virus types have been associated with over 99% of cervical cancer biopsies (Walboomers et al., 1999) These are considered the high risk types and include in order of prevalence, HPV types 16, 18, 31 and 45. HPVs have also been associated with other anogenital lesions and carcinomas, oral and pharyngeal papillomas and skin lesions in a rare genetic disorder called epidermodysplasia verruciformis. (EV)

**Prussia(2012)** Retrospective study in Barbados to determine the types of paptest abnormalities and their clinical implications in girls aged 18 and under during the five year period January 1995 to December 1999. Gynaecological history and histology reports for these patients were analyzed. Two hundred and sixty-five pap smears were examined from 236 patients. Of the 236 first – visit samples 94(39.8%) were abnormal with 58(24.5%) reported as atypical cells of undetermined significance (ASCUS) 33 (14%) reported as low grade squamous intra epithelial lesions (LSIL) and three (1%) reported as high grade squamous intra epithelial lesions (HSIL) . Twenty two (23.4%) of the 94 patients who had abnormal smears (either ASCUS or LSIL) were re evaluated within 6-12 months of the initial abnormal diagnosis. Eight of these 22 patients (36.4%) had a histological diagnosis of LSIL, including cervical intra epithelial neoplasia grade 1 (CIN1) and condylomata. High risk HPV DNA types were detected in two of these eight patients (25%).

**Zurhausen(2012)** Cancer of the uterine cervix is one of the leading cancer among women worldwide , with an estimated 520,000 new cases and 274,000 deaths reported annually (WHO/ ICO) information centre on HPV and cervical cancer–HPV cervical cancer statistics in India 2010. About 86% of the cervical

cancer cases occur in developing countries, which represents 13% of all female cancers (WHO/ICO) Cervical cancer is subdivided into cervical squamous cell carcinoma and cervical adenoma carcinoma (Snijders et al., 2006). Majority of the cases of cervical cancer are squamous cell carcinoma (SCC) and adenocarcinomas are rare. Cervical squamous carcinoma (SCC) develops gradually over time from pre-existing non-invasive squamous precursor lesions, also called cervical intraepithelial neoplasia (CIN) or squamous infections to establishment of cancer may take over a decade .

**(Zurhausen 2010)** Papilloma Virus infections in humans are known to cause a variety of benign proliferations; these include warts, intraepithelial neoplasia, anogenital papillomas, oral laryngeal and pharyngeal papillomas.

**Lowy et al., (2010)** Molecular and epidemiological evidence has now established that HPV types associated with anogenital neoplasms, including condylomata, cervical dysplasia and cervical carcinoma, are almost always sexually transmitted.

**Bernard et al.,(2010)** Papilloma viruses (PVs) are epitheliotropic viruses and infect the vertebrates, where they cause neoplasia or exist asymptotically. Papilloma virus isolates are identified as “types” when their L1 gene sequence differs from every other type by at least 10 percent. The L1 gene is instrumental for PVs classification, as it is mostly conserved among the PVs, and this is one of the strong reasons for genome-based classification of PVs.

**(WHO/ICO information centre 2010)** In Indian women and about 7.9% of women in the general population are estimated to harbor persistent HPV infection at any given time. An estimate suggests number of new cervical cases to increase by the year 2025 to 2,03,757 and estimated number of deaths in 2025

may be 1,15,171 which is almost 70% increase compared to the existing estimates for persistent HPV infection.

**Bosch et al., Bruchell et al., (2009)** After studying cervical cancer patients from 25 countries reported that HPV types 16 and 18 are detected in more than 70% of cervical cancer cases. The HPV type 16 prevalence in India is also reported to be high (70%) ( Das et al ., 2008) where as HPV 18 occurrence differs from 3-20% , followed by other high risk type such as HPV 45, 33, 35, 52, 58,59 and 73 (. The HPV type distribution varies depending on geographical regions and also cultural variations.

**Schifman and Castle(2008) Sankaranarayanan et al., (2009)** reported that the cervical cancer and HPV infection prevalence in India indicate that the initiations as well as peak of HPV infection occurs at a slightly older age group (26-35 years ) women , when compared to the global incidence ( peak in 18-25 years ). It is observed that, while in the developed countries there was significant decrease of cervical cancer mortality after incorporation effective screening programs, no reduction in the incidence of cervical cancer was observed during past three decades in the developing countries.

**WHO/ICO (2010)** India has a population of 366.58 million women of ages 15 years or older who may be potentially at risk of developing cancer of uterine cervix. Current estimates indicate that every year approximately 134,000 women are diagnosed with cervical cancer of which more than half (72, 825) die from the disease in India. Cervical cancer is the most frequent cancer in India women and about 7.9% of women in the general population are estimated to harbor persistent HPV infection at any given time. An estimate suggest number of new cervical cases to increase by the year 2025 to 2,03, 757 and estimated

number of deaths in 2025 may be 1,15,171 which is almost 70% increase compared to the existing estimates for persistent HPV infection.

**J.Obel et al (2014)** This study provides the first systematic literature review of cervical cancer incidence and mortality as well as human papilloma virus (HPV) genotype prevalence among women with cervical cancer in the Pacific Island countries and territories . the cervical cancer burden in the Pacific region is substantial , with age standardized mortality rate from 2.7 to 23.9 per 100,000 women per year. The HPV genotype distribution suggest that 70-80% of these cancers could be preventable by the currently available bi-or quadrivalent HPV vaccines. There are only few comprehensive studies examining the epidemiology of cervical cancer in this region and no published data have hitherto described the current cervical cancer prevention initiatives in this region.

According to **Parkin** cervical cancer is an important public health problem for adult women in developing countries. The risk of cervical cancer remains high in many developing countries mostly due to lack or insufficiency of existing prevention programmes. This review attempts to give a brief picture about the scenario of cervical cancer identification and prevention of HPV epidemiology in India.

**Shantha (2013)** estimated that India has a population of approximately 1.2 billion and accounts for a significant burden of cervical cancer in the Indian subcontinent. There is an estimated annual global incidence of 5,00,000 cancers , in that India contributes 100,000 ie., one – fifth of the world burden . A total of

4304 cervical cancer cases were registered during 1982-89 in the Chennai registry, India.

**In (2004)** cervical cancer accounted for 247000 deaths in women Gajalakshmi in 2005 estimated that twenty percent of all female deaths from cancer in India, were from cervical cancer, amounting to an estimated 6100 deaths.

India is a country with the highest disease frequency of 1,34,000 cases and 73,000 deaths. The incidence of cervical cancer in Delhi at 26.6 per hundred thousand women of any age group tops the numbers due to any other women's cancer. The age distribution of cervical cancer is pyramidal with a higher percentage of older women being diagnosed with pre cancer symptom and invasive disease. The number of cervical cancer deaths in India is projected to increase to 79,000 by the year 2010. Particularly, in Southern India, carcinoma of the uterine cervix is the most common form of cancer in females.

According to **Curado and** cancer Atlas, it was estimated that, age standardized cervical cancer incidence rates range from 9 to 40 per 100,000 women in various regions of India. The estimated age standardized cervical cancer incidence and mortality rates around 2002 were 30.7 and 17.8 per 100,000 women respectively. The peak incidence was observed in older women 55-70 years of age (menopausal women).

In the state **Karnataka** , of all the cervical cancer 23% accounts to cervical cancer while that in Bangalore is 30.8%.

A case control study was conducted to evaluate the role of human papillomavirus (HPV) and other risk factors in the etiology of invasive cervical

carcinoma (ICC), in **Chennai, Southern India** 205 cases (including 12 adenocarcinomas) and 213 frequency age-matched control women were included. Incidence rates in the country, varied between 11 per 100,000 in Trivandrum and 30 per 100,000 in Chennai in Southern India. In urban areas cancer of the cervix accounted for over 40% of the cancers while in rural areas it accounts for 65% of cancers as per the information from the cancer registry in India.

Based on a study by **Chittaranjan Cancer Institute in Kolkata** India, approximately 14% of the 6,000 new cases reported annually in Kolkata are cervical cancer. It is important to investigate women's screening practices. Currently, there are no national guidelines in India for recommended cervical cancer screening or screening intervals. Pap tests are performed predominantly for diagnosis in the presence of problematic symptoms such as abnormal vaginal bleeding. Continued progress and education about screening may allow for earlier detection and higher cure rates.

## **2. REVIEW OF LITERATURE RELATED TO KNOWLEDGE ON CERVICAL CANCER:**

**Akshar S et al., (2014)** A cross sectional questionnaire based study was conducted from December 2013 to february 2014 in five primary health clinics inSharjah, UAE by means of interviews carried out by trained pharmacist with proper skills. A total of 212 respondents participated in the study. The sample was calculated by using the built in STATCAL. The inclusion criteria were married women with the age between 20 to 60 years old. The exclusion criteria were women less than 20 years old and not married. All the women who gave



informed consent to participate in the study were included. The response rate was 85%. The participants score of knowledge and practice. The participants median score on knowledge was 2.08 on a scale with a maximum of 6 (range 0-6) . The participants median score on practice was 3.66 on a scale with a maximum of 9 (range 0-9). Knowledge level knowledge score range from the lowest score 0 (11.32%) to the highest score of 6(2.36%) with the normal distribution. Mean (SD)core is 2.23(1.466). Eighty (37.7%) of respondents had a good knowledge score while 132(62.26%) Of respondents had a poor knowledge score. The correlation between knowledge and practice was (p=0.038) significant. This finding adds to the growing body of evidences showing that increased knowledge is automatically translated into changes in attitude and practices.

**B.Agama bansal, AbijithP.Pakhare(2014)** Facility-based cross-sectional study was conducted in an OPD of AIIMS Bhopal during months of March/April 2014. All patients are subjected to anthropometric and blood pressure assessment at central measurement station before visiting respective departments. Every third women aged 15-45 reporting to this measurement station was approached for participation in the study, and verbal informed consent was obtained. Consenting women were included in the study and further interview with pretested structured questionnaire was conducted by one of the investigators. The questionnaire was comprised of four sections to gather information regarding the sociodemographic characteristics of the participants, knowledge, attitude, and practice regarding cervical cancer and its screening. The sociodemographic characteristics included age, educational status, occupation, marital status, age of marriage, and per capita family monthly income.The knowledge was assessed using a 20 points scale which had

dichotomous response, that is, correct and incorrect. Each correct response was scored as 1 and incorrect as 0. A score 50% ( $\geq 10$  correct responses) was considered as optimal. Attitude was assessed by 7 statements regarding cervical cancer screening and risk factors responses to which were categorized as 3-point scale Disagree, Neutral, and Agree. Attitude was considered as favorable for screening if four or more “Agree” responses were obtained. Those who had been screened for cervical cancer through pap-smear were regarded as having good practice. Sample size estimations were based on assumption that 50% women will have optimal knowledge score ( $> 50\%$ ). Therefore, required sample size to estimate the proportion of women with optimum knowledge score with 95% confidence interval (CI) of 50% (95% CI 45-55%) 384. Final sample size with 5% nonresponse rate was 400. Data were entered into Epi-info version 7 (CDC, Atlanta). Qualitative variables were summarized as counts and proportions and numerical variables as mean and standard deviation. Univariate analysis using Chi-square test and *t*-test as appropriately was done to compare sociodemographic and other factors among optimal knowledge versus sub-optimal knowledge group, favorable attitude versus nonfavorable attitude group and takers of the screening test versus nontakers. We considered  $P < 0.05$  as statistically significant. We performed binary logistic regression analysis separately to identify predictors of optimal knowledge, favorable attitude, and good practices. Independent factors for these three models were statistically significant variables of optimal knowledge, favorable attitude, and good practices groups on univariate analysis.

**Choudhury(2013)** Between April 2012 and February 2013, a predesigned, pretested, self-administered multiple responses questionnaire survey was conducted among staff nurses’ working in various hospitals of

Sikkim. Questionnaire contained information about their demographics, knowledge of cervical cancer, its risk factors, screening methods, attitudes toward cervical cancer screening and practice of Pap smear amongst themselves. Overall, 90.4% nurses responded that they were aware of cancer cervix. Three quarter of the staff nurses were not aware of commonest site being cancer cervix in women. Of the 320 participants, who had heard of cancer cervix, 253 (79.1%) were aware of cancer cervix screening. Pap smear screening should start at 21 years or 3 years after sexual debut was known to only one-third of the nursing staff. Age was found to be a significant predictor of awareness of Pap smear screening among nursing staff. Awareness was significantly more prevalent among older staff ( $P < 0.007$ ). Married nursing staffs were significantly more likely to be aware of screening methods, and nursing staff of Christian and Buddhist religion were 1.25 times and 2.03 times more likely to aware of screening methods than Hindu religion respectively. Only 16.6% nurses, who were aware of a Pap smear (11.9% of the total sample), had ever undergone a Pap smear test. Most common reason offered for not undergoing Pap smear test were, they felt they were not at risk (41%), uncomfortable pelvic examination (25%) and fear of a bad result (16.6%). Knowledge of cancer cervix, screening and practice of Pap smear was low among Sikkimese nursing staff in India. There is an urgent need for re-orientation course for working nurses and integration of cervical cancer prevention issues in the nurses' existing curriculum in India and other developing countries.

**Singhal.T (2012)** A cross-sectional interview-based survey regarding knowledge levels about cervical carcinoma was conducted among the nursing staff from one of the tertiary health institutes of Ahmedabad, India. A structured questionnaire with multiple choices was used for data collection. Provision for

open-ended responses was also made in the questionnaire. Department-wise stratification was carried out, and thereafter 15% of the total nursing staff from all departments were selected randomly so as to include a total of 100 nurses in the current study. Data entry was done in Microsoft Excel. SPSS statistical software was used to generate statistical parameters like proportion, mean, standard deviation, etc. The Z test was used as a test of significance, and a *P* value of <0.05 was considered as the level of significance.

**P.Rajkumar (2012)** A descriptive study was conducted to assess the risk factors of cancer in cervix among post menopausal women in Madhya Pradesh in India 214 women's examined clinically with cervical erosion 22%, cervicitis 13.1%, vaginitis 8.4% and cervical hypertrophy 7.9% were the most common pathological condition observed suspicious malignancy and atrophy of the cervix were found in the 4.2- 8.4% of patient . The percentage of the cases of diagnosed to the suffering from 1 or other morbidity decreased with increasing at the marriage and literacy level and also decreasing parity among the risk factors associated with morbidity of these women age at marriage less 18 years 31.45%, high parity 30 years. 56% and literacy leading to poor genital hygiene 41% were observed to the prominent risk factors. Some other studies have also reported a significant association of cancer cervix with these risk factors.

**Musthappa and Abdulkeim(2010)** Cervical cancer resulting from prior infection with human papillomavirus is a significant public health threat against young Japanese women. A national immunization plan to vaccinate 13-16 year old female students against HPV infection has been started In Japan since 2010, and may reach almost full coverage by the end of 2012. Older age females who may already be sexually active are not targeted by this plan but should follow

safer sex practices as well as periodic screening of the cervix cytology to reduce their risk of developing cervical cancer . HPV vaccination alone dose not offer full protection either, because only some HPV types are covered by the vaccine and the long term efficacy of the vaccines hs not been determined yet. Therefore , we did a survey at an International university in Japan to study the knoeledge and attitude of female college students towards prevention of cervical cancer , to examine the age when they start sexual activity and other related attributes that may influence the risk of cervical cancer. We discuss the result of our survey and what they imply for the possible impact of an HPV immunization plan on the risk of cervical cancer in Japan , and conclude by an emphasis on the nee to increase awareness among Japneese female adolescents and to enhance the cervical screening rates among older females who are already sexually active.

**Pinky (2010)** An evaluative study was conducted to determine effectiveness of a teaching programme on knowledge about cancer prevention and early detection of cancer among 99 teacher trainees in College of Education, UdupiTaluk, Karnataka State. The instruments used for the study were demographic questionnaire and knowledge questionnaire. The results found that the pretest score was 43.75% and posttest score was 79.15%. . This clearly indicated the effectiveness of structured teaching programme.

**Zaria& Sabon Gari(2010)** This was a cross sectional study to evaluate the knowledge , and practice of cervical cancer screening among market women. A total of 260 women were administered with questionnaires which were both self and interviewer administered. These were analysed using SPSS version11.Respondents exhibited a fair knowledge of risk factors was poor.

There was generally good attitude to cervical cancer screening (80.4%), but their level of practice was low(15.4%). There was a fair knowledge of cervical cancer and cervical cancer screening among Nigerian market women in this study , their practice of cervical cancer screening was poor.

A multicenter descriptive study was conducted in **South Korean** woman with cervical cancer to explore the prevention of cervical cancer. This multicenter descriptive study comprises 968 cervical cancer patients who had been treated from 1983 through 2004 at six South Korean hospitals. The study data were obtained through a mail-in self-responses questionnaire that asked about patients on prevention of cervical cancer. The result found that outof 968 cervical cancer patients, 404 (41.7%) had sought cancer information. When patients felt a need for information, their information-seeking behavior increased (overall risk = 4.053,95% confidence interval =2.139-7.680

**Ali SF et al., (2009)** A cross sectional , interview based survey was conducted in June , 2009 . Sample of 400 was divided betw een the three tertiary care centres. Convenience sampling was applied as no definitive data was available regarding the number of registered interns and nurses at each centre. Of all the interviews conducted, 1.8% did not know cervical cancer as a disease. Only 23.3% of the respondent were aware that cervical cancer is the most common cause of gynaecological cancers and 26% knew it is second rank in mortality. Seventy eight percent were aware that infection is the most common cause of cervical cancer, of these 62% said that virus is the cause and 61% of the respondent knew that the virus is human papilloma virus (HPV) . Majority recognized that it is sexually transmitted but only a minority (41%) knew that it can be detected by PCR. Only 26% of the study population was aware of one or

more risk factors. Thirty seven percent recognized Pap smear as a screening test. In total only 37 out of 400 respondents were aware of the HPV vaccine. This study serves to highlight that the majority of working health professionals are not adequately equipped with knowledge concerning cervical cancer. Continuing medical education programme should be started at the hospital level along with conferences to spread knowledge about this disease.

**Sheila, Twin. (2005)** conducted a study among Chinese women from a total sample of 467 in order to identify the knowledge about cervical cancer. Evidence suggested that women's knowledge about cervical cancer and preventive strategies are significant to their screening practices. The need for further knowledge about the cervical screening and preventive measure was demonstrated.

**Dr. Ranajit Mandal**, a specialist in gynaecological oncology at Calcutta's Chittaranjan National Cancer Institute (CNCI) states that more than 130,000 new cases roughly one-fourth of the global total are reported in the country every year.<sup>18</sup> In addition; an estimated 74,000 Indian women die annually from the disease, which results from the abnormal growth of cells in the cervix. Nationwide, the disease accounts for an estimated 24 percent of India's cancer cases among women, compared with 20 percent for breast cancer.<sup>21</sup> India's National Cancer Control Program emphasizes the importance of early detection and treatment. But the country has no organized screening program, and many Indian women lack both awareness about the disease and access to prevention and treatment facilities. These factors put poor and rural women at heightened risk for cervical cancer. Evidence shows that the disease in India is more common among the lower economic strata.

A qualitative study was carried out to analyze the role of different social and cultural factors in the timely detection of cervical cancer. As part of a multi-level, multi-method research effort, this particular study was based on individual interviews with women diagnosed with cervical cancer (identified as the "cases"), their female friends and relatives (identified as the "controls") and the cases' husbands. The results showed that both: denial and fear are two important components that regulate the behavior of both the women and their partners. Women with a small support network may have limited opportunities for taking action in favor of their own health and wellbeing. Women tend not to worry about their health, in general and neither about cervical cancer in particular, as a consequence of their conceptualizations regarding their body and feminine identity – both of which are socially determined. Furthermore, it is necessary to improve the quality of information provided in health services.

### **3. REVIEW OF LITERATURE RELATED TO ATTITUDE ON CERVICAL CANCER:**

**Matin M, LeBaron S.** Our key informants were five Muslim women who identified pelvic and Pap smear screening exams as major sources of anxiety for their community, and therefore major barriers to health care. Three focus groups were then convened, including 15 women ages 18-25, to discuss these issues in more detail. Many Muslim women from immigrant backgrounds face challenges in obtaining adequate health care due to some common barriers of language, transportation, insurance, and family pressures. Additionally, many Muslim women resist screening practices that are the standard in the US but which



threaten their cultural and religious values. Equally important, many health care professionals contribute to the women's challenges by making inappropriate recommendations regarding physical exams and reproductive health. The women were enthusiastic and candid in discussing these highly sensitive and taboo topics.

**Wong LP, Wong YL, (2012)** In this qualitative study, in-depth interviews were conducted with 20 Malaysian women, ages 21 to 56 years, who have never had a Papanicolaou (Pap) smear. Respondents generally showed a lack of knowledge about cervical cancer screening using Pap smear, and the need for early detection for cervical cancer. Many believed the Pap smear was a diagnostic test for cervical cancer, and since they had no symptoms, they did not go for Pap screening. Other main reasons for not doing the screening included lack of awareness of Pap smear indications and benefits, perceived low susceptibility to cervical cancer, and embarrassment. Other reasons for not being screened were related to fear of pain, misconceptions about cervical cancer, fatalistic attitude, and undervaluation of own health needs versus those of the family. Women need to be educated about the benefits of cervical cancer screening. Health education, counseling, outreach programs, and community-based interventions are needed to improve the uptake of Pap smear in Malaysia.

**Zaria (2010)** This was a cross-sectional study to evaluate the knowledge, attitude and practice of cervical cancer screening among market women. A total of 260 women were administered with questionnaires which were both self and interviewer administered. These were analysed using SPSS version 11. Respondents exhibited a fair knowledge of cervical cancer and cervical cancer screening (43.5%); however, their knowledge of risk factors was poor. There was generally good attitude to cervical cancer screening (80.4%), but their level

of practice was low (15.4%). sThere was a fair knowledge of cervical cancer and cervical cancer screening among Nigerian market women in this study, their practice of cervical cancer screening was poor.

**Anarado AN, Agunwah E.et al., (2010)** The incidence of cervical cancer has declined in developed nations due to routine use of cervical cancer screening services. In developing nations opportunistic screening is the practice, and many women present with late-stage disease. This study was designed to ascertain the knowledge of the women in Nigeria to cervical cancer, their practice of cervical cancer screening and factors hindering the use of available screening services. A cross-sectional study was done with interviewer-administered questionnaire. Only the consenting women attending an annual Christian religious meeting in 2007 in three towns in Enugu, South Eastern Nigeria participated. Only 15.5% of the respondents were aware of availability of cervical cancer screening services. The awareness significantly varied with the level of educational attainment ( $P < 0.0001$ ). Only 4.2% had ever done Pap smear test and all were referred for screening. The most important factors hindering the use of available cervical cancer screening services were lack of knowledge (49.8%) and the feeling that they had no medical problems (32.0%). There is very poor knowledge and practice of cervical cancer screening among Nigerian women. Effective female education and free mass screening are necessary for any successful cervical cancer screening programme in Nigeria.

A qualitative study was carried out to analyze the role of different social and cultural factors in the timely detection of cervical cancer. As part of a multi-level, multi-method research effort, this particular study was based on individual interviews with women diagnosed with cervical cancer (identified as the

"cases"), their female friends and relatives (identified as the "controls") and the cases' husbands. The results showed that both: denial and fear are two important components that regulate the behavior of both the women and their partners. Women with a small support network may have limited opportunities for taking action in favor of their own health and wellbeing. Women tend not to worry about their health, in general and neither about cervical cancer in particular, as a consequence of their conceptualizations regarding their body and feminine identity – both of which are socially determined. Furthermore, it is necessary to improve the quality of information provided in health

A descriptive cross-sectional study conducted by **Mutyaba et al.** regarding knowledge, attitudes and practices on cervical cancer screening among the medical workers of Mulago Hospital, Uganda. About 310 medical workers including nurses, doctors and final year medical students were interviewed using a self-administered questionnaire. Response rate was 92% (285). Of these 93% considered cancer of the cervix a public health problem and knowledge about Pap smear was 83% among respondents. Less than 40% knew risk factors for cervical cancer, eligibility for and screening interval. Of the female respondents 65% did not feel susceptible to cervical cancer and 81% had never been screened. Of the male respondents only 26% had partners who had ever been screened. Only 14% of the final year medical students felt skilled enough to use a vaginal speculum and 87% had never performed pap smear. Medical students and nurses training curricula needs review to incorporate practical skills on cervical cancer screening.

A descriptive study conducted by **Udigwe G O** regarding Knowledge, attitude and practice of cervical cancer screening (pap smear) among female

nurses in Nnewi, South Eastern Nigeria A self administered questionnaire survey of all the female nurses .Among 140 nurses, 122 (87%) were aware of the existence of screening services. Although 9.3% had lost relations to cancer of the cervix, only 5.7% had ever undergone a pap smear. While 52 (37.1%) had no reason for not screening, 21 (15%) were afraid of the possible outcome and 35 (25%) felt they were not likely candidates for cancer of the cervix. Knowledge of cervical cancer screening services among female nurses in Nnewi is high while uptake rate is poor. There is need to further educate the nurses who will play a major role in enlightening the public on the availability and need for cervical screening services.

A descriptive study conducted by **Nganwai P etal.** regarding Knowledge, attitudes and practices on cervical cancer among registered nurses at the Faculty of Medicine, Khon Kaen University, Thailand. Systematic sampling was used and self-administered questionnaires were sent. Out of 149 registered nurses 133 (89.3%) of whom responded. The respondents' averaged 34.6 years of age while 54.6% had sexual partners and 61.4% had normal deliveries. About 66.2% would like to have prophylactic HPV vaccines because they thought that it would prevent HPV infection. Almost all of the registered nurses have a moderate level of knowledge regarding cervical cancer and HPV but there are still some major misunderstandings. Thus educational pamphlets, notices and hospital announcements would be useful in increasing their knowledge.

**Raley, JC. (2011)** suggested that Human papilloma virus (HPV) is the causative agent of cervical neoplasia and genital warts. A vaccine has recently been developed that may prevent infection with HPV. Vaccination for HPV may become a routine part of office gynecology. Researcher surveyed members of the

American College of Obstetricians and Gynecologists (ACOG) to determine their attitudes to HPV vaccination. A survey was sent to Fellows of ACOG to evaluate gynecologists' attitudes. Vaccine acceptability was analyzed by using 13 scenarios with the following dimensions and respective attributes: age of patient (13, 17 and 22 years); efficacy of vaccine (50% or 80%); ACOG recommendation (yes or no); and disease targeted (cervical cancer, warts or both). Each scenario was rated by means of an 11-point response format (0 to 100). Responses were evaluated using conjoint analysis. Results of 1200 surveys that were sent out, 181 were returned and included in our analysis. ACOG recommendation was considered the most important variable in vaccine distribution (importance score = 32.2), followed by efficacy (24.5), age (22.4) and, lastly, disease targeted (20.9). Of these variables, higher efficacy was favored; preference was given to age 17 years, with a strong disinclination to vaccinate at age 13 years; and protection against cervical cancer, or genital warts, or both. Demographic characteristics of the gynecologists (i.e., age of physician, gender, and practice setting and community size) did not play an important role in the decision to recommend vaccination. Professional society recommendation is important for acceptability of a potential HPV vaccine. Gynecologists are willing to include this vaccine in their practice.

#### **4. REVIEW OF LITERATURE RELATED TO CERVICAL CANCER SCREENING:**

A study reported by **MNT in 2015** called for urgent changes to the current cervical cancer screening guidelines; the authors said that the recommendation for screening to be ceased for women aged 65 and older should be revisited, after finding women who received regular screening between the ages of 50-64 were much less likely to develop cervical cancer aged 65-85. Last year, a study reported by *MNT* even found that the HPV test may be more accurate than a Pap test for cervical cancer screening. A study from researchers in India suggesting that a vinegar test may be a cheap and effective way of detecting cervical cancer

**B. Agama Bansal , Abhijit P. Pakhare, (2014)** Facility-based cross-sectional study was conducted in an OPD of AIIMS Bhopal during months of March/April 2014. All patients are subjected to anthropometric and blood pressure assessment at central measurement station before visiting respective departments. Every third woman aged 15-45 reporting to this measurement station was approached for participation in the study, and verbal informed consent was obtained. Consenting women were included in the study and further interview with pretested structured questionnaire was conducted by one of the investigators. The questionnaire was comprised of four sections to gather information regarding the sociodemographic characteristics of the participants, knowledge, attitude, and practice regarding cervical cancer and its screening. The sociodemographic characteristics included age, educational status, occupation, marital status, age of marriage, and per capita family monthly

income. The knowledge was assessed using a 20 points scale which had dichotomous response, that is, correct and incorrect. Each correct response was scored as 1 and incorrect as 0. A score 50% ( $\geq 10$  correct responses) was considered as optimal. Attitude was assessed by 7 statements regarding cervical cancer screening and risk factors responses to which were categorized as 3-point scale Disagree, Neutral, and Agree. Attitude was considered as favorable for screening if four or more “Agree” responses were obtained. Those who had been screened for cervical cancer through pap-smear were regarded as having good practice. Sample size estimations were based on assumption that 50% women will have optimal knowledge score ( $>50\%$ ). Therefore, required sample size to estimate the proportion of women with optimum knowledge score with 95% confidence interval (CI) of 50% (95% CI 45-55%) 384. Final sample size with 5% nonresponse rate was 400. Data were entered into Epi-info version 7 (CDC, Atlanta). Qualitative variables were summarized as counts and proportions and numerical variables as mean and standard deviation. Univariate analysis using Chi-square test and *t*-test as appropriately was done to compare sociodemographic and other factors among optimal knowledge versus sub-optimal knowledge group, favorable attitude versus nonfavorable attitude group and takers of the screening test versus nontakers. We considered  $P < 0.05$  as statistically significant. We performed binary logistic regression analysis separately to identify predictors of optimal knowledge, favorable attitude, and good practices. Independent factors for these three models were statistically significant variables of optimal knowledge, favorable attitude, and good practices groups on univariate analysis.

In 2014, the Food and Drug Administration (FDA) approved the first HPV test for primary screening of cervical cancer, called the cobas HPV test.

This test simultaneously detects 14 HPV types - including HPV-16 and HPV-18 from DNA. Current recommendations from the US Preventive Services Task Force (UPSTF), which were updated in March 2012, state that women aged between 21-65 years should undergo a Pap test every 3 years. Women aged between 30-65 years can choose to have the Pap test every 3 years, or the Pap test and an HPV test (carried out the same way as a Pap test) every 5 years.

**In 2013, Medical News Today** reported on research from the Centers for Disease Control and Prevention (CDC) that claimed Pap tests are frequently wasted on women who do not need to undergo screening for cervical cancer.

**In 2012, the US Preventive Services Task Force (UPSTF)** updated their screening recommendations based on "sufficient evidence" suggesting that cervical cancer screening does not reduce the incidence of the disease in certain groups of women.

**Mustapha Mouallif:** A cross-sectional descriptive study using an interview with a structured questionnaire to obtain information regarding cervical cancer, practice in screening for cervical cancer, and attitudes of female physicians regarding the HPV vaccine in different health facilities in Saudi Arabia. The study was performed in the Department of Obstetrics & Gynecology, Faculty of Medicine, King Abdulaziz University Hospital, Jeddah, Kingdom of Saudi Arabia, between May and December 2009. Results: Of the 200 respondents, 70 (35%) physicians comprised gynecological doctors (GDs) group I, and 130 (65%) physicians comprised the non- Limitations of the study The limitations of the study are the biases inherent to any questionnaire survey based study which are as follows: Selection Bias: In spite of taking adequate care to follow the scientifically valid methods of representative samples, selection bias cannot be ruled out entirely as only a small proportion of the total target



population will be studied. Social Acceptability Bias:, the women may not be truthful all the time in their responses in apprehension of hurting the sentiments of the interviewers. Recall Bias: The women need to respond to some of the survey questionnaires based on their memory where there is chance of error. However, attempts were made to minimize such errors as much as possible through appropriate research design and methodology. gynecological doctors (NGDs) group II. The mean age was 36 years. A total of 63 (90%) in group I, and 87 (60.5%) in group II knew that HPV is a cause for cervical cancer. Forty-five (64.3%) in group I, and 44 (33.8%) in group II believed that cervical cancer was curable .

**Anarado AN, Agunwah E :(2011)**The incidence of cervical cancer has declined in developed nations due to routine use of cervical cancer screening services. In developing nations opportunistic screening is the practice, and many women present with late-stage disease. This study was designed to ascertain the knowledge of the women in Nigeria to cervical cancer, their practice of cervical cancer screening and factors hindering the use of available screening services. A cross-sectional study was done with interviewer-administered questionnaire. Only the consenting women attending an annual Christian religious meeting in 2007 in three towns in Enugu, South Eastern Nigeria participated. Only 15.5% of the respondents were aware of availability of cervical cancer screening services. The awareness significantly varied with the level of educational attainment ( $P < 0.0001$ ). Only 4.2% had ever done Pap smear test and all were referred for screening. The most important factors hindering the use of available cervical cancer screening services were lack of knowledge (49.8%) and the feeling that they had no medical problems (32.0%). There is very poor knowledge and practice of cervical cancer screening among Nigerian women. Effective female

education and free mass screening are necessary for any successful cervical cancer screening programme in Nigeria.

**Syed A. Aziz (2010)** A cross-sectional, interview based survey was conducted in June, 2009. Sample of 400 was divided between the three tertiary care centers. Convenience sampling was applied as no definitive data was available regarding the number of registered interns and nurses at each center. Of all the interviews conducted, 1.8% did not know cervical cancer as a disease. Only 23.3% of the respondents were aware that cervical cancer is the most common cause of gynecological cancers and 26% knew it is second in rank in mortality. Seventy-eight percent were aware that infection is the most common cause of cervical cancer, of these 62% said that virus is the cause and 61% of the respondents knew that the virus is Human Papilloma Virus (HPV). Majority recognized that it is sexually transmitted but only a minority (41%) knew that it can be detected by PCR. Only 26% of the study population was aware of one or more risk factors. Thirty seven percent recognized Pap smear as a screening test. In total only 37 out of 400 respondents were aware of the HPV vaccine.

**Saslow** explained that in most areas of the US, cervical cancer screening rates are very high - at over 80%. But she notes that in some places, screening rates are very low, and so there should be focus on increasing awareness in these areas. **"Their efforts should focus on less screening of the overscreened, explaining why they don't need to be screened, and more screening of women who have not been screened in the past or who have not been screened recently," Saslow explained.**

**Sarah Al Akshar (2013)** . A crosssectional questionnaire based study was conducted from December 2013 to February 2014 in five primary health care

clinics in Sharjah. Demographic profile of women was noted and questions pertaining to KAP on screening for cervical cancer were asked. The study included 212 respondents, of which 29% of respondents knew about the disease, 74.5% had knowledge about the Pap smear test, while only 10% were aware of one or more of the risk factors. In addition, 2.73% of the participants had never been screened for cervical cancer. More than 70% of women had a positive attitude towards screening, however, 59.9% did not know that they can be vulnerable to cervical cancer. The awareness and practice of the screening procedure of cervical cancer (Pap smear) among married women in Sharjah, UAE was low. However, the attitude of women towards screening was positive. Therefore, there is a need for intensifying health education provision on cervical cancer screening in the city, by educating women on possible susceptibility to cervical cancer & the possibility to prevent it by early detection.

**Wright & Kuhn, 2012 ,Shi, et al, (2012)** VIA screening is the simplest method of screening with the lowest cost and relative ease of use. The approach does not require high technology and has been demonstrated to reduce the deaths of women in developing countries). During VIA, 5% acetic acid or vinegar is applied to the cervical mucosa. Normal tissue is unaffected by vinegar wash, but abnormal cells including dysplastic and cancerous cells turn white. The screening method allows the practitioner to diagnose and treat abnormal cells almost immediately in a health center, typically using cryotherapy which is the application of liquid nitrogen or carbon nitrogen to the dysplastic area. The process is also inexpensive; in a Chinese study, the cost for VIA was estimated at \$2.64 per test .

**Maine, Hurlburt & Greeson, (2011)** Cytology or “Pap” smear is the most effective and common screening method. Cervical cytology consists of spreading and staining a smear of collected cervical cells and analyzing them under the microscope to detect lesions. The method enables professionals to accurately detect and stage high grade lesions. This approach can contribute to early detection, thereby decreasing the incidence of advanced cervical cancer and associated mortality. However, PAP smears are challenging to perform in developing countries because the process requires trained personnel and certified laboratories that are often unavailable.

**Maine et al., (2011)** The HPV-DNA test has shown promising results with high sensitivity and specificity to detect high grade lesions, and therefore is used as a primary screening test in women aged 30 years or older. Samples can be either self-collected or provider collected. However, there are some limitations: the test is expensive, requires a laboratory, and the time needed to process the test is at least 7 hours. Although suitable for low resource settings, it requires a sophisticated laboratory to read the samples. Unfortunately, most developing countries do not have reliable laboratory facilities .

**Goldie et al., (2010).**The sensitivity of careHPV testing in China was 90% compared to Visual Inspection with Acetic Acid (VIA) (described below) and Pap smear at 41% and 85% respectively (Qiagen group, 2009). Unlike CareHPV, the HPV-DNA test is more costly, requires more technology and time to process. Costs of testing vary by country; for example, for HPV-DNA, the price ranges from \$ 26-29 per person in India to \$ 82 per person in South Africa

**Reis et al.,( 2009)**A Turkish study explored knowledge, behaviors, and beliefs related to cervical cancer in Turkish's women and revealed that the ineffective use of cervical cancer screening was due to poor knowledge and impractical behaviors of practitioners. The study indicated that nurse practitioners are needed to address cervical cancer screening, educate women and other health workers about attitudes, and explain the truths about cervical cancer screening .

A descriptive cross-sectional study conducted by **Mutyaba etal.** regarding knowledge, attitudes and practices on cervical cancer sreening among the medical workers of Mulago Hospital,Uganda. About 310 medical workers including nurses, doctors and final year medical students were interviewed using a self- administered questionnaire. Response rate was 92%(285).Of these 93 % considered cancer of the cervix a public health problem and knowledge about Pap smear was 83% among respondents. Less than 40% knew risk factors for cervical cancer, eligibility for and screening interval. Of the female respondents 65% did not feel susceptible to cervical cancer and 81% had never been screened. Of the male respondents only 26% had partners who had ever been screened. Only 14% of the final year medical students felt skilled enough to use a vaginal speculum and 87% had never performed pap smear. Medical students and nurses training curricula needs review to incorporate practical skills on cervical cancer screening.

**HkoLiou, Xueminling. (2009)** conducted cross sectional descriptive design on responses action and health promoting behaviors among rural Taiwanese women with abnormal Pap test. The result shows that nearly 14% were diagnosed as precancerous and underwent further treatment. 24%of the

women took no action during the 3 month after receiving the result. As many as 96% were not aware about localized cervical cancer. These analyzed results may prove useful in developing intervention strategies to assist women with positive Pap test results to choose treatment modalities and adopted health behaviors.

**Louie, de Sanjose, Silvia, & Mayaud, (2009).** A common cause of cervical cancer is HPV. HPV- DNA approach is a newer option for cervical cancer screening. The HPV-DNA testing consists of screening for high-risk strains of HPV. In some studies, HPV testing has been shown to reduce mortality in high grade lesions in advanced invasive cervical cancer and even in women with human immunodeficiency (HIV). Allison Friedman,L. (2008) suggested that genital human papilloma virus (HPV) infection is the most common sexually transmitted virus in the united States, causing genital warts, cervical cell abnormalities, and cervical cancer in women. To inform HPV education efforts, 35 focus groups were conducted with members of the general public, stratified by gender, race/ethnicity, and urban/rural location. Focus groups explored participants' knowledge, attitudes, and beliefs about HPV and a hypothetical HPV vaccine as well as their communication preferences for HPV-related educational messages. Audience awareness and knowledge of HPV were low across all groups. This, along with an apparent STD-associated stigma, served as barriers to participants' hypothetical acceptance of a future vaccine. Although information about HPV's high prevalence and link to cervical cancer motivated participants to learn more about HPV, it also produced audience fear and anxiety. This research suggests that HPV- and HPV-vaccine-related education efforts must be approached with extreme.

**Raley, JC. (2008)** suggested that Human papilloma virus (HPV) is the causative agent of cervical neoplasia and genital warts. A vaccine has recently been developed that may prevent infection with HPV. Vaccination for HPV may become a routine part of office gynecology. Researcher surveyed members of the American College of Obstetricians and Gynecologists (ACOG) to determine their attitudes to HPV vaccination. A survey was sent to Fellows of ACOG to evaluate gynecologists' attitudes. Vaccine acceptability was analyzed by using 13 scenarios with the following dimensions and respective attributes: age of patient (13, 17 and 22 years); efficacy of vaccine (50% or 80%); ACOG recommendation (yes or no); and disease targeted (cervical cancer, warts or both). Each scenario was rated by means of an 11-point response format (0 to 100). Responses were evaluated using conjoint analysis. Results of 1200 surveys that were sent out, 181 were returned and included in our analysis. ACOG recommendation was considered the most important variable in vaccine distribution (importance score = 32.2), followed by efficacy (24.5), age (22.4) and, lastly, disease targeted (20.9). Of these variables, higher efficacy was favored; preference was given to age 17 years, with a strong disinclination to vaccinate at age 13 years; and protection against cervical cancer, or genital warts, or both. Demographic characteristics of the gynecologists (i.e., age of physician, gender, and practice setting and community size) did not play an important role in the decision to recommend vaccination. Professional society recommendation is important for acceptability of a potential HPV vaccine. Gynecologists are willing to include this vaccine in their practice.

**Lawrence Rozendaal,** We monitored by cytology, colposcopy, and testing for high-risk human papillomavirus 353 women referred to gynaecologists with mild to moderate and severe dyskaryosis. The median

follow-up time was 33 months. At the last visit we took biopsy samples. Our primary endpoint was clinical progression, defined as cervical intraepithelial neoplasia (CIN) 3, covering three or more cervical quadrants on colposcopy, or a cervical-smear result of suspected cervical cancer. 33 women reached clinical progression. All had persistent infection with high-risk human papillomavirus. The cumulative 6-year incidence of clinical progression among these women was 40% (95% CI 21–59). In women with end histology CIN 3, 98 (95%) of 103 had persistent infection with high-risk human papillomavirus from baseline. Among women with mild to moderate dyskaryosis at baseline, a second test for human papillomavirus at 6 months predicted end histology CIN 3 better than a second cervical smear.

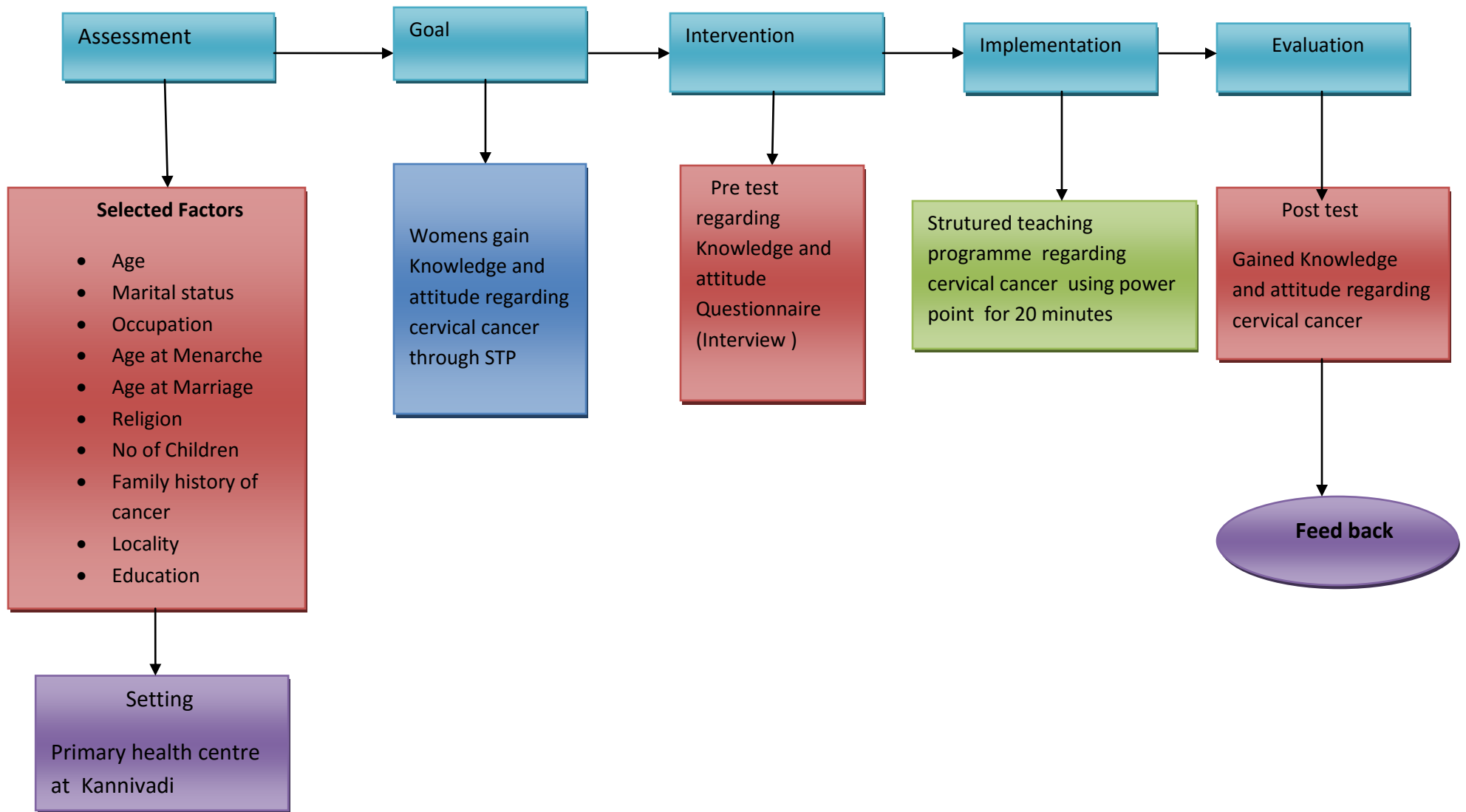
**Bradley et al., (2008).** In Thailand, patients were very satisfied with the care they received from nurses. In South Africa, cervical screening was done by the female nurses from the same ethnic group and this was a key to overcoming barriers. Women in South Africa, who originally viewed screening as a service provided by men, were more satisfied when the screening was done by female nurses. They did not feel frightened or ashamed about challenges and societal objections to vaginal examinations .

**Sherris et al., (2009).** In India, studies indicated that HPV testing reduced cervical cancer incidence and mortality rate up to 50%. The testing is done either with cervical or vaginal samples collected with a brush by a trained provider in the case of cervical screening or by the woman herself in the case of the vaginal sample. The sensitivity of HPV-DNA testing ranged from 66% to 95% for all women tested, but most studies indicated a sensitivity of 85% among women 30 years old or greater .



**Chamaraja Thippeveeranna et al.,** This cross sectional study was carried out with a questionnaire survey covering the socio demographic factors, knowledge, attitude and practices about Pap smear screening among 224 nurses in Regional Institute of Medical Sciences, Imphal, Manipur, India during December 2011. Two hundred and twenty one participants (98.6%) had heard about cervical carcinoma but 18.3% lacked adequate knowledge regarding risk factors. Knowledge about the Pap smear was adequate in 88.8% of the respondents. Out of these, only 11.6% had Pap smear at least once previously. The most common reasons for non-participation in screening were lack of any symptoms (58.4%), lack of counselling (42.8%), physician does not request (29.9%) and fear of vaginal examination (20.5%). Conclusion: Although knowledge of Pap smear as a screening procedure for cervical cancer is high, practice is still low. The nurses who should be responsible for opportunistic screening of women they care for are not keen on getting screened themselves. If we can improve the practice of Pap smear screening in such experts, they should be able to readily provide appropriate and accurate information and motivate the general population to join screening programs.

**S.Santhi, Bharath Sorubha Rani and Jebamani Augustin** A quasi-experimental study conducted by regarding effectiveness of STP on cervical cancer among women in reproductive age in Milaganoor village, Tamil Nadu. Sample was 50 and collected data by using semi structured knowledge questionnaire and attitude scale. The finding was overall mean post test Knowledge (17.7) and attitude score (44.68) was significantly higher than the mean pretest knowledge (10.83) and attitude score (34.2).<sup>1</sup> Public knowledge about cervical cancer and its association with HPV is limited in many countries. And should conduct community education campaigns about cervical cancer and HPV are recommended as a strategy for increasing vaccine acceptance.



**FIG. 1 CONCEPTUAL FRAME WORK BASED ON NURSING PROCESS MODEL**

# *CHAPTER - III*

## *METHODOLOGY*

## **CHAPTER III**

### **METHODOLOGY**

Methodology is a systematic way to solve the research problem undertaken. Methodology for the study is defined as the way pertinent information is gathered in order to answer the research question to analyze the research problem.

This study intended to assess the knowledge and attitude towards cervical cancer among womens in Kannivadi village at Dindigul district.

This chapter deals with description of the different steps, which were undertaken by the investigator for the study. It includes the research approach, research design, variables, settings, population, sample size, sampling technique, sampling criteria, development of tools, content validity, reliability, pilot study, data collection procedure, plan for data analysis and ethical consideration.

#### **RESEARCH APPROACH:**

Research that explores the interrelationships among variables of interest without intervention on the part of the researcher is a correlation study. There is no manipulation of one independent variable s and to determine if there is a correlation between variables. In the present study, the investigator intended to correlate the knowledge and attitude.

#### **STATEMENT OF PROBLEM**

A quasi experimental Study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding cervical cancer among women at Primary health center Kannivadi , Dindigul district.

## **OBJECTIVES:**

- To assess the knowledge and attitude regarding the cervical cancer among womens.
- To determine the effectiveness of structured teaching programme on cervical cancer among womens.
- To associate the post-test knowledge and attitude on cervical cancer with their selected demographic variables.
- To correlate the knowledge and attitude Pre- test and post test score on cervical cancer among womens.

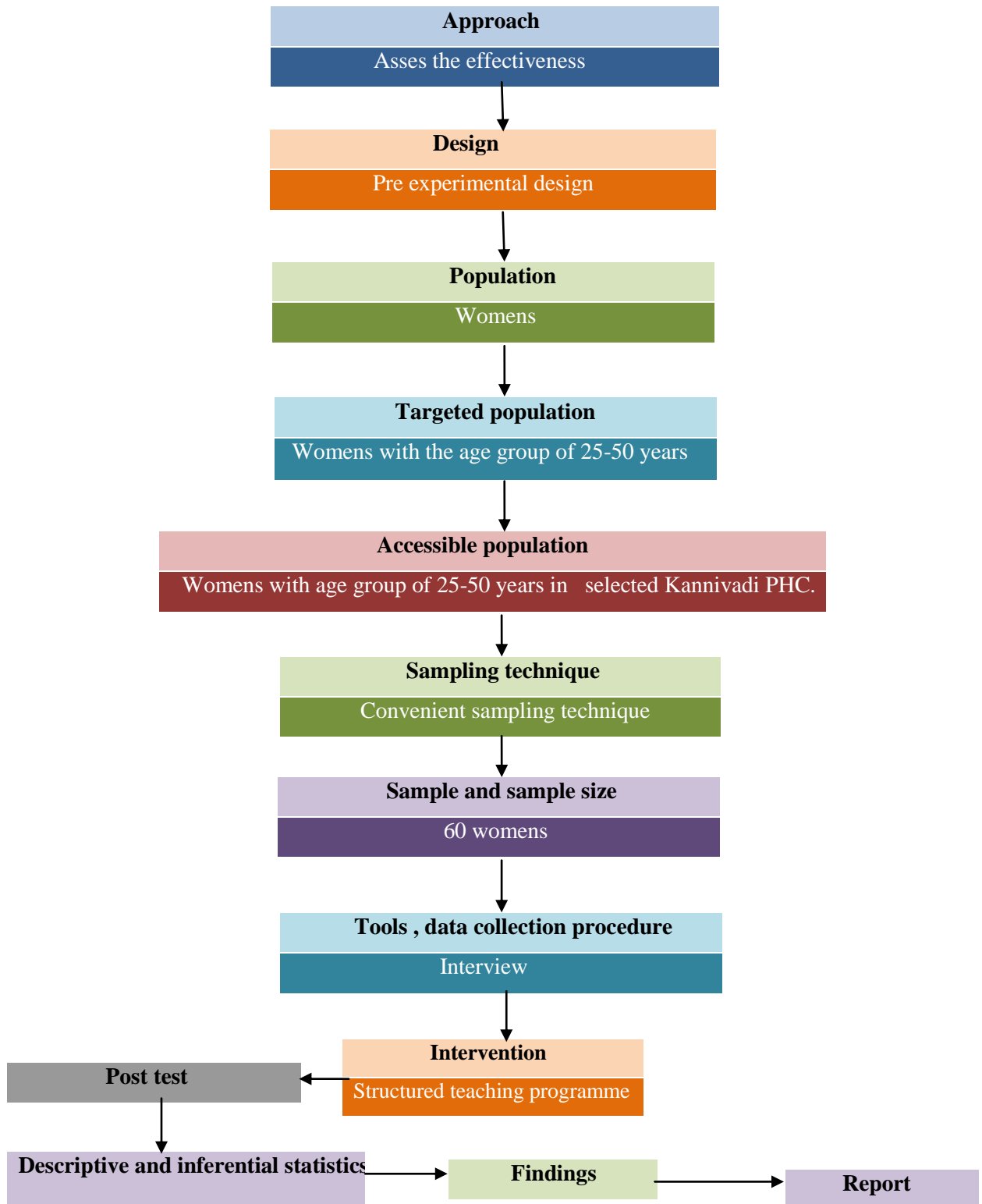
## **RESEARCH DESIGN:**

The research design selected for the present study was quasi experimental design).

The present study attempts to assess the knowledge and attitude among womens in PHC , Kannivadi at Dindigul district.

<b>Design</b>	<b>O1</b>	<b>X</b>	<b>O2</b>
Pre experimental design	Pre test on knowledge and attitude regarding cervical cancer.	Structured teaching programme.	Post test on knowledge and attitude on cervical cancer.

## SCHEMATIC REPRESENTATION OF RESEARCH DESIGN



## **VARIABLES:**

Independent variables :- Structured teaching programme.

Associate Variable : - Age, Marital status, Age at Menarche, Age at Marriage , Family history of cancer, Religion, Educational Status, Income, Occupation, No of children, Source of information, Residence.

Dependent variables : - Cervical cancer

## **POPULATION:**

The entire set of individuals or objects having some common characteristics selected for a research study. Target population is the set of individuals or objects on whom the researcher wishes to generalize the findings. The target population for the study was the womens. Accessible population is the portion of the target population that is available to the researcher. Accessible population was womens with the ge group of 25-50 years in selected kannivadi village in Dindigul District.

Popultion : Womens

Targeted population : Womens with the age group of 25 – 50 years.

Accessible population : Womens with the age group of 25 – 50 years in  
Kannivadi PHC.

## **SAMPLE AND SAMPLE SIZE:**

The samples for the present study were womens in selected kannivadi village in dindigul district who fulfilled the sample selection criteria. The main

purpose of the study was to obtain large enough sample to show statistical significance and being economical at the same time. The sample size is arbitrarily decided to be **60** womens from the age group of **25-50** years considering the availability of time, sample acquaintance of the investigator with the PHC.

### **SAMPLING TECHNIQUE:**

In this study samples were chosen by non random sampling technique of convenient sampling.

### **SAMPLING CRITERIA:**

Sampling criteria is the list of characteristics of the elements that we have determined beforehand that are essential for eligibility to form part of the sample.

#### **Inclusion Criteria:**

- ❖ Womens who were with the group of 25-50years.
- ❖ Womens who were willing to participate in this study.
- ❖ Womens who can able to read and write.

#### **Exclusion Criteria:**

- ❖ Womens who were diagnosed with cancer.
- ❖ Womens who were suffering with abilities, pelvic inflammatory disease.
- ❖ Womens who were taking regular hormonal therapy.
- ❖ Women who were below 20 years of age and above 50 years of age.
- ❖ Women who were not willing to participate .
- ❖ Women who cannot able to read and write Tamil.



## **DEVELOPMENT OF THE TOOL:**

A modified standardized self administered questionnaire was identified and used to collect data regarding cervical cancer knowledge and Likert Scale used for attitude; the questionnaire consisted of 3 sections with a total 72 items.

## **DESCRIPTION OF THE TOOL:**

The study tool consisted of two sections

Section A: Back ground factors

Section B: Knowledge questionnaire on cervical cancer

Section C: Attitude scale on cervical cancer

### **Section A: Background factors of women**

The questionnaire consisted of 12 items seeking general information about women like age, marital status, age at menarche, age at marriage, family history of cancer, religion, educational status, income, occupation, no of children, source of information, locality. Information collected by interview method.

### **Section B: Knowledge questionnaire on cervical cancer**

### **Section C: Attitude scale on cervical cancer**

This section seeks the information regarding the attitude on cervical cancer on 5 point scale; it is considered of 30 items.

0= Undecided

1= Strongly Disagree

2= Disagree

3= Agree

4= Strongly Agree

### **TRY OUT:**

The tool was administered and checked for its clarity and appropriateness. The subjects chosen were similar in characteristics to those of the population under the study. The tool prepared by the researcher and was administered to twenty women.

### **RELIABILITY:**

The stability of an instrument refers to the instrument's reliability to produce the same result with repeated testing. Inter-rater reliability was done. The purposive sampling. Two persons who were equally exposed to the caring of the patients and researcher administered the tool simultaneously. Correlation coefficient was found  $r = (0.8)$ . The tool was found highly reliable.

### **VALIDITY OF THE TOOLS:**

The background factors, the knowledge scale, and attitude scale in the structured questionnaire and the translated tools are sent along with the request for validation to 3 nursing experts and 2 Obstetrics and Gynaecology doctors. Suggestions were considered and modification of tool was done according to the opinion of experts in the background factors, the cervical cancer knowledge and

attitude Scale. Language experts did translation of the tool into tamil and retranslation into English was done. The validity was confirmed.

### **DATA COLLECTION PROCEDURE:**

The data on knowledge and attitude towards cervical cancer were collected from Kannivadi village womens. The data were collected for 4 weeks from the month of April and may 2016. Permission was sought and obtained from PHC authoritative . The womens were selected using non random sampling method among those who fulfilled the sample selection. Initial rapport was developed and the purpose of the study was explained to them. Informed consent was obtained from the womens. the questionnaire was administered to the womens regarding knoeledge and attitude regarding cervical cancer separately. Confidentiality of the information shared was assured. The womens were co – operative. On an average, it took 30 minutes to complete one sample. At the end, the tool was edited for completion.

### **PLAN FOR STATISTICAL ANALYSIS:**

The data collected from the subjects were edited, compared and correlated using both descriptive and inferential statistics on the basis of objectives and hypothesis of the study. The analysis was done using statistical package SPSS version 10. The level of signficance was 0. 05.

1. Frequency, percentage distribution were used to describe womens regarding their back ground.
2. Correlation of knowledge and attitude were analyzed by mean, standard deviation, range, and “r” value.

3. The association between knowledge and selected back ground factors were analyzed by linear regression.
4. The association between attitude and selected back ground factors were analyzed by linear regression.

### **ETHICAL CONSIDERATION:**

The researcher committee approved the research problem and objectives. Informed consent was obtained from individual womens by orally. The womens had the freedom to leave the study at her will without assigning any reason. Due permission from hospital authorities were obtained. Explained regarding the purpose of the STP was given to the womens involved in the study. Thus the ethical issues were ensured in this study.

# *CHAPTER - IV*

## *DATA ANALYSIS AND INTERPRETATION*

## **CHAPTER IV**

### **DATA ANALYSIS AND INTERPRETATION**

Analysis and interpretation of the data of this study was done by description and inferential statistics. Analysis was done using SPSS version 24. A probability value of less than 0.05 was considered to be significant.

This chapter deals with analysis and interpretation of data collected on knowledge and attitude towards cervical cancer before and after structured teaching programme.

#### **THE OBJECTIVES OF THE STUDY:**

- To associate the post test knowledge and attitude on cervical cancer with their selected demographic variables.
- To correlate the knowledge and attitude Pre- test and post test score on cervical cancer among women.

The data collected were edited, tabulated, analyzed, interpreted and findings obtained were presented in the form of tables, and diagrams under the following sections.

Section I : Data on background factors of the women.

Section II : Data on knowledge and attitude before and after structured teaching programme.

Section III : Data on association between the demographic variables and knowledge, attitude score of post test.

## SECTION –I

### DATA ON BACK GROUND FACTORS OF THE WOMEN

### FREQUENCY AND PERCENTAGE DISTRIBUTION OF WOMENS REGARDING BACK GROUND FACTORS

Table 1. Social characteristics of women

NO: 60

Table No.	Characteristics of women	Frequency	Percent
<b>1.1</b>	<b>Religion</b>		
	Hindu	50	83.3
	Muslim	5	8.3
	Chiristian	5	8.3
	Total	60	100.0
<b>1.2</b>	<b>Education</b>		
	Primary	39	65.0
	High School	13	21.7
	Higher secondary	5	8.3
	Degree	3	5.0
	Total	60	100.0
<b>1.3</b>	<b>Occupation</b>		
	Heavy work	33	55.0
	Moderate work	12	20.0
	Sedentary work	15	25.0
	Total	60	100.0
<b>1.4</b>	<b>Marital status</b>		
	Married	45	75.0
	Divorced/Separated	8	13.3
	Widow	7	11.7
	Total	60	100.0
<b>1.5</b>	<b>Residence</b>		
	Rural	53	88.3
	Urban	7	11.7
	Total	60	100.0

**Table 1** shows the frequency and percentage distribution of social characteristics of women.

Majority (83.3%) of women belongs to Hindu and (8.3%) belongs to each of Muslim and Christian. As same in (Table 1.1)

Analysis of education of women shows that a higher proportion of women (65%) studied primary school of education, (21.7%) studied high school, (8.3%) studied higher secondary and (5%) had degree (Table 1.2)

Regarding occupation of women (55%) are doing heavy work, (25%) sedentary work, and (20%) Moderate work (Table 1.3)

Three fourths of women were Married, (13.3%) either Divorced or separated and (11.7%) being in Urban areas (Table 1.4)

Majority of the (88.3%) women respondents were living in Rural areas, (11.7%) being in urban areas. (Table 1.5)



**Table 2. Demographic and economic characteristics of women**

<b>Table No.</b>	<b>Characteristics of women</b>	<b>Number</b>	<b>Percent</b>
<b>2.1</b>	<b>Age</b>		
	20-30 years	27	45.0
	31-40 years	20	33.3
	41-50 years	13	21.7
	Total	60	100.0
<b>2.2</b>	<b>Age at menarche</b>		
	10-12 years	30	50.0
	13-15 years	26	43.3
	above15 years	4	6.7
	Total	60	100.0
<b>2.3</b>	<b>Age at Marriage</b>		
	13-15 years	19	31.7
	16-18 years	24	40.0
	19-21 years	9	15.0
	above21 years	8	13.3
	Total	60	100.0
<b>2.4</b>	<b>No. of living Children</b>		
	1	18	30.0
	2	25	41.7
	3 and above	17	28.3
	Total	60	100.0
<b>2.5</b>	<b>Annual Income</b>		
	Below Poverty<5000	55	91.7
	Above Poverty> 5000	5	8.3
	Total	60	100.0
<b>2.6</b>	<b>Family History of Cancer</b>		
	Yes	8	13.3
	No	52	86.7
	Total	60	100.0
<b>2.7</b>	<b>Source of Information on cervical cancer</b>		
	Medias	50	83.3
	Books	4	6.7
	Magazine	2	3.3
	Friends	4	6.7
	Total	60	100.0

**Table 2** shows the frequency and percentage distribution of Demographic and economic characteristics of women.

Analysis of age of women shows that (45%) are in 20-30- years, (33.3%) in 31-40 years, and (21.7%) in 41-50 years (Table 2.1)

Half of women attained Menarche at the age of 10-12 years, followed by (43.3%) in 13-15 years, (6.7%) above 15 years (Table 2.2)

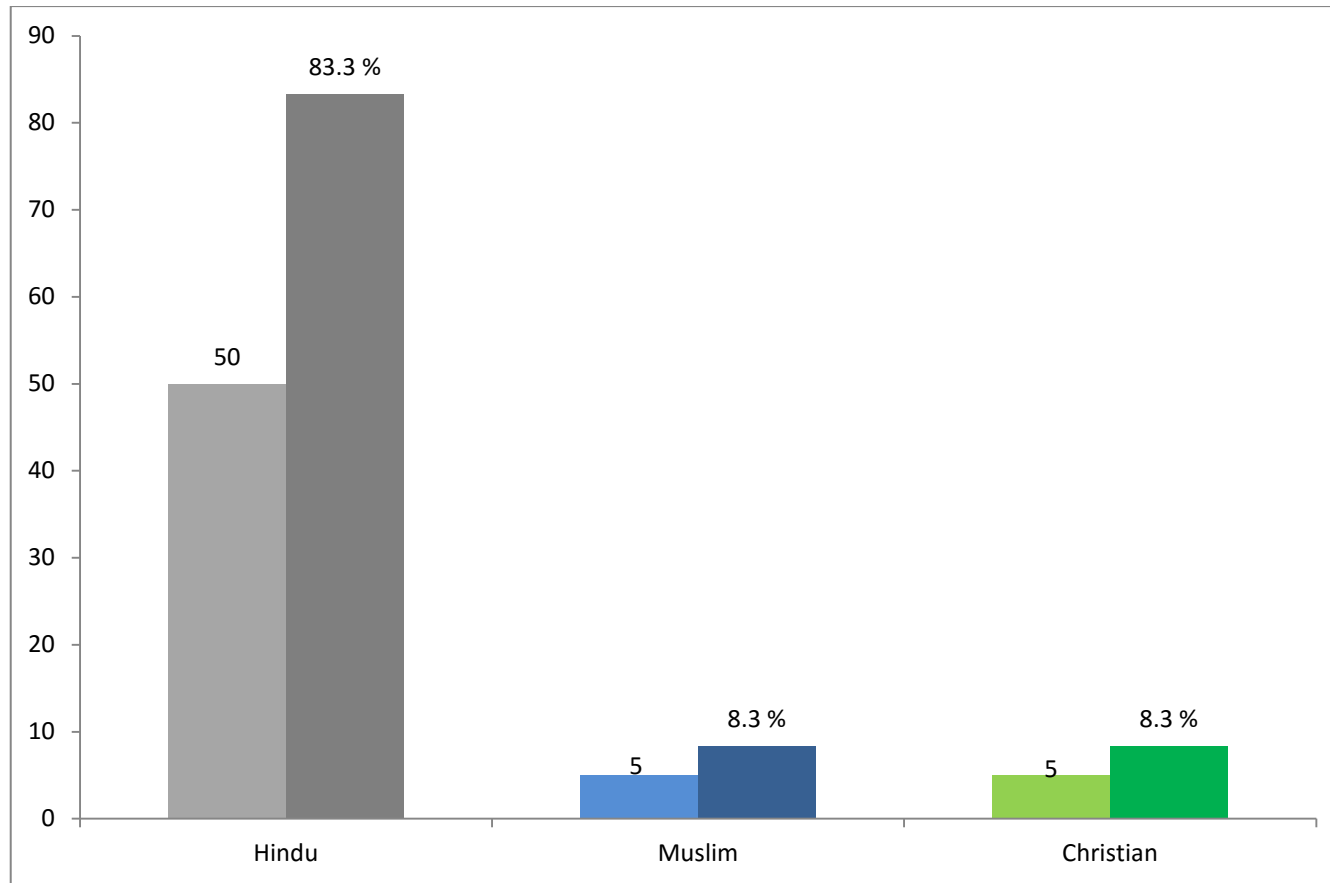
More women (40%) Married in 16-18 years, followed by women in 13-15 years (31.7%), women in 19-21 years (15%) and (13.3%) of women got married at 21 years and above, about (72%) women got married at less than 19 years (Table 2.3)

Regarding the no of children about (42%) of women are having 2 children, (30%) of women having one child, and (28%) women were having 3 and above children. (Table 2.4)

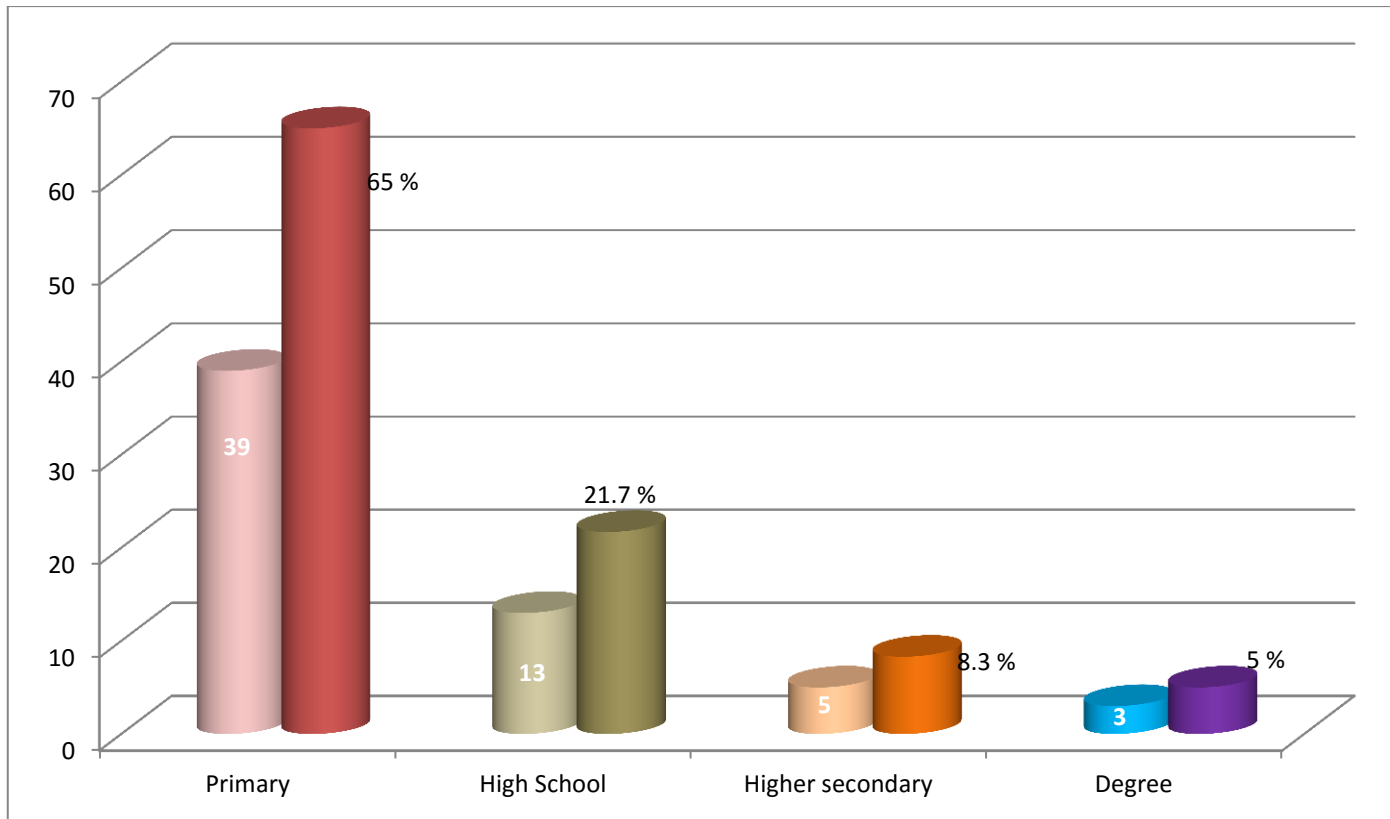
Analysis of annual income of respondent women shows that majority (92%) were below poverty line of Rs less than 5000, and only (8%) women are above the poverty line of Rs greater than 5000 (Table 2.5)

Women were enquired whether family members had the history of any type of cancer (13.3%), women confirmed the family history of cancer and remaining women are reported family has not experienced any cancer (Table 2.6)

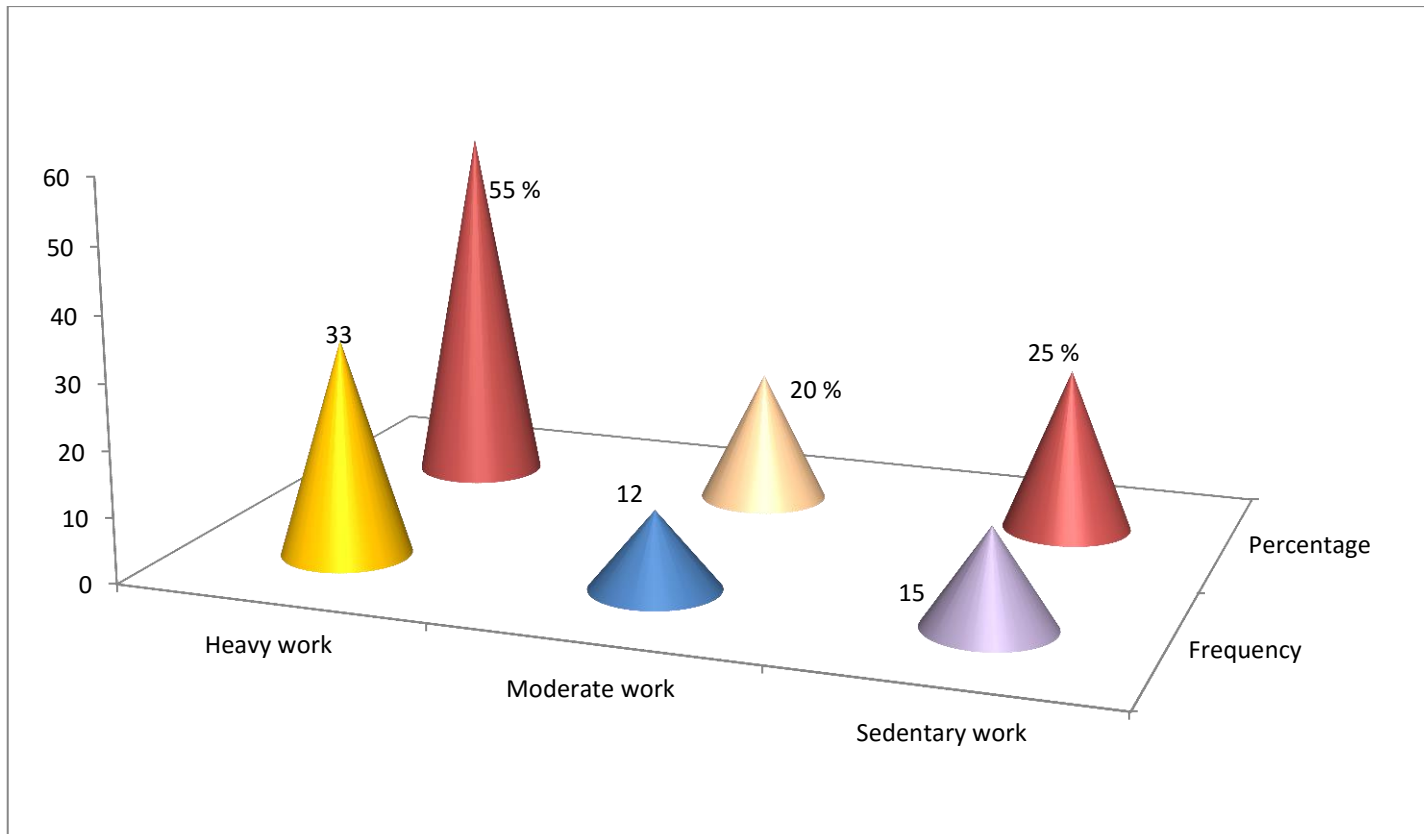
Majority of women came to know about the cervical cancer through Medias such as TV, News paper, the remaining women came to know through books, magazine, and friends as seen in (Table2.7)



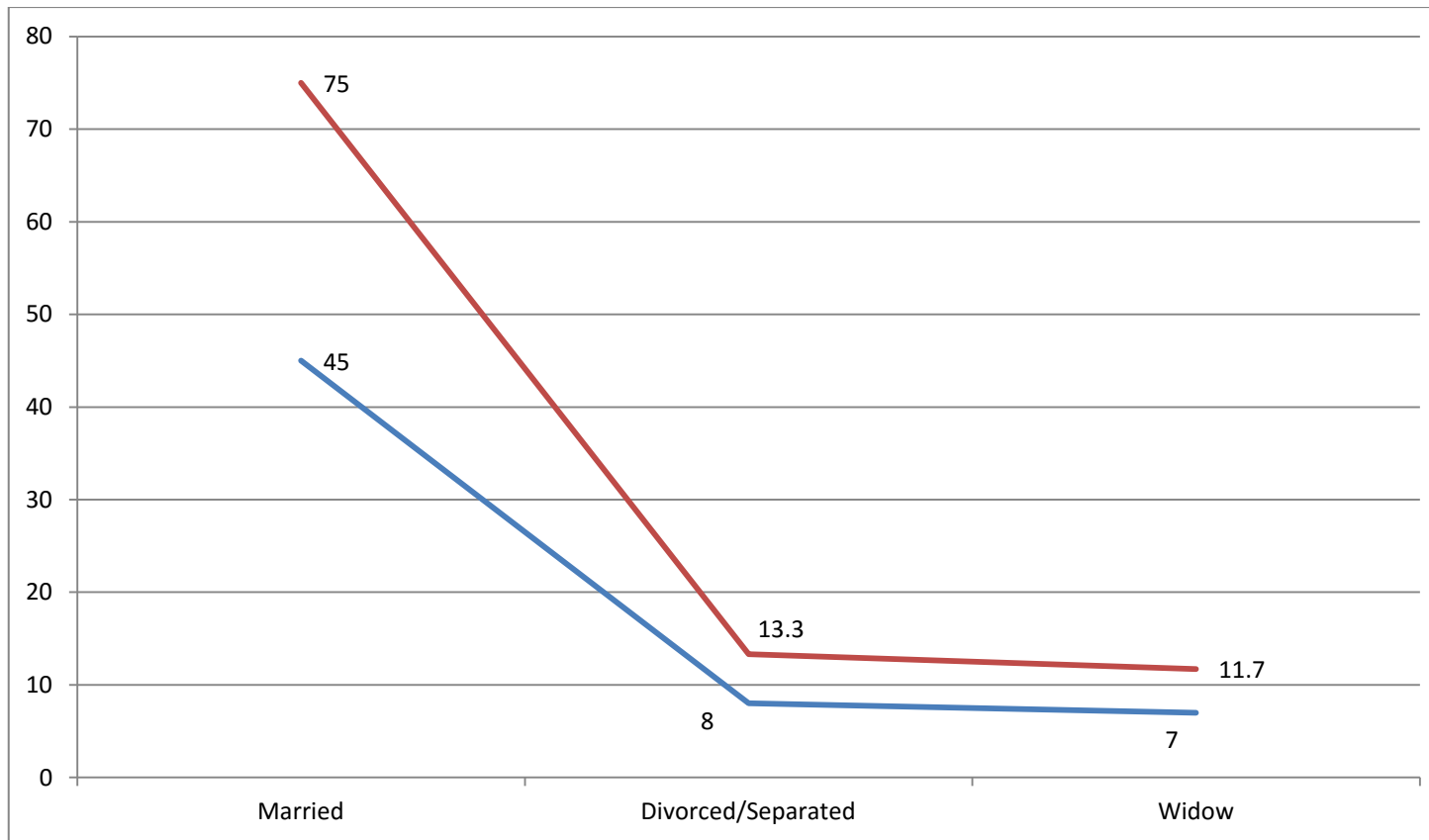
**FIGURE 1.1 RELIGIOUS WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**



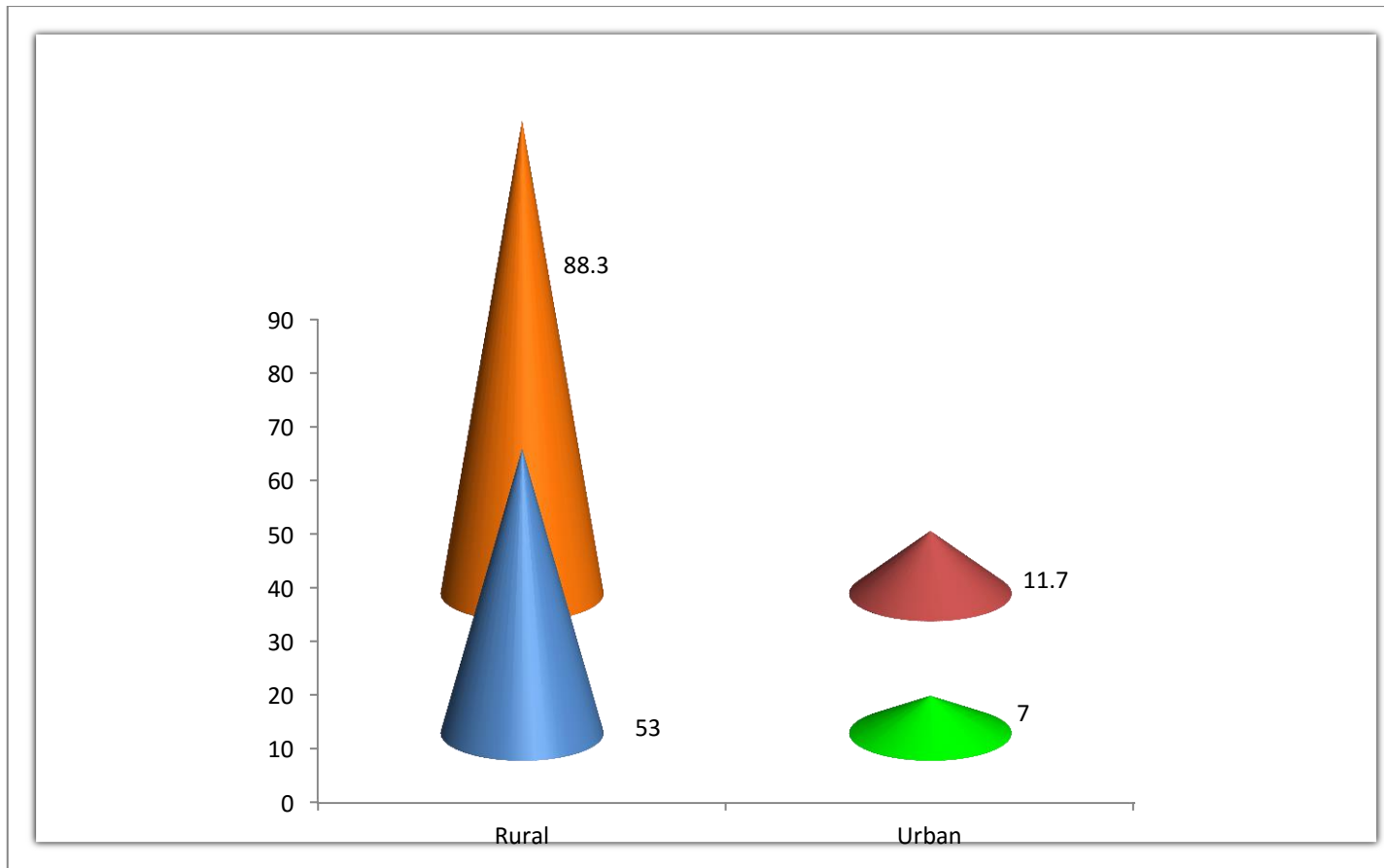
**FIGURE 1.2 EDUCATION WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**



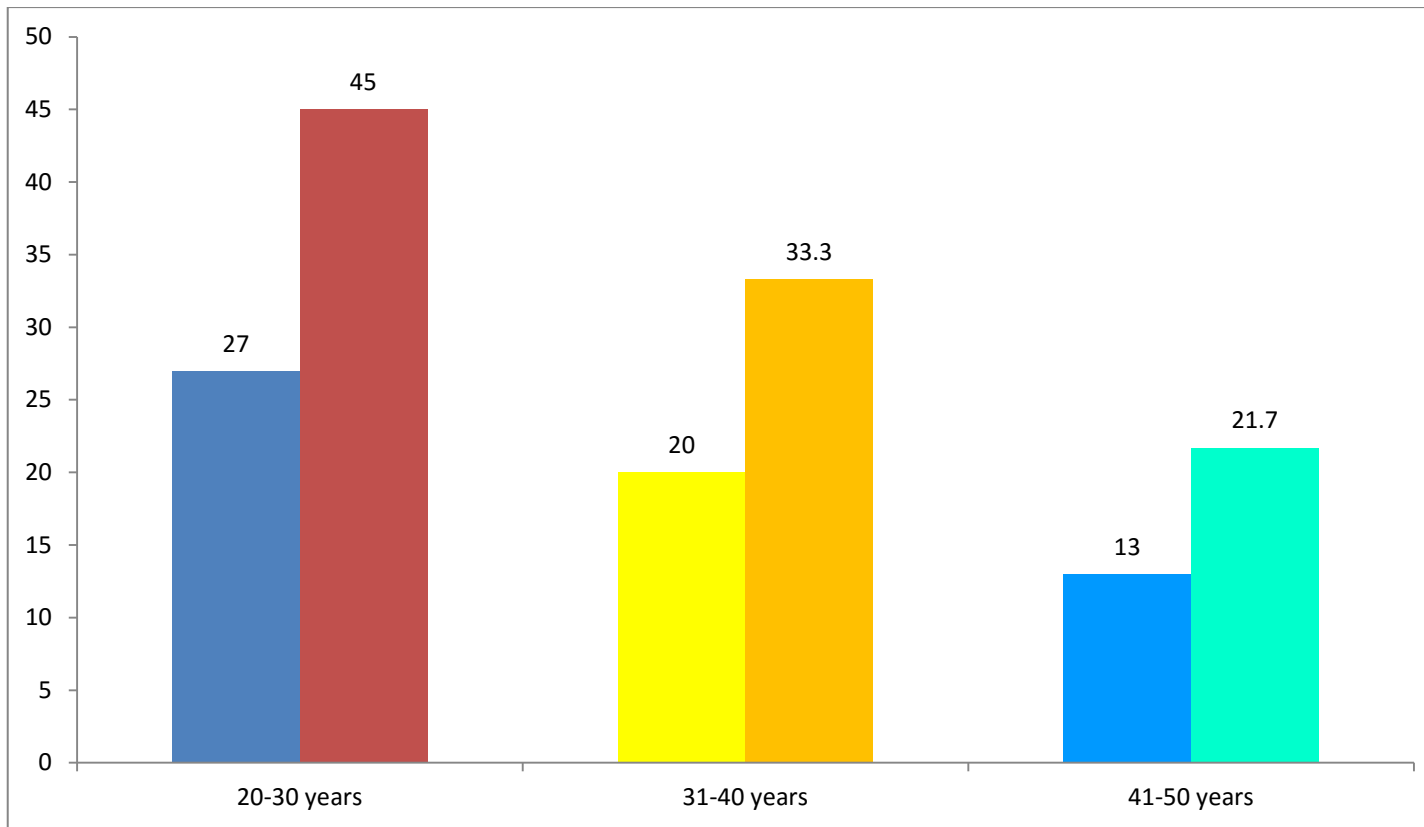
**FIGURE 1.3 OCCUPATION WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**



**FIGURE 1.4 MARITAL STATUS WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**

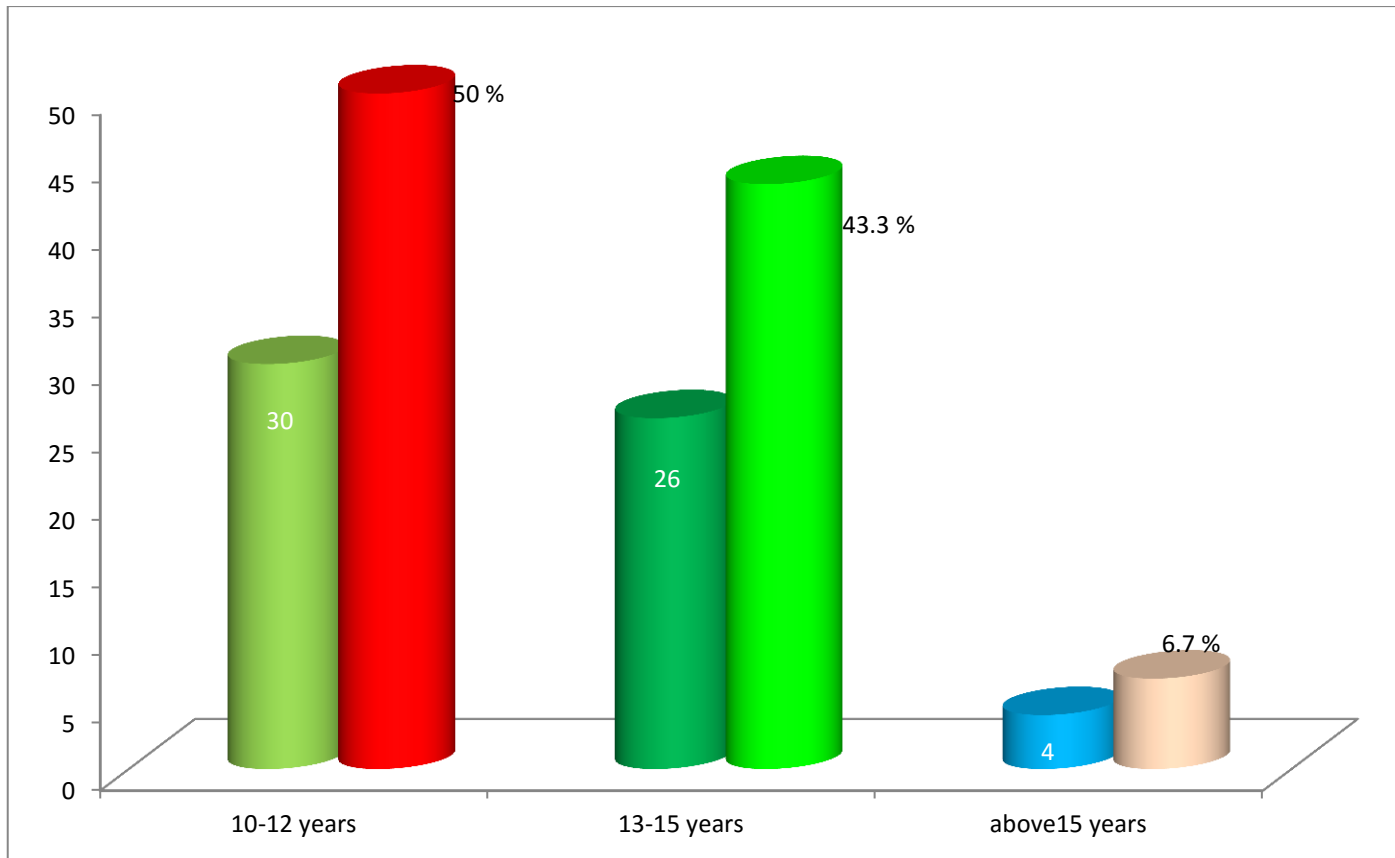


**FIGURE 1.5 RESIDANCE STATUS WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**

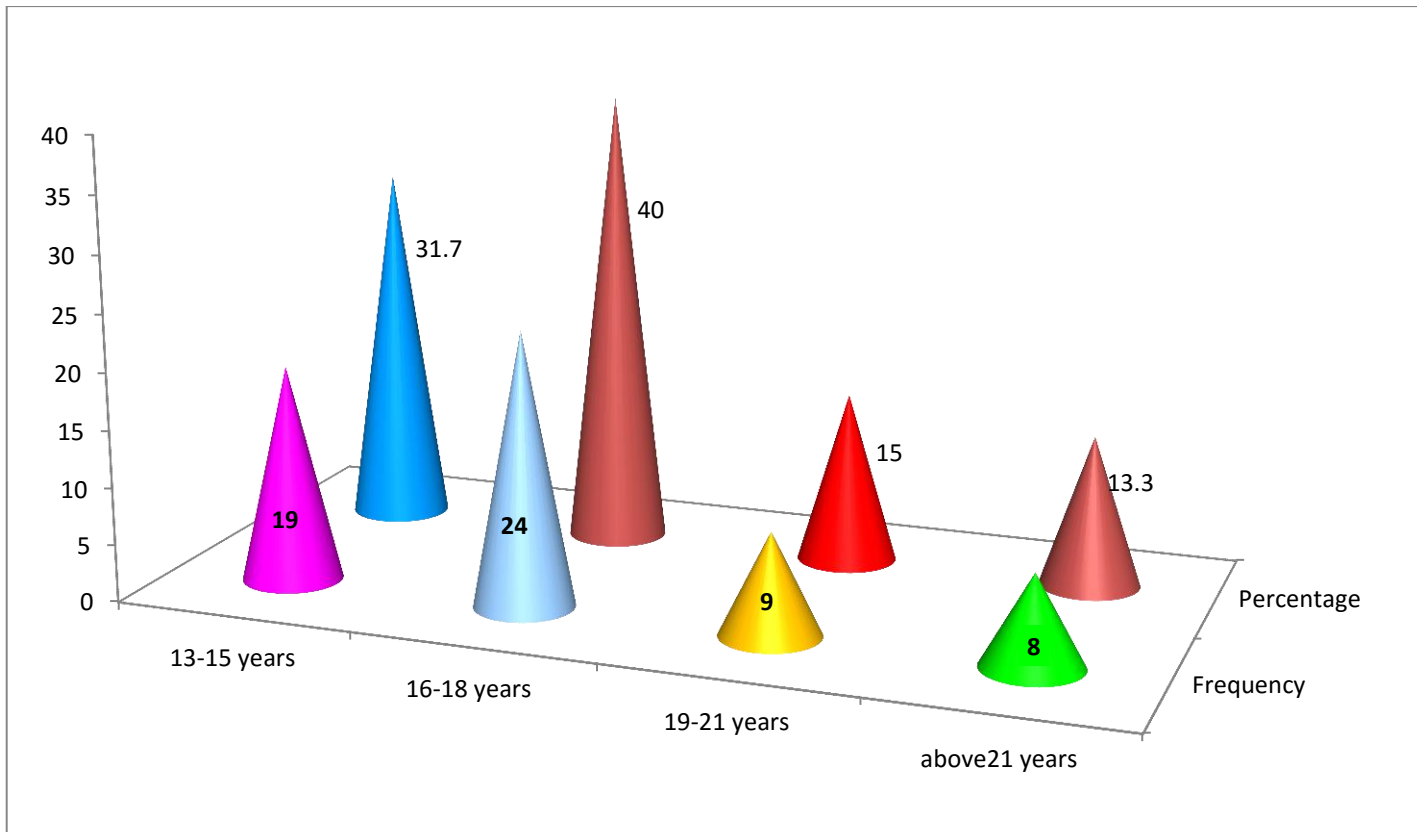


**FIGURE 2.1 AGE WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**

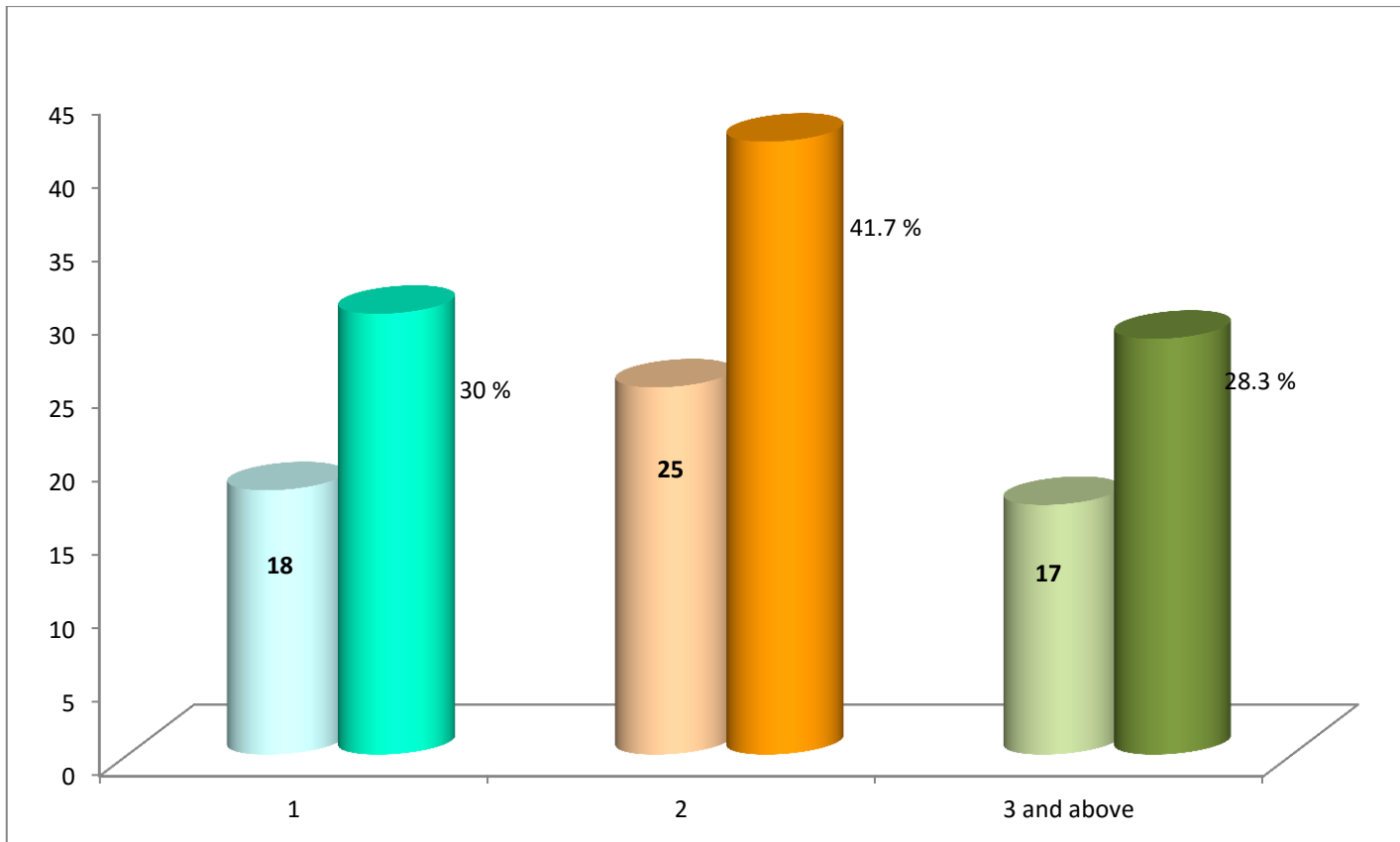




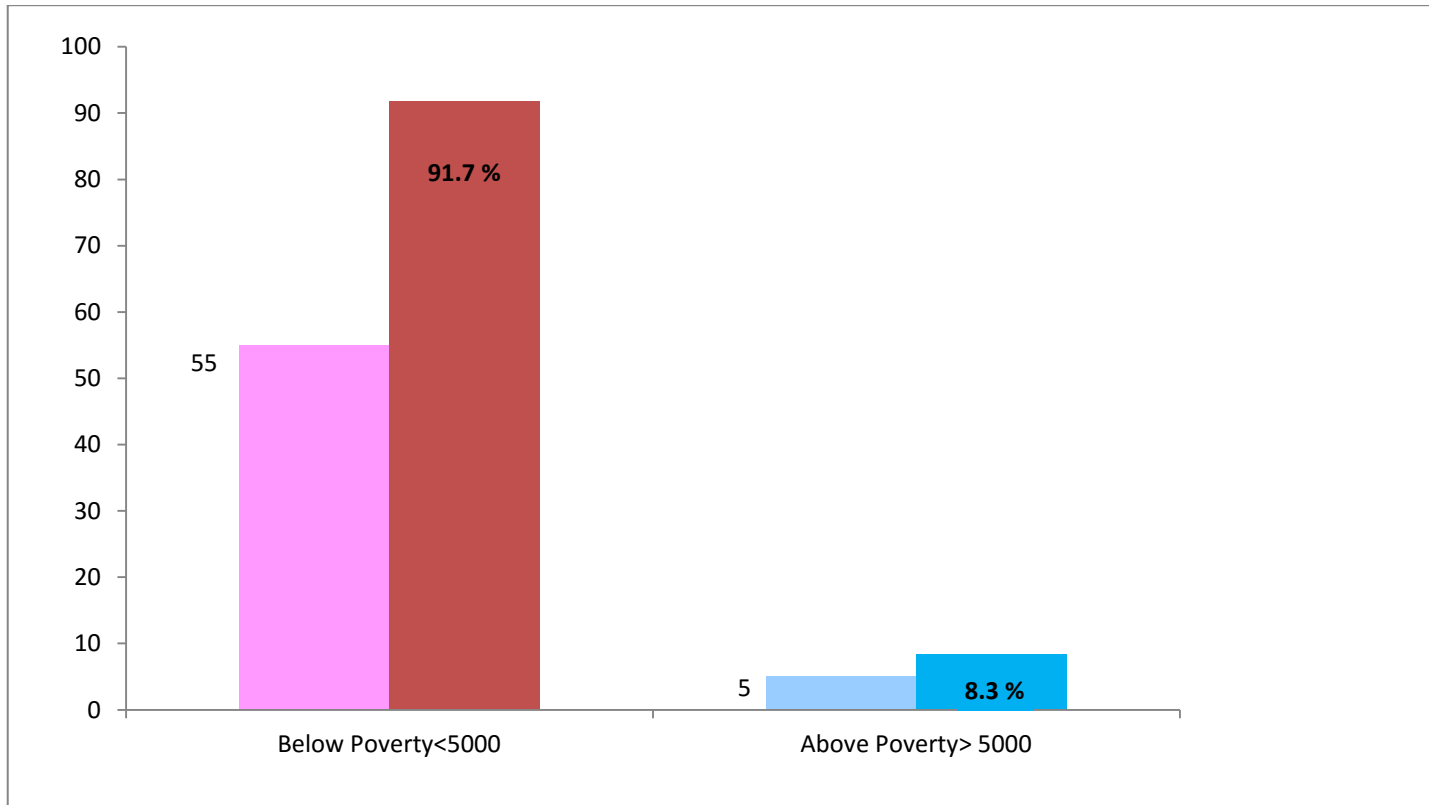
**FIGURE 2.2 AGE AT MENARCHE WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**



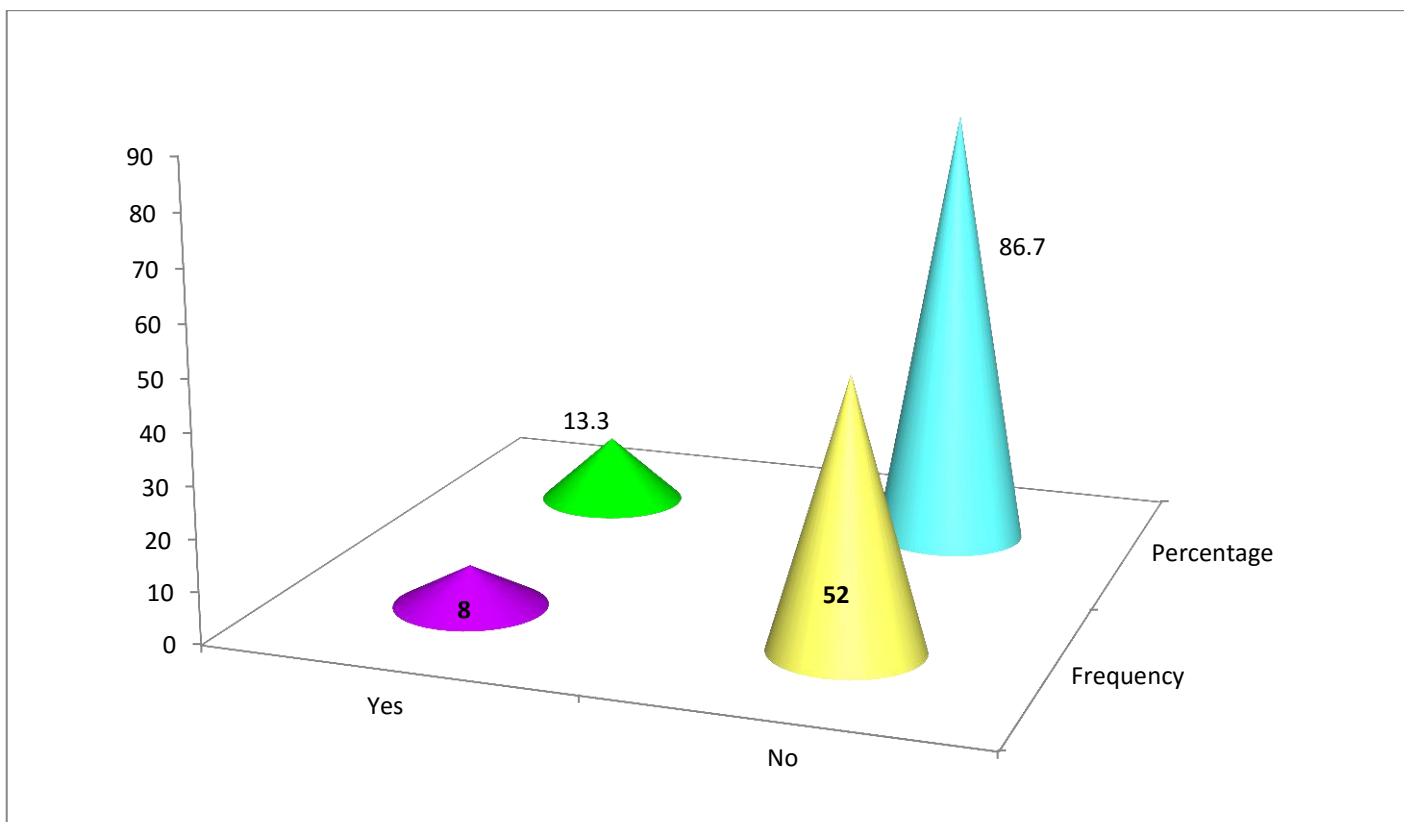
**FIGURE 2.3 AGE AT MARRIAGE WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**



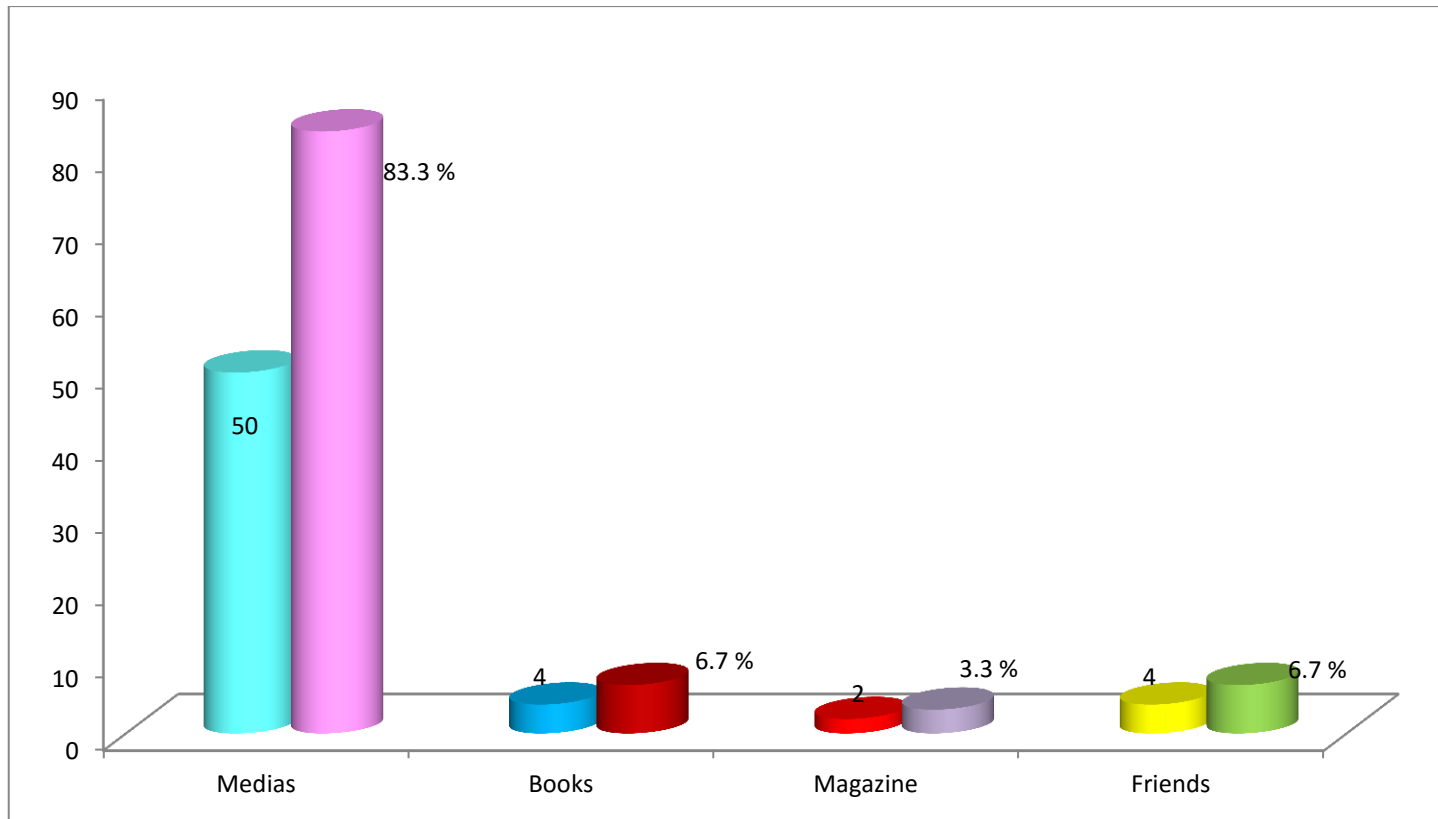
**FIGURE 2.4 LIVING CHILDREN WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**



**FIGURE 2.5 INCOME WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**



**FIGURE 2.6 CANCER HISTORY WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**



**FIGURE 2.7 SOURCE OF INFORMATION ON CERVICAL CANCER WISE FREQUENCIES AND PERCENTAGE DISTRIBUTION**

## SECTION : II

**Table 3. Knowledge and attitude score of women at pre, post tests and their changes.**

**NO: 60**

<b>Table No.</b>	<b>Characteristics of women</b>	<b>frequency</b>	<b>Percentage</b>	<b>Mean</b>	<b>Standard deviation</b>
<b>3.1</b>	<b>Knowledge pre test (score)</b>				
	1-6	12	20.0		
	7-10	27	45.0		
	11-15	21	35.0		
	Total	60	100.0	8.80	3.256
<b>3.2</b>	<b>Knowledge post test (score)</b>				
	18-24	21	35.0		
	25-26	19	31.7		
	27-30	20	33.3		
	Total	60	100.0	24.67	3.079
<b>3.3</b>	<b>Change in knowledge of cervical cancer (score)</b>				
	11-14	21	35.0		
	15-16	16	26.7		
	17-24	23	38.3		
	Total	60	100.0	15.8667	3.08340
<b>3.4</b>	<b>Attitude pre test (score)</b>				
	43-57	20	33.3		
	58-64	20	33.3		
	65-78	20	33.3		
	Total	60	100.0	60.43	8.083
<b>3.5</b>	<b>Attitude post test (score)</b>				
	93-99	19	31.7		
	100-103	18	30.0		
	104-114	23	38.3		
	Total	60	100.0	102.27	4.554
<b>3.6</b>	<b>Change in attitude of cervical cancer(score)</b>				
	22-38	20	33.3		
	39-44	19	31.7		
	45+	21	35.0		
	Total	60	100.0	41.8333	7.86575

The knowledge level of cervical cancer has been increased from mean value of (3.8) at pre test to (24.67) at post test (Table 3.1, 3.2)

In the same way the attitude level towards cervical cancer has been increased from mean value of (60.43) to (102.27) (Table 3.4, 3.5)

While considering the change in knowledge from pretest to post test, the distribution of change is given in (Table 3.3). Whereas change in attitude towards cervical cancer is at mean value of( 41.8) (Table 3.6). It seems that the attitude of women has changed at higher level mean of (41.83) compare to knowledge mean of (15.87).



**TABLE 4**

**Test of significance of difference between pre and post test level score**

<b>Variable and type of test</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>T-test value</b>	<b>Significant value</b>
<b>Knowledge</b>				
Pre test	8.80	3.256		
Post test	24.67	3.079	27.543	.01
<b>Attitude</b>				
Pre test	60.43	8.083		
Post test	102.27	4.554	34.931	.01

### **DESCRIPTIVE STATISTICS**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
ChangeK	60	11.00	24.00	15.8667	3.08340
ChangeA	60	22.00	62.00	41.8333	7.86575
Knowledge pretest	60	1	16	8.80	3.256
Knowledge post test	60	18	30	24.67	3.079
Attitude pre test	60	43	78	60.43	8.083
Attitude post test	60	93	114	102.27	4.554
Valid N (listwise)	60				

The difference between pre and post test level in knowledge as well as attitude is tested using the T- test of significance which is presented in (Table 4). The difference between pre and post test for both knowledge and attitude is significant that 1% level which implies that there is a significant effect of intervention on improving knowledge and positive attitude that is education of women towards cervical cancer(Table 4).

**TABLE 5**

**Regression of background characteristics of women on change in knowledge of cervical cancer from pre to post test**

Variable and its category	B	S.E.	Wald	df	Sig.	Exp(B)
<b>Age</b>						
20-30 years (Reference)						
31-50 years	.344	.748	.212	1	.645	1.411
<b>Marital status</b>						
Married (Reference)						
Divorced/Separated/widow	-.910	.875	1.084	1	.298	.402
<b>Age at menarche</b>						
10-12 yeas (Reference)						
13+ yeas	.013	.701	.000	1	.985	1.013
Age at marriage			1.792	2	.408	
<b>13-15 years (Reference)</b>						
16-18 years	-.429	1.134	.143	1	.705	.651
19+years	-1.104	.935	1.396	1	.237	.331
<b>Religion</b>						
Hindu (Reference)						
Muslim/Christian	1.194	1.011	1.395	1	.238	3.299
<b>Education</b>						
Primary (Reference)						
Above primary	-.881	.865	1.038	1	.308	.414
<b>Occupation</b>						
Heavy work (Reference)						
Moderate & sedentary work	1.191	.802	2.203	1	.138	3.289
<b>Source of information</b>						
Media (Reference)						
Books/Magazine/Friends	2.129	1.099	3.757	1	.053	8.409
<b>Income</b>						
Below Poverty< Rs.5000 (Reference)						
Above Poverty> Rs.5000	.320	1.119	.082	1	.775	1.378
<b>Residence</b>						
Rural (Reference)						
Urban	.165	1.053	.025	1	.876	1.179

<b>No. of living children</b>						
1 (Reference)			.502	2	.778	
2	-.530	.951	.310	1	.577	.589
3 and above	.061	.815	.006	1	.940	1.063
Constant	-1.910	2.072	.850	1	.357	.148

The influence of socio economic, Demographic and other variables on the change that happened due to a intervention on knowledge of cervical cancer and positive attitude towards cervical cancer is assessed by using Logistic Regression analysis. The following variables are used in the analysis separately for change in knowledge and change in attitude.

**DEPENDENT VARIABLES:**

1. Change in knowledge : Less than median value = 0  
More than median value = 1
2. Change in Attitude : Less than median value = 0  
More than median value = 1

**INDEPENDENT VARIABLES:**

Age, marital status, educational status, Income, Occupation, Age menarche Age at marriage, Religion, No of Children , family history of Cancer, Source of information, residence.

**RESULTS OF LOGISTIC REGRESSION ON CHANGE IN KNOWLEDGE:**

Among the independent variables only the source of information change in knowledge is due to significantly associated with the change in knowledge.

Women exposed to the source of books, Magazine, and friends are (8.4) times more likely to have knowledge compared women exposed to TV, News papper (Medias).

Muslim and Christian women, womens doing moderate and sedentary work are (3.3) times more likely to have the knowledge compared to the respective counter parts.

Women in 31-50 years are 1.4 times more likely to have kn owledge compared to women in 20-30 years.

Married women , married at early age 13-15 years educated at primary level , above the poverty line , living in Urban area and having 3 no of children , are (1 and little above ) times to have knowledge when compared to counter parts .

However all the independent variables except source of information is not significantly associated in knowledge (Table 5).

**TABLE 6**

**Regression of background characteristics of women on change in attitude towards cervical cancer from pre to post test.**

<b>Variable and its category</b>	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Age</b>						
20-30 years (Reference)						
31-50 years	-.120	.706	.029	1	.866	.887
<b>Marital status</b>						
Married (Reference)						
Divorced/Separated/widow	.139	.768	.033	1	.856	1.149
<b>Age at menarche</b>						
10-12 yeas (Reference)						
13+ yeas	.037	.661	.003	1	.956	1.037
Age at marriage			1.776	2	.412	
13-15 years (Reference)						
16-18 years	-1.481	1.132	1.712	1	.191	.227
19+years	-1.164	.989	1.383	1	.240	.312
<b>Religion</b>						
Hindu (Reference)						
Muslim/Christian	.410	.851	.232	1	.630	1.507
<b>Education</b>						
Primary (Reference)						
Above primary	.282	.785	.129	1	.720	1.326
<b>Occupation</b>						
Heavy work (Reference)						
Moderate & sedentary work	.071	.718	.010	1	.921	1.074
<b>Source of information</b>						
Media (Reference)						
Books/Magazine/Friends	-.481	.930	.268	1	.605	.618
<b>Income</b>						
Below Poverty< Rs.5000 (Reference)						
Above Poverty> Rs.5000	.866	1.046	.685	1	.408	2.377
<b>Residence</b>						
Rural (Reference)						
Urban	.892	.950	.882	1	.348	2.439

No. of living children			.183	2	.912	
1 (Reference)						
2	-.187	.910	.042	1	.837	.830
3 and above	-.315	.738	.183	1	.669	.730
Constant	-.294	1.887	.024	1	.876	.745

Women below the poverty line and living in Urban area are 2.4 times more likely to have positive attitude towards cervical cancer compared to their counter parts.

Women with the 1 child, having the source of information through media, women married at 13-15 years, and women aged 20-30 years are little more likely to have positive attitudes towards cervical cancer compared to their counter parts.

However none of the background charecteristics of women is significantly associated with positive attitude towards cervical cancer as seen in (Table6).

**TABLE: 7**

**CHI-SQUARE TEST REGARDING ASSOCIATION BETWEEN  
KNOWLEDGE, ATTITUDE POST TEST AND BACK GROUND  
FACTORS AMONG WOMEN**

<b>Back ground factors and variables</b>	<b>Chi –square value</b>	<b>Significance p &lt; 0.05</b>
Age * Change in knowledge of cervical cancer	.123	.94 (NS)
Age * Change in attitude of cervical cancer	1.964	.375 (NS)
Age * Knowledge post test	1.964	.375 (NS)
Marital status * Change in knowledge of cervical cancer	.985	.03 (S)
Marital status * Change in attitude of cervical cancer	1.991	.37 (NS)
Marital status * Knowledge post test	1.991	.37 (NS)
Age at menarche * Change in knowledge of cervical cancer	3.385	.184 (NS)
Age at menarche * Change in attitude of cervical cancer at menarche	3.808	.149 (NS)
Age at menarche * Knowledge post test	1.321	.517 (NS)
Age at marriage * Change in knowledge of cervical cancer	4.311	.366 (NS)
Age at marriage * Change in attitude of cervical cancer	2.956	.565 (NS)
Age at marriage * Knowledge post test	1.47	.832 (NS)
Religion * Change in knowledge of cervical cancer	1.874	.392 (NS)



Religion * Change in attitude of cervical cancer	4.454	.108 (NS)
Religion * Knowledge post test	1.422	.491 (NS)
Education * Change in knowledge of cervical cancer	.966	.04 (S)
Education * Change in attitude of cervical cancer	4.531	.104 (NS)
Education * Knowledge post test	1.879	.396 (NS)
Occupation * Change in knowledge of cervical cancer	.793	.673 (NS)
Occupation * Change in attitude of cervical cancer	1.964	.375 (NS)
Occupation * Knowledge post test	1.313	.519 (NS)
Source of information * Change in knowledge of cervical cancer	4.084	.13 (NS)
Source of information * Change in attitude of cervical cancer	.136	.934 (NS)
Source of information * Knowledge post test	1.327	.515 (NS)
family H/o Cancer * Change in knowledge of cervical cancer	.672	.715 (NS)
family H/o Cancer * Change in attitude of cervical cancer	5.295	.071 (NS)
family H/o Cancer * Knowledge post test	2.204	.332 (NS)
Income * Change in knowledge of cervical cancer	.881	.644 (NS)
Income * Change in attitude of cervical cancer	1.749	.417 (NS)
Income * Knowledge post test	1.749	.417 (NS)

No of Children * Change in knowledge of cervical cancer	7.591	.108 (NS)
No of Children * Change in attitude of cervical cancer	1.931	.748 (NS)
No of Children * Knowledge post test	.931	.923 (NS)
Residence * Change in knowledge of cervical cancer	4.049	.132 (NS)
Locality * Change in attitude of cervical cancer	2.58	.275 (NS)
Locality * Knowledge post test	1.316	.518 (NS)

**Table 7** shows the association between the post of knowledge, change in knowledge and attitude with the back ground factors among women based on chi-square.

It was inferred that there is no significant association between back ground variables and change in knowledge, change attitude, knowledge post test value.

There will be a significant association between the knowledge post test and the Marital status, Education.

# *CHAPTER - V*

*SUMMARY, FINDING,  
IMPLICATIONS, LIMITATIONS,  
CONCLUSION AND  
RECOMMENDATIONS*

## **CHAPTER V**

### **SUMMARY, FINDING, IMPLICATIONS, LIMITATIONS, CONCLUSION AND RECOMMENDATIONS**

The essence of any research project is based on study findings, limitations, interpretations of the result and recommendations that incorporate the study implication. It also gives meaning to the results obtained in this study.

#### **SUMMARY**

The prime aim of the study was to assess the effectiveness of structured teaching programme of knowledge and attitude towards cervical cancer among women 25-50 years in selected PHC, Dindigul.

#### **The objectives of the study were,**

1. To associate the post test knowledge and attitude on cervical cancer with their selected demographic variables.
2. To correlate the knowledge and attitude Pre test and post test score on cervical cancer among women.

#### **The study attempted to examine the following research hypothesis.**

H1: There will be a significant difference between pre and post test

knowledge and attitude score after structured teaching programme on cervical cancer among women.

H2: There will be a significant correlation between Knowledge and attitude on cervical cancer among women

H3: There will be a significant association between the knowledge on cervical cancer and background features among women .

H4: There will be a significant association between the attitude on cervical cancer and background features among women.

The major assumption of the study include the women were participated and responded honestly in this study, cooperate with women the investigator and every women were unique.

The review of literature helped to investigator to develop conceptual frame work, tool and develop intervention of structured teaching programme literature review was done for the present study and presented in the following headings.

1. Review of literature related to cervical cancer.
2. Review of literature related to knowledge on cervical cancer.
3. Review of literature related to attitude on cervical cancer.
4. Review of literature related to cervical cancer screening.

The conceptual frame work adopted for the present study was based on Nursing process theory.

The research approach adopted for this study was evaluate in nature. The present study was a quasi experimental study, pre experimental design. Independent in this study was structured teaching programme (Power point). Dependent variable was cervical cancer. Associate variable age, marital status,

Age at menarche, Age at marriage, Family history of cancer, Religion, Educational status, Income, Occupation, No of Children, Source of information, residence.

The tool was developed and used for data collection was an interview method to assess the knowledge and attitude towards cervical cancer. The power point teaching was developed on the basis of related literature. The content validity of the tool was established by five experts. The tool was found reliable and feasible. The reliability, correlation was found high,  $r= 0.84$ . The pilot study was conducted in selected village, Dindigul and study was found feasible.

The main study was conducted in Kannivadi PHC at Dindigul. Convenient sampling was used to select the samples. Pre test was done to assess the knowledge and attitude status among womens between the age group of 25-50 years. The intervention on structured teaching programme was administered by Power point; Post test was done on the first day, third day, and fifth day. The data gathered were analyzed using SPSS (version 24) software at the level of 0.05 level of significance based on the study objectives.

## **MAJOR FINDINGS**

The findings of the study are presented under the following headings based on the objective of the study.

### **OBJECTIVE 1:**

To associate the post test knowledge and attitude on cervical cancer with their selected demographic variables.

1. The obtained chi-square value regarding knowledge, attitude and selected factors such as age, marital status, Age at menarche, Age at marriage, Family history of cancer, Religion, Educational status, Income, Occupation, No of Children, Source of information, residence (  $P > 0.05$  ) were not significant.
2. The obtained chi-square = 0.985 (  $P = 0.03$  ) regarding marital status and knowledge post test, chi square = 0.966 (  $P = 0.04$  ) regarding education and knowledge post test of women was significant.
3. Selected factor such as age, marital status, Age at menarche, Age at marriage, Family history of cancer, Religion, Educational status, Income, Occupation, No of Children, Source of information, residence, did make no difference in the Knowledge and attitude towards cervical cancer among women.

## **OBJECTIVE 2:**

To correlate the knowledge and attitude Pre- test and post test score on cervical cancer among women.

1. There was a significant increase in knowledge after the power point teaching among women between the age group of 25-50 years  $t = 27.543$  ( $P = 0.05$ )
2. There was a significant increase in Attitude after the power point teaching among women between the age group of 25-50 years  $t = 34.931$  ( $P = 0.05$ )

## **DISCUSSION**

The discussion on the study findings were presented under the following headings of the study.

### **FINDING 1:**

To associate the post test knowledge and attitude on cervical cancer with their selected demographic variables.

1. The obtained chi-square value regarding knowledge, attitude and selected factors such as age, marital status, Age at menarche, Age at marriage, Family history of cancer, Religion, Educational status, Income, Occupation, No of Children, Source of information, residence (  $P > 0.05$  ) were not significant.
2. The obtained chi-square =0.985 ( $P = 0.03$ ) regarding marital status and knowledge post test, chi square = 0.966 ( $P = 0.04$ ) regarding education and knowledge post test of womens was significant.
3. Selected factor such as as age, marital status, Age at menarche, Age at marriage, Family history of cancer, Religion, Educational status, Income, Occupation, No of Children, Source of information, residence, did make no difference in the Knowledge and attitude towards cervical cancer among womens.



## **FINDING 2:**

To correlate the knowledge and attitude, Pre- test and post test score on cervical cancer among women.

1. There was a significant increase in knowledge after the power point teaching among women between the age group of 25-50 years  $t = 27.543$  ( $P = 0.05$ )
2. There was a significant increase in Attitude after the power point teaching among womens between the age group of 25-50 years  $t = 34.931$  ( $P = 0.05$ )

The above findings were supported by studies conducted by **Askar Set et al., (2014), Singhal. T (2012), B. Agama Bunsal, Abhijith et al., (2014), P. Rajkumar (2012), Anarado AN , AGANWAH E, (2011)**, where they reported that there was a significant increase in knowledge and attitude on cervical cancer.

## **IMPLICATIONS**

The study had implications, guidelines and suggestions for nursing practice and nursing research.

### **Implications for nursing practice**

1. Power point teaching is an effective measure to increase the knowledge and Attitude. Nurse can use this Power point teaching is an effective measure to increase the knowledge and Attitude towards cervical cancer.

2. Nurse can plan the goal of pap smear screening of cervical cancer and enhance the nurse patient relationship and sense of well being to the patient through the development of mutually agreed the goals.
3. Power point teaching should be made an integral part of preventive management of cervical cancer among womens .

### **IMPLICATIONS FOR NURSING RESEARCH**

1. The study will be valuable reference for the further research.
2. The findings of the study would help to expand the scientific body of professional knowledge up on which further research can be conducted.

### **LIMITATION**

1. Period of power point teaching only five days
2. This study has no control group to prove the effectiveness of structured teaching programme.
3. The samples were selected by non random method limiting the generalizability.

### **RECOMMENDATIONS**

1. A similar study can be conducted inlarge group of womens.
2. A longer period of intervention can be used studied for more reliability and effectiveness.
3. A true experimental study with experimental and control groups can be conducted.

## **CONCLUSION**

Structured teaching programme significantly increases the knowledge and attitude. So future nurses can incorporate structured teaching as a part of nursing intervention in treating cervical cancer.

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# *APPENDICES*

## APPENDIX-I

### LETTER SEEKING PERMISSION FOR CONTENT VALIDITY

#### FROM

301423051  
II Year Msc Nursing  
Jainee college of Nursing,  
Aathupatti Pirivu,  
Dindigul.

#### TO

#### THROUGH

The Principal,  
Jainee college of Nursing,  
Aathupatti Pirivu,  
Dindigul.

**Respected Madam,**

SUB: Letter requesting consent to validate the tool.

I am 301423051, II<sup>nd</sup> year M.sc nursing student of Jainee college of Nursing Dindigul, under the Dr. M.G.R Medical university, Chennai.

As a partial fulfilment of M.sc Nursing programme, I am conducting **“A quasi experimental Study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding cervical cancer among women At Primary health center, Kannivadi Dindigul district”**.

Here I am sending the tool for content validity for your expert opinion. I humbly request yourself to spare a little of your valuable time for me which I remain ever grateful to you. I would be very kind of you to return the same undersigned at the earliest.

Thanking You

Place:

Yours Sincerely

Date:

(301423051)

## **APPENDIX-II**

### **LIST OF EXPERTS**

**1. Dr. UMA RAMANATHAN, MBBS, MD, DGO**

Meenakshi hospital,

Dindigul.

**2. Dr. KAVITHA MD. DGO.**

Director,

Velan Hospital,

Dindigul.

**3. Mrs.Meera M.sc (Nursing)**

OBG department,

Vice Principal,

Jainee college of nursing,

Dindigul.

**4. Mrs. Thilagavathy M.sc (Nursing)**

Psychiatric department,

Principal,

Jainee college of nursing,

Dindigul.

**5. Mrs. Kavitha M.sc (Nursing)**

OBG department,

Resource person,

Jainee college of nursing,

Dindigul.

## **APPENDIX–III**

### **PERMISSION LETTER**

**FROM**

301423051 (G.ABIZHA)  
Msc Nursing IIInd year,  
Jainee College of Nursing,  
Veerakkal , Dindigul.

**TO**

The Deputy Director,  
Dindigul.

**THROUGH**

The Prinicpal,  
Jainee college of Nursing,  
Dindigul.

**Respected madam / Sir**

I am G.ABIZHA (301423051) II<sup>nd</sup> year M.sc nusing student of Jainee college of nursing Veerakkal, under the Tamil Nadu Dr.M.G.R Medical University, Chennai. As a partial fulfillment of university requirement for a award of Master of Science in Nursing degree , I am conducting research on the following topic. “A quasi experimental Study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding cervical cancer among womens in Kannivadi PHC at Dindigul district.Iwould like to conduct the research in your esteemed PHC. Please grant permission to the same.

Thanking You

Place:

Yours sincerely

Date:

(301423051)

## **APPENDIX IV**

### **CONTENT VALIDATED CERTIFICATE**

I here by certify that I have validated the tool of 301423051 M.sc Nursing II year, who is undertaking , **“A quasi experimental Study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding cervical cancer among womens in Kannivadi PHC at Dindigul district”**.

Place:

Signature of the Expert,

Date:

Designation.



# BACKGROUND FACTORS

## SECTION: A

### Introduction:

The section seeks information regarding back ground factors of the womens. The interviewer is requested to ask the item and get responses one by one. Please tick (√) Mark appropriate box.

#### 1. Age

- a) 20-30 years
- b) 31-40 years
- c) 41-50 years

#### 2. Marital status

- a) Married
- b) Divorced / Separated
- c) Widow

#### 3. Age at menarche

- a) 10-12 years
- b) 13-15 years
- c) Above 15 years

4. Age at marriage

- a) 13-15 years
- b) 16-18 years
- c) 18-21 years
- d) Above 21 years

5. Family history of cancer, if yes who

- a) Yes
- b) No

6. Religion

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

7. Educational status

- a) Primary
- b) High school
- c) Higher secondary
- d) Degree

8. Income

- a) Below poverty line (less than 50,000/ annum)
- b) Above poverty line (50,000 and above/ annum)

9. Occupation

- a) Heavy
- b) Moderate
- c) Sedentary

10 . No of children

- a) 1
- b) 2
- c) 3 and above

11.Source of information

- a) Media (Tv/ news paper)
- b) Books
- c) Journals
- d) Friends

12.Locality

- a) Rural
- b) urban

**SECTION: B**

**KNOWLEDGE QUESTIONNAIRE ON CERVICAL CANCER**

1) Where the cervix is situated?

- a) Lower part of the ovary
- b) Lower part of Uterus
- c) Lower part of vagina
- d) Near to fallopian tube

2) What is cancer?

- a) An Abnormal rapid growth of cells
- b) Rearrangement of cells
- c) Displacement of cells

3) What do you mean by cervical cancer?

- a) It is an abnormal growth of cancer cells in cervix
- b) It is an abnormal growth present in body of uterus
- c) It is an abnormal growth present in fallopian tube
- d) It is an abnormal growth present in vagina

4) Which one of the following virus causing cervical cancer?

- a) Human papilloma virus
- b) Staphylococcus
- c) Pseudomonas
- d) Pneumococcus

5) Which one of the following contraception will cause to cervical Cancer?

- a) Oral contraceptive pills
- b) Copper-T
- c) Condom
- d) Vaginal sponge

6) Who are all at risk for developing cervical cancer? Except?

- a) Giving birth at a very young age
- b) Exclusive intake of contraceptive pills
- c) Having many sexual partners
- e) Certain genetic factors

7) Which is the most common symptom in a woman with cervical Cancer?

- a) Continuous vaginal bleeding
- b) Bleeding per rectum
- c) Fever
- d) Redness of vagina

8) Which one of the following is not the warning sign of cervical cancer?

- a) Abnormal vaginal bleeding
- b) Unusual foul smelling vaginal discharge
- c) Pain during urination
- d) Pain during sex (dyspareunia)
- e) Breast engorgement

9) In which stage the cervical cancer symptoms will explore?

- a) Stage I
- b) Stage III
- c) Stage II

10) Which is the early diagnostic procedure for cervical cancer?

- a) Haemoglobin in blood
- b) Pap smear test
- c) Vaginal examination
- d) None of the above

11) Which is the confirmatory diagnostic Procedure for cancer cervix?

- a) MRI Scan
- b) CT Scan
- c) Biopsy
- d) None of the above

12) Define biopsy?

- a) Sample of tissue taken from the affected organ
- b) Removal of uterus
- c) Removal of any one organ
- d) An artificial opening

13) When dose the department of health recommended you have a cervical cancer smear?

a) Atleast every five years once from the age of 30 years

b) Atleast every ten years from the age of 30 years

c) After the age of 40

d) After the age of 50

14) Which age group can have an abnormal cervical smear?

a) 18-25 years

b) 25-35 years

c) 36-50 years

d) Over 50 years

15) What is a pap smear test?

a) Scraping to look for an abnormal cervical cells

b) A microscopical examination

c) seeking the abnormal cells of cervix through ultrasound

d) Is a type of CT scan

16) Women who are undergoing pap smear should avoid intercourse?

a) 24 hours before

b) 48 hours before

c) 3 days before

d) 4 days before

17) Which is the best time to undergoing pap smear test?

- a) Between 5to 10 days after the first day of last menstrual period.
- b) 10 to 20 days after the first day of last menstrual period.
- c) 21 to 25 days after the first day of last menstrual period.
- d) All the time.

18) Which one of the following treatment available for cervical cancer?

- a) Surgery
- b) Radiation therapy
- c) Chemo therapy
- d) none of the above.

19) Which one of the following is most advanced treatment for cervical Cancer?

- a) Chemotherapy
- b) Radiationtherpy (brachytherapy)
- c) Cryosurgery
- d) Hysterectomy

20) What is mean by metastasis?

- a) It will spread from the affected parts to other parts
- b ) It will not spread to other parts
- c) It will spread only pelvic area
- d) It will spread only vagina



- 21) In cancer cervix which primary organ affected by metastasis?
- a) Heart
  - b) Kidney
  - c) lungs
  - d) Stomach
- 22) Which one is the most common metastasis organ for all cancer?
- a) Heart
  - b) Liver
  - c) Lungs
  - d) None of the above
- 23) What is the important complication of cancer cervix?
- a) Frequency of urination
  - b) Pelvic Pain
  - c) Abdominal pain
  - d) None of the above
- 24) What is mean by HPV vaccine?
- a) Human Papilloma Virus vaccine
  - b) Human polio Virus vaccine
  - c) Human pertusis virus vaccine
  - d) none of the above

25) What is the route of administration of HPV vaccine?

- a) Intra muscular
- b) Subcutaneous
- c) Intra dermal
- d) Intra venous

26) What is the dosage of HPV vaccination?

- a) 0.1 ml
- b) 2 ml
- c) 2.5 ml
- d) 0.5 ml

27) Which one of the following is the important method of preventing cervical cancer?

- a) Frequent medical examination
- b) Regular Exercise
- c) Avoid Stress
- d) None of the above

28) Which one of the contraception is help in preventing cervical cancer?

- a) Copper –T
- b) Vaginal Sponge
- c) Condom
- d) Oral pill

29) Which one of the following is best life style modification to avoid cervical cancer?

- a) Adequate sleep and rest
- b) Prefer super foods like (Pappaya, Green tea, Raspberries, carrots, Turmeric , Cauliflower, Cabbage)
- c) Do not smoke
- d) Cervical screening

30) Which type of diet help to prevent cervical cancer?

- a) Vitamin Aand C
- b) Vitamin D
- c) Vitamin K
- d) Vitamin E

## SECTION: C

### ATTITUDE SCALE ON CERVICAL CANCER.

Read the sentences carefully And Choose One From these five Options

Items	Undecided (0)	Strongly disagree (1)	Disagree (2)	Agree (3)	Strongly agree (4)
1) Cervical cancer is the curse of God *					
2) An abnormal rapid growth of cells is cancer					
3) Women who had family history of cervical cancer are more likely to get cervical cancer					
4) Prolonged use of orall pills can cause cervical cancer					
5) Grand multiparas may get cervical cancer					
6) Poor personal hygiene and poor genital hygiene leads to cervical cancer					
7) Cervical cancer symptoms will explore in IIIrd stage only					
8) Confirmatory symptoms will reveal in IVth stage only					
9) Cervical cancer is also caused by HPV virus					
10) Irregular Vaginal bleeding and foul smelly vaginal discharge is a early symptoms of cervical cancer					
11) Cervical cancer can be identified by doing pap Smear test					
12) There is no treatment for cervical cancer*					
13) HPV vaccination helps to prevent cervical cancer					
14) All women above 30 years should undergo pap test					

15) It is essential for women to attend cancer awareness programme					
16) Prevention of cervical cancer is by proper use of condoms *					
17) cervical cancer will be detected early.					
18) treatment of cervical cancer will improve the life expectancy of women					
19) Chemotherapy and radiation therapy is one of the important treatment of cervical cancer					
20) Women who had regular health check up need not worry about cervical cancer					
21) Cervical cancer is a communicable disease *					
22) Cancer is preventable					
23) Cervical cancer cannot be prevented *					
24) Cervical cancer womens are need to be isolated *					
25) Cervical cancer it affects the other part of the body					
26) Cervical cancer it affects your body image					
27) Cervical cancer treatment needs prolong hospitalization					
28) Vitamin A and C rich diet helps to prevent cervical cancer					
29) Using condom during sex helps to protect from HPV infection					
30) Pain during sexual intercourse is an important symptom of cervical cancer					

**Keys: \* (\* - the score will be reversed)**

# CERVICAL CANCER

## DEFINITION

Cervical cancer is a cancer arising from the cervix. It is due to the abnormal growth of cells that have the ability to invade or spread to other parts of the body.

## ETIOLOGY:

- Human Papilloma Virus (HPV more than 90% of cases) and the exact cause is unknown. (Human papilloma virus infection appears to be involved in the development of more than 90% of cases).
- Human papilloma virus types 16 and 18 are the cause of 75 % of cervical cancer, while 31 and 45 are the cause of another 10%.

## RISK FACTOR:

- **Genital Warts** (which are a form of benign tumor of epithelial cells are also caused by various strains of HPV).
- **Smoking** (Smoking can increase the risk in women a few different ways, which can be by direct and indirect methods of inducing cervical cancer.)
- **Weakened immune system** (people with weakened immune system, such as those with HIV/AIDS or transplant recipients taking immunosuppressive medications have a higher risk of developing cervical cancer.)
- **Certain Genetic factors**
- **Long term mental stress** (A woman who experiences high levels of stress over a sustained period may be understanding her ability to fight off HPV and be at increased risk of developing cervical cancer it can cause.)
- **Giving birth at a very young age** (women who gave birth before the age of 17 are significantly more likely to develop cervical cancer compared to women who had their first baby when they were aged 25 or over.)

- **Several pregnancies** (women those who have had seven or more full term pregnancies have around four times the risk of cancer compared with women with no pregnancies, and two to three times the risk of women who have had one or two full term pregnancies.)
- **Contraceptive pills** (women who have used oral contraceptives for 5 to 9 years have about three times the incidence of invasive cancer and those who used them for 10 years or longer have about four times the risk.)
- Other **sexually transmitted diseases** (Chlamydia, Gonorrhea, Syphilis, HIV)
- **Having many sexual partners** (cervical cancer causing HPV types are nearly always transmitted as a result of sexual contact with an infected individual)
- **Socio – economic status.**

#### **SIGNS AND SYMPTOMS:**

- Bleeding between periods.
- Bleeding after sexual intercourse.
- Bleeding in post menopausal women.
- Discomfort during sexual intercourse.
- Smelly vaginal discharge.
- Vaginal discharge tinged with blood.
- Pelvic pain.

#### **STAGES:**

- Stage: I (Cancer is Strictly confined to the Cervix)
- Stage: II (Cervical cancer invades beyond the Uterus but not in the pelvic wall)
- Stage: III (The tumour extends to the pelvic wall and half of the Vagina)

- Stage: IV(The Carcinoma has extends beyond the true pelvis or has involved the mucosa of the Bladder or Rectum)

## DIAGNOSIS:

- **Pap smear test :**  
A magnified visual inspection of the cervix aided by using a dilute acetic acid eg: vinegar solution to highlight abnormal cells on the surface of the cervix.
- **Biopsy:**  
A small piece of tissue will be taken. This patient will be anesthetized for this.
- **Colposcopy:**  
A speculum is placed to hold the vagina open and the gynaecologist looks at the cervix through a colposcope a lighted magnifying instrument specifically designed for examining the tissue of the vagina and the cervix.
- **Cone biopsy :**  
A small cone shaped section of the abnormal tissue is taken from the cervix for examination under a microscope.
- **LLETZ :**  
A diathermy bis used to remove abnormal tissue. The tissue is sent to lab to be checked
- **Blood test :**  
(Number of Blood cells)
- **Computerised tomography scan:**  
3-D cross – sectional picture of the part of the body and displays it on the screen. The patient will have to barium drink beforehand. The barium appears white on the scan. Just before the scan tampon may be placed into the vagina, and a barium liquid may be placed into the rectum. the **whole scans takes from 10- 30 minutes.**



- **MRI :**  
Magnetic Resonance Imaging scan (By using the high MRI with a special vaginal coil, a technique to measure the movement of water within the tissue, the researchers may be able to identify cervical cancer in its early stages.)
- **Pelvic ultra sound :**  
This is a device that uses high frequency sound waves which create an image on a monitor of the target area. The patient will be asked to drink plenty of fluids beforehand so that the bladder is full and a clear picture can be viewed. A trans vaginal ultrasound device may be inserted into the vagina, or an external device may be placed next to the stomach.

#### **PREVENTION:**

- **Dietary prevention:** super foods for preventing cervical cancer- papaya, Raspberries, Green tea, Asparagus, Carrots, Salmon, Turmeric, Broccoli, Arugula, fish roe, Horse radish, cherish, brussels sprouts, cauliflower, cabbage.
- **HPV vaccine:** Gardasil, Cervarix. Three doses over six month interval.
- **Safe sex.** (using **condom** during sex helps protect from HPV infection.)
- Cervical screening.( Regular cervical screening will make it much more likely that signs are picked up early on and dealt with before cancer develops at all or too far.)
- **Have one sex partner.**
- **Delay first sexual intercourse.** (The younger a female is when she has her first sexual intercourse the higher is her risk of developing cervical cancer. the longer she delays it the lower her risk.)
  - **Do not smoke.**

## **TREATMENT:**

### **EARLY STAGE:**

- I. **Cone biopsy** (conization)-this procedure may also be used to remove any abnormality. The surgeon uses a Scalpel to remove a cone – shaped piece of cervical tissue.
- II. **Laser surgery** – a narrow beam of intense light destroys cancerous and precancerous cells.
- III. **LEEP** (loop electrosurgical excision procedure) - a wire loop which has an electric current cuts through tissue removing cells from the mouth of the cervix .
- IV. **Cryosurgery**- cancerous and precancerous cells are destroyed by freezing them.
- V. **Hysterectomy**- the cancerous and precancerous areas, as well as the cervix and the uterus are surgically removed. This is not common and is only done in certain cases of noninvasive cervical cancer.

### **RADIO THERAPY:**

Radiotherapy works by damaging the DNA inside the tumour cells, destroying their ability to reproduce. This may be delivered externally or internally (brachytherapy) by placing radioactive material near the cervix.

### **CHEMOTHERAPY:**

Chemotherapy is the use of medications which is used to destruction of cancer cells. Cytotoxic medication prevents cancer cells from dividing and growing.

## **RECENT ADVANCEMENT IN CERVICAL CANCER TREATMENT:**

- I. Phase II trial **anti tumour** drug that prolong the survival of women with cervical cancer.
- II. **Avastin** can length the lives of cervical cancer women.
- III. Just on HPV vaccine dose **“Could be enough”** to prevent cervical cancer.

## **COMPLICATION:**

- Haemorrhage
- Pyelitis, Pyelonephritis, and Hydronephrosis
- Frequency of Urination

## **METASTASES:**

- The first metastases organ of cervical cancer is Kidney.
- Lungs (36%)
- Lymp Nodes (30%)
- Bone (16%)
- Abdominal Cavity (7%)s

## மறைமுக காரணிகள்

### பகுதி: அ

#### குறிப்புகள்:

இப்பகுதியானது கர்பாவாய் புற்றுநோய் குறித்த பெண்களின் அறிவு (புலமை) மற்றும் அணுகுமுறை குறித்த மறைமுக காரணிகளின் செய்திகளைகொண்டது. நேர்முகத்தேர்வாளர் கேள்விகளைக் கேட்டு அதின் பதில்களை ஒன்றன்பின் ஒன்றாக பெற வேண்டும். மற்றும் பதில்களுக்கிரிய கட்டங்களில் (V) குறியீட்டை போடவும்.

#### 1. வயது

அ.) 20-30

ஆ.) 31-40

இ.) 41-50

#### 2. திருமண நிலை

அ) திருமணமானவர்

ஆ) விவாகரத்து பெற்றவர் / தனித்தவர்

இ) விதவை

#### 3. பருவமடைந்த வயது

அ) 10-12

ஆ) 13-15

இ) 15 வயதிற்கு மேல்

#### 4. திருமணமான வயது

அ) 13-15

ஆ) 16-18

இ) 18-21

ஈ) 21 வயதிற்கு மேல்

#### 5. குடும்பத்தில் யாரேனும் புற்றுநோயால் பாதிக்கப்பட்டவர் யாரேனும் உள்ளனரா? ஆம் எனில் யார் ?

அ) ஆம்

ஆ) இல்லை

6. மதம்

- அ) இந்து  
ஆ) இஸ்லாம்  
இ) கிறிஸ்தவர்

7. கல்வித்தகுதி

- அ) ஆரம்பப்பள்ளி  
ஆ) உயர்நிலை  
இ) மேல்நிலை  
ஈ) பட்டதாரி

8. வருமான நிலை

- அ) வருமைக்கோட்டிற்கு கீழ் ( ரூ 50000 க்கு கீழ் )  
ஆ) வருமைக்கோட்டிற்கு மேல் ( ரூ 50000 க்கு மேல்)

9. உங்கள் வேலை நிலை

- அ) மிகவும் கடினமானது  
ஆ) மிதமான கடினமானது  
இ) எளிதானது

10) எத்தனை குழந்தைகள்

- அ) 1  
ஆ) 2  
இ) 3 மற்றும் அதற்கு மேல்

11) புற்றுநோய் பற்றிய தகவலை நீங்கள் எவ்வாறு தெரிந்து கொண்டீர்கள்

- அ) தகவல்தொடர்பு சாதனங்கள்  
(தொலைக்காட்சி வானொலி செய்திதாள்)  
ஆ) புத்தகங்கள்  
இ) பத்திரிகைகள்  
ஈ) நண்பர்கள்

12) இருப்பிடம்

- அ) கிராமம்  
ஆ) நகரம்

## பகுதி: ஆ

கார்ப்பவாய் புற்றுநோய் பற்றிய விபரங்கள் குறித்த அறிவுதெளிவினை கேள்விகள்.

### குறிப்புகள்:

இப்பகதியானது கார்ப்பவாய் புற்றுநோய் பற்றிய விபரங்கள் குறித்த அறிவுதெளிவினை கேள்விகளை கொண்டது. நேர்முகத்தேர்வாளர் கேள்விகளை கேட்டு அதன் பதில்களை ஒன்றன்பின் ஒன்றாக பெற வேண்டும். மற்றும் பதில்களுக்குரிய கட்டங்களில் (V) குறியீட்டை போடவும்.

1. கார்ப்பவாய் உடலின் எந்த பகுதியில் உள்ளது?

- அ) முட்டைப்பையின் கீழ்ப்பகுதியில்
- ஆ) கருப்பையின் கீழ்ப்பகுதியில்
- இ) பெண்குறியின் கீழ்ப்பகுதியில்
- ஈ) கருமுட்டைகுழாயின் அருகில்

2. புற்று நோய் என்றால் என்ன ?

- அ) முரண்பாடான அசாதாரணமான செல்களின் வளர்ச்சி
- ஆ) செல்களின் மறுவரிசைப்படுத்துதல்
- இ) செல்களின் இடப்பெயர்ச்சி

3. கார்ப்பவாய் புற்று நோய் பற்றி நீங்கள் என்ன நினைக்கிறீர்கள்?

- அ) முரண்பாடான கார்ப்பவாய் செல்களின் வளர்ச்சி
- ஆ) முரண்பாடான கருப்பை செல்களின் வளர்ச்சி
- இ) முரண்பாடான கருமுட்டைகுழாய் செல்களின் வளர்ச்சி
- ஈ) முரண்பாடான பெண்குறியின் செல்களின் வளர்ச்சி

4. கீழ்க்கண்டவற்றில் கார்ப்பவாய் புற்று நோயை உருவாக்கும் வைரஸ் கிருமி எது?

- அ) ஹியுமன் பேப்பில்லோமா வைரஸ்
- ஆ) ஸ்டெபைலொகாக்கஸ்
- இ) சூடோமோனாஸ்
- ஈ) நியுமோகாக்கஸ்

5. கீழ்க்கண்டவற்றில் எந்த கருத்தடை சாதனம் கர்ப்பவாய் புற்று நோயை உருவாக்கும் ஒரு காரணியாக செயல்படுகிறது?

அ) கருத்தடை மாத்திரை

ஆ) காப்பா-டீ

இ) ஆணுறை

ஈ) பெண்குறி பஞ்சு

6. கீழ்க்கண்டவற்றில் எந்த ஒன்று கர்ப்பவாய் புற்று உருவாவதற்கான அபாயம் அல்லாதது?

அ) மிக இளம் வயதிலேயே குழந்தை பேறு அடைதல்

ஆ) அதிகமாக கருத்தடை மாத்திரை உட்கொள்ளுதல்

இ) பலருடன் உடலுறவு வைத்துக்கொள்ளுதல்

ஈ) சில பரம்பரை காரணிகள்

7. கர்ப்பவாய் புற்று நோயின் மிகப் பொதுவான அறிகுறி என்ன?

அ) பெண்குறியில் தொடர் இரத்தப்போக்கு

ஆ) ஆசன வாயில் இரத்தப்போக்கு

இ) காய்ச்சல்

ஈ) பெண்குறி சிவந்து காணப்படுதல்

8. கீழ்க்கண்டவற்றில் எந்த ஒன்று கர்ப்பவாய் புற்று நோய்க்கான அபாயத்தை குறிக்கும் அறிகுறி அல்ல?

அ) முரண்பாடான பெண்குறி இரத்தப்போக்கு

ஆ) பிறப்புறுப்பில் துர்நாற்றத்துடன் கூடிய நீர்க்கசிவு

இ) சிறுநீர் கழிக்கும் போது வலி ஏற்படுதல்

ஈ) உடலுறவின் போது வலி ஏற்படுதல்

உ) மார்பகம் விரிவடைதல்

9. கர்ப்பவாய் புற்று நோய் அறிகுறிகள் எந்த நிலையில் வெளிப்படும் ?

அ) நிலை 1

ஆ) நிலை 2

இ) நிலை 3

ஈ) நிலை 4

10. கர்ப்பவாய் புற்று நோயை கண்டறியும் ஆரம்பநிலை பரிசோதனை என்ன?

அ) இரத்தப்பரிசோதனை

ஆ) பேப் சிமியர்

இ) கர்ப்பவாய் பரிசோதனை

ஈ) எதுவுமில்லை

11. கர்ப்பவாய் புற்று நோயை உறுதிசெய்யும் பரிசோதனை என்ன?

அ) எம் ஆர் ஐ ஸ்கேன்

ஆ) சி பி ஸ்கேன்

இ) திசு பரிசோதனை

ஈ) எதுவுமில்லை

12. திசு பரிசோதனை என்றால் என்ன ?

அ) பாதிக்கப்பட்ட உறுப்பின் ஒரு சிறு பகுதியை  
எடுத்து பரிசோதனை செய்தல்

ஆ) கருப்பையை நீக்குதல்

இ) உடலின் ஏதாவது ஒரு பகுதியை நீக்குதல்

ஈ) செயற்கையாக துளைபோடுதல்

13. சுகாதார நிறுவனம் கர்ப்பவாய் புற்று நோயை கண்டறியும் பேப் சிமியர் பரிசோதனையை

எத்தனை வயதிலிருந்து செய்து கொள்ள அறிவுறுத்துகிறது?

அ) 30 வயதிற்குப்பின் 5 ஆண்டுகளுக்கு ஒரு முறை

ஆ) 30 வயதிற்குப்பின் 10 ஆண்டுகளுக்கு ஒரு முறை

இ) 40 வயதிற்குப்பின் எப்போது வேண்டுமானாலும்

ஈ) 50 வயதிற்குப்பின் எப்போது வேண்டுமானாலும்

14. எந்த வயதை சார்ந்த பெண்களுக்கு பேப் சிமியர் பரிசோதனை முடிவு முரண்பாடாக

காணப்பட வாய்ப்பு உள்ளது

அ) 18-25

ஆ) 25-35

இ) 36-50

ஈ) 50 வயதிற்கு மேல்



15. பேப் சிமியர் பரிசோதனை என்றால் என்ன ?

- அ) கர்ப்பவாய் செல்களை சுரண்டி எடுத்து பரிசோதனை செய்தல்
- ஆ) மைக்ரோஸ்கோப் பரிசோதனை
- இ) ஸ்கேன் பரிசோதனை மூலம் கர்ப்பவாயிலுள்ள முரண்பாடான செல்களை கண்டறிதல்
- ஈ) இதுவும் ஒரு வகையான சி. பி ஸ்கேன்

16. பேப் சிமியர் பரிசோதனைக்கு செல்லும் முன் எப்பொழுதிலிருந்து உடலுறவைத் தவிர்க்க வேண்டும்?

- அ) 24 மணி நேரத்திற்கு முன்பு
- ஆ) 48 மணி நேரத்திற்கு முன்பு
- இ) 3 நாட்களுக்கு முன்பிலிருந்து
- ஈ) 4 நாட்களுக்கு முன்பிலிருந்து

17. பேப் சிமியர் பரிசோதனை செய்து கொள்ள சரியான நேரம் எது?

- அ) மாதவிடாய் முடிந்த முதல் நாளிலிருந்து 5 முதல் 10 நாட்களுக்கு இடைப்பட்ட காலம்
- ஆ) மாதவிடாய் முடிந்த முதல் நாளிலிருந்து 10 முதல் 20 நாட்களுக்கு இடைப்பட்ட காலம்
- இ) மாதவிடாய் முடிந்த முதல் நாளிலிருந்து 21 முதல் 25 நாட்களுக்கு இடைப்பட்ட காலம்
- ஈ) எப்போது வேண்டுமானாலும்

18. கீழ்க்கண்டவற்றில் கர்ப்பவாய் புற்று நோய்க்கான சிகிச்சை முறைகள் என்ன?

- அ) அறவை சிகிச்சை
- ஆ) கதிர்வீச்சு சிகிச்சை
- இ) கீமோதெரபி
- ஈ) எதுவுமில்லை

19. கீழ்க்கண்டவற்றில் கர்ப்பவாய் புற்று நோய்க்கான முன்னோக்கிய சிகிச்சை முறை என்ன?

அ) கீமோதெரபி

ஆ) கதிர்வீச்சு ( பிரேக்கிதெரபி)

இ) கிரையோ அறுவை சிகிச்சை

ஈ) கர்ப்பப்பையை நீக்குதல்

20. நோய்த்திசு பரவுதல் (அ)புற்றுநோய் பரவுதல் என்றால் என்ன ?

அ) பாதிக்கப்பட்ட உறுப்பிலிருந்து அருகில் உள்ள உறுப்புகளுக்கு புற்று செல்கள் பரவுதல்

ஆ) பாதிக்கப்பட்ட உறுப்பிலிருந்து அருகில் உள்ள உறுப்புகளுக்கு புற்று செல்கள் பரவாது

இ) பாதிக்கப்பட்ட உறுப்பிலிருந்து இடுப்பு எலும்புக் கட்டுக்கு மட்டும் பரவுதல்

ஈ) பாதிக்கப்பட்ட உறுப்பிலிருந்து பிறப்புறுக்கிற்கு மட்டும் பரவுதல்

21. கர்ப்பவாய் புற்று நோய் எந்த முதன்நிலை உறுப்புக்கு முதலில் பரவும்?

அ) இதயம்

ஆ) சிறுநீரகம்

இ) நுரையீரல்

ஈ) இரைப்பை

22. எல்லா வகையான புற்று நோயும் அதிகமாக பரவும் பொதுவான முதன்நிலை உறுப்பு?

அ) இதயம்

ஆ) கல்லீரல்

இ) நுரையீரல்

ஈ) எதுவுமில்லை

23. கர்ப்பவாய் புற்று நோயின் முக்கியமான பின்விளைவு என்ன?

அ) அபிக்கபி சிறுநீர் கழித்தல்

ஆ) இடுப்பெலும்புக் கட்டில் வலி

இ) வயிற்று வலி

ஈ) எதுவுமில்லை

24. எச்.பி.வி தடுப்பு ஊசி என்றால் என்ன ?

- அ) ஹூயுமன் பேப்பில்லோமா வைரஸ்
- ஆ) ஹூயுமன் போலியோ வைரஸ்
- இ) ஹூயுமன் பெர்ட்ரூசிஸ் வைரஸ்
- ஈ) எதுவுமில்லை

25. எச்.பி.வி தடுப்பு ஊசி செலுத்தும் வழிமுறை என்ன?

- அ) தசையிடை
- ஆ) தோலுக்கடியில்
- இ) தோல் வழியாக
- ஈ) இரத்தநாளத்துக்குள்

26. எச் பி வி தடுப்பூசியின் அளவு என்ன ?

- அ) 0.1 மிலி
- ஆ) 2 மிலி
- இ) 2.5 மிலி
- ஈ) 0.5 மிலி

27. கீழ்க்கண்டவற்றில் கர்ப்பவாய் புற்று நோயை தடுக்கும் முக்கியமான வழிமுறை என்ன?

- அ) அபிக்கபி மருத்துவ பரிசோதனை செய்துகொள்ளுதல்
- ஆ) தொடர்ந்த உடற்பயிற்சி
- இ) மன அழுத்தத்தை தவிர்த்தல்
- ஈ) எதுவுமில்லை

28. கர்ப்பவாய் புற்று நோய் வராமல் தடுக்க உதவும் கருத்தடை சாதனம் இவற்றில் எது?

- அ) காப்பர்-பி
- ஆ) பெண்குறி பஞ்சு
- இ) ஆணுறை
- ஈ) கருத்தடை மாத்திரை

29. கீழ்க்கண்டவற்றில் எந்த வாழ்கை முறை மாற்றத்தினால் கர்ப்பவாய் புற்று நோயைத் தடுக்கலாம்?

- அ) போதிய ஓய்வு மற்றும் உறக்கம்
- ஆ) சூப்பர் உணவு (பப்பாளி, கிளூன் டீ, ரேஸ் பெர்ரி, காரட், மஞ்சள், காலி பிளவர், முட்டை கோஸ்)
- இ) புகை பிடிப்பதை தவிர்த்தல்
- ஈ) கர்ப்பவாய் பரிசோதனை

30. எந்த வகையான உணவை அதிகமாக உட்கொள்வதின் மூலம் கர்ப்பவாய் புற்று நோய் வராமல் தடுக்கலாம்?

- அ) வைட்டமின் ஏ மற்றும் சி
- ஆ) வைட்டமின் டி
- இ) வைட்டமின் கே
- ஈ) வைட்டமின் இ

## பகுதி: இ

கர்ப்பவாய்புற்று நோய் குறித்த அணுகுமுறை அளவீடுகள்

### குறிப்புகள்:

இப்பகுதியானது கர்ப்பவாய் புற்றுநோய் பற்றிய விபரங்கள் குறித்த அணுகுமுறை அளவீடுகள் பற்றிய கேள்விகளை கொண்டது. நேர்முகத்தேர்வாளர் கேள்விகளை கேட்டு அதன் பதில்களை ஒன்றன்பின் ஒன்றாக பெற வேண்டும். மற்றும் பதில்களுக்குரிய கட்டங்களில் (V) குறியீட்டை போடவும்.

செய்திகள்	தீர்மானிக்க முடியவில்லை (0)	முற்றிலுமாக மறுக்கிறேன் (1)	மறுக்கிறேன் (2)	ஏற்கிறேன் (3)	முற்றிலுமாக ஏற்கிறேன் (4)
1) கர்ப்பவாய் புற்றுநோய் ஒரு கடவுளின் சாபம்					
2) செல்களின் இயல்பு நிலையில் ஏற்படும் மாறுபட்ட அத்த வளர்ச்சியே புற்று நோய்					
3) முன்னோர்களுக்கு கர்ப்பவாய் புற்றுநோய் ஏற்பட்டிருந்தால் அந்த குடும்பத்தை சார்ந்த பெண்களுக்கு கர்ப்பவாய் புற்றுநோய்க்கான வாய்ப்பு அதிகம் உள்ளது					
4) நீண்டநாட்களாக கருத்தடை மாத்திரை பயன்படுத்துவதால் கர்ப்பவாய் புற்றுநோய் ஏற்பட வாய்ப்பு உள்ளது					

5) ஐந்திற்கும் மேற்பட்ட குழந்தை பேறு அடைந்த பெண்களுக்கு கர்ப்பவாய் புற்றுநோய் ஏற்படக்கூடும்					
6) தன் சுத்தம் மற்றும் பிறப்புறுப்பு சுகாதாரம் ஆகியவற்றை பேணாமலிருப்பது கர்ப்பவாய் புற்றுநோயை ஏற்படுத்தக் கூடும்					
7) கர்ப்பவாய் புற்றுநோய்க்கான அறிகுறிகள் முன்றாம் நிலையில்தான் வெளிப்படும்					
8) நான்காவது நிலையில்தான் கர்ப்பவாய் புற்றுநோய்க்கான உறுதியான அறிகுறிகள் வெளிப்படும்					
9) எச்.பி. வி வைரஸ் கிருமி கர்ப்பவாய் புற்றுநோயை உருவாக்கும்					
10) ஒழுங்கற்ற இரத்தப்போக்கு மற்றும் துர்நாற்றத்துடன் கூடிய வெள்ளைபடுதல் ஆகியவை கர்ப்பவாய் புற்றுநோய்க்கான ஆரம்ப அறிகுறிகள்					

11) பேப் சிமியர் பரிசோதனை மூலம் எளிதில் கண்டறிய முடியும்					
12) கர்ப்பவாய் புற்றுநோய்க்கான முறையான சிகிச்சை கிடையாது					
13) எச்.பி. வி தடுப்பூசி கர்ப்பவாய் புற்றுநோய் வராமல் தடுக்க உதவுகிறது					
14) 30 வயதிற்கு மேற்பட்ட பெண்கள் அனைவரும் பேப் சிமியர் பரிசோதனை செய்து கொள்ள வேண்டும்					
15) புற்றுநோய்க்கான விழிப்புணர்வு நிகழ்ச்சிகளில் கலந்து கொள்வது அவசியம்					
16) ஆணுறைகளை சரியாக பயன்படுத்துவது கர்ப்பவாய் புற்றுநோய் வராமல் தடுக்க உதவுகிறது					
17) கர்ப்பவாய் புற்றுநோயை ஆரம்ப நிலையிலேயே கண்டறிய முடியும்					
18) கர்ப்பவாய் புற்றுநோய்க்கான முறையான சிகிச்சை மூலமாக பாதிக்கப்பட்டவர்களின் வாழ்நாட்களை நூட்டிக்க முடியும்					
19) மருந்து மற்றும் கதிர்வீச்சு சிகிச்சை ஆகியவை கர்ப்பவாய் புற்றுநோய்க்கான முக்கியமான சிகிச்சை முறைகளாகும்					
20) வழக்கமாக உடற்பரிசோதனை செய்துகொள்பவர்கள் கர்ப்பவாய் புற்றுநோயை குறித்து பயப்படத் தேவையில்லை					
21) கர்ப்பவாய் புற்றுநோய் ஒரு தொற்று வியாதி					
22) புற்று நோய் வராமல் தடுக்கக்கூடிய ஒரு நோய்					
23) புற்று நோய் வராமல் தடுக்க முடியாது					
24) கர்ப்பவாய் புற்றுநோய் தாக்கப்பட்ட பெண்கள் தனிமை படுத்தப்பட வேண்டும்					
25) கர்ப்பவாய் புற்றுநோய் உடலின் மற்ற உறுப்புகளையும் பாதிக்கும்					

26) கர்ப்பவாய் புற்றுநோய் உடலின் அமைப்பை சர்குலைக்கும்					
27) கர்ப்பவாய் புற்றுநோய் பாதிப்பு ஏற்பட்டால் நுண்டநாள் மருத்துவமனையில் தங்கும் நிலை ஏற்படும்					
28) வைட்டமின் ஏ மற்றும் சி நிறைந்த உணவுகள் கர்ப்பவாய் புற்றுநோய் வராமல் தடுக்கும்					
29) உடலுறவின் போது ஆணுறை பயன்படுத்துவதன் மூலம் எச்.பி. வி வைரஸ் கிருமி தொற்று வராமல் தடுக்க முடியும்					
30) உடலுறவின் போது வலி ஏற்படுவது கர்ப்பவாய் புற்றுநோய்க்கான முக்கியமான அறிகுறி					



*ABSTRACT*

## **ABSTRACT**

A quasi experimental Study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding cervical cancer among womens in Kannivadi PHC at Dindigul district, as partial fulfillment of the requirement for the award of the degree of Master of science in nursing was done by 301423051 from Jainee College of Nursing , affiliated to the Tamilnadu Dr. M. G. R University, Chennai.

The objectives of the study were 1) To associate the post test knowledge and attitude on cervical cancer with their selected demographic variables.2) To correlate the knowledge and attitude on cervical cancer among womens.

The hypothesis of the study were , H1: There will be a significant difference between pre and post test knowledge and attitude score after structured teaching programme on cervical cancer among womens.H2: There will be a significant correlation between Knowledge and attitude on cervical cancer among womens. H3: There will be a significant association between the knowledge on cervical cancer and background features among womens. H4: There will be a significant association between the attitude on cervical cancer and background features among womens.

The investigator organized the review of literature under various aspects on studies related to cervical cancer , studies related to knowledge on cervical cancer, studies related to attitude on cervical cancer, studies related to cervical cancer screening.

The conceptual frame work for the study was based on Nursing process model. The research design was used pre experimental design .Sample size was 60 womens between the age group of 25-50 years. The samples were selected by using convenient sampling method.

The tool developed and used for data collection was an observational schedule. Five expert validated the tool. Reliability was established by interrator reliability, ( $r=0.8$ ). The main study was conduted in Kannivadi Primary health centre , Dindigul. The data were collected, tabulated, analysed and interpreted by using SPSS packages (version 24).

Inferential statistics was used to evaluate the effectiveness of structured teaching programme on knowledge and attitude of cervical cancer among womens between the age group of 25-50 years. The result showed that there was a significant increase in both the knowledge and attitude towards cervica cancer among womens between the age group of 25-50 years, and there was a significant association in relation to selected factors that Marital status, education with their knowledge. The structured teaching programme was independently effective among womens between the age group of 25-50 years in knowledge and attitude towards cervical cancer. The implications, recommendations, and conclusion have been stated adequately.