

“EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING KNOWLEDGE ON PREVENTION OF CERVICAL CANCER AMONG REPRODUCTIVE WOMEN IN SELECTED AREAS OF RANGA REDDY DISTRICT, HYDERABAD, TELANGANA, INDIA”

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ABSTRACT

Cervical cancer is the commonest cancer cause, reason behind the death among women in developing countries. Mortality rates from cancer cervix are very high due to late diagnosis. HPV 16 and 18 are the two most common high-risk type of all cervical cancer. Cervical cancer is preventable disease as it has a very well defined, long pre-malignant phase which can be detected by regular screening test and follow up. Unfortunately, most women in India are not aware of the screening. More women in India die from cervical cancer than any other country.

OBJECTIVES

- Assess the knowledge of reproductive women regarding prevention of cervical cancer by pretest.
- Develop and administered structured teaching regarding knowledge of reproductive women on prevention of cervical cancer.
- Evaluate the effectiveness of structured teaching program regarding knowledge of reproductive women on prevention of cervical cancer.
- Find out the association between pretest level of knowledge on prevention of cervical cancer with selected demographic variables.

HYPOTHESIS

H₁: There will be significant difference between pretest and posttest knowledge scores of reproductive women on prevention of cervical cancer at 0.05 level of significance.

H₂: There will be significant association between pretest level of knowledge with selected demographic variables at 0.05 level of significance.

MATERIALS AND METHODS

A pre experimental study was conducted by structured interview scheduled among 300 reproductive women aged between below 20 years to above 40 years in urban area of Green hills Colony, Rangareddy District, Hyderabad. Convenient sampling technique was used for selection of the sample for data collection. Descriptive and inferential statistics were used for data analysis.

RESULTS

- Maximum respondents in the age group of 21-30 years 87(29.0%)
- Maximum respondents were from Hindu community 135(45.0%)
- Maximum respondents were 93(31.0%) are degree and above in education.
- Maximum respondents are 150(50.0%) are home makers
- Maximum respondents are below Rs.15000 per month 210(70.0%)
- Maximum respondents have no family history of cancer 258(86.0%)
- Maximum respondents were married 228(76.0%)
- Maximum respondents are married at the age of below 20 years and 21-25 years 105(35.0%)
- Maximum respondents has 1-2 children 132(44.0%)
- Maximum respondents of history of screening are never screened 267(89.0%).

The overall improvement of Mean Knowledge is 36.66%. The result revealed that there was a significant association with age, monthly income, cancer history, marital status, age at marriage and parity of the reproductive women. There is no significant association with religion, education and history of screening shows.

CONCLUSION

The present study concludes that the respondents of Green Hills Colony, Kothapet, Hyderabad had inadequate knowledge about prevention of cervical cancer. After administration of STP, post-test knowledge is improved compared with pretest knowledge scores.

1-INTRODUCTION

The cervix is the bottom part of the uterus, which connects the uterine body to the vagina or the birth canal and which is closest to the uterine body is known as the endo cervix and the part of the cervix that next to the vagina is called the ecto cervix. Majority of the cervical cancer changes begins in the junction where the end cervix and ecto cervix meet. Cervical Cancer develops whilst the cells of the cervix expand out of manipulate. Unlike normal cells which divide and grow in an organized fashion, malignant cancer cells continue to divide until they form a growth or tumor. In some cases, the cancer cells become invasive, spreading to tissues and organs outside of the cervix. maximum cervical cancers expand slowly in the lining of the cervix as pre-cancerous changes known as cervical dysplasia which can potentially develop into cancer if not treated early, but some dysplasia cells may not be malignant and can disappear without treatment (D.C Datta 2003).

The WHO defines cancer as a collective time period used to classify a difficult and fast of sickness, affecting any region of the body, which is characterized by the rapid proliferation of abnormal cells that have the potential to metastasize to other areas of the body. The International Agency for Research on Cancer currently recognizes more than 100 different types of cancers (WHO 2003).

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. Early on, typically no symptoms are seen. Later symptoms may include abnormal vaginal bleeding, pelvic pain, or pain during sexual intercourse. While bleeding after sex may not be serious, it may also indicate the presence of cervical cancer (Shaw's 2008).

Cervical cancer is unique among cancers in that it can largely be prevented through screening and removal of precursor lesions. It is the second most common cancer among women worldwide and is the most common place malignancy in developing countries, particularly in India (Senapathy G J,2011).

Cervical most cancers starts with in the cervix, the lower part of uterus that opens on the top of the vagina. The precancerous condition called dysplasia can be detected with the source of a pap smear and is 100% treatable. It may take years for pre-cancerous changes to turn to cervical most cancers (Dr. Abraham P 2007).

Cervical maximum cancers is sub-divided into cervical squalors mobile carcinoma and cervical adeno carcinoma (Snijders *et al.*, 2006).Majority of the times of cervical most cancers are squalors cell carcinoma (SCC) and adeno carcinomas are uncommon. Cervical squalors cell carcinoma (SCC) develops step by step time past law from pre-existing non-invasive squalors precursor lesions, also called cervical intra epithelial neoplasias (CIN) or squalors intraepithelial lesions (SIL). The latency duration between ordinary HPV infections to establishment of cancer may additionally more over take over a decade (ZurHausen, 2002).

Cervical cancer is one of the most common cancers affecting women worldwide-huge. There are two distinct conditions which characterize cervical cancer 'carcinoma in situ' and 'invasive cervical cancer'. The previous refers back to the development of pre-malignant lesions while the latter is a more superior degree of cervical cancers in which a tumor is identified. Inside the United Kingdom about 4000 new cases of invasive cervical carcinoma and about 1600 associated deaths are reported every year (OPCS 1992) at the same time as within

the US around 15,000 cases of invasive cervical cancer are diagnosed each year. In the developing world the incidence of cervical cancer is much greater, notably in regions such as China, Latin America, Africa and the Caribbean (Birley 1995; CRC 1994a).

NEED FOR THE STUDY

Globally, cervical cancer is second to breast cancer as the commonest female cancer but in the developing countries, it is the leading cause of gynecological cancer related morbidity and mortality. An estimated 500,000 new cases and 250,000 deaths arise worldwide annually with vast majority (80%) of these in developing countries. In the United Kingdom (UK), cervical screening programs have been successful in securing participation of a high proportion of targeted women and have seen a fall in mortality rates of those suffering from cervical cancer. However, there continue to be a large percentage of unscreened women and, of ladies in whom an abnormality is detected many will no longer attend for Colposcopy. Despite the positive factors of Pap smear in America, every year, approximately 14,000 American women are diagnosed with cervical cancer and about 3,900 die from it. This showed that even though great strides against cervical cancer have been achieved in America, it still proves fatal for many women (Breakway 2009).

Cancer of the uterine cervix is the second most common cancer among women globally. An estimated 550,700 new cases and 286,823 deaths due to cervix cancer are estimated to have occurred in the year 2010. India alone accounts for one-fourth of the global cervix cancer burden (Farley J 2013). Several tests have been developed to screen women for cervix pre-cancers and cancers. Pap test has repeatedly demonstrated good specificity ranging from 86% to 100%. Cytology based screening programmes are labor intensive and logistically burdensome. They require multiple visits by the women for various reasons like screening, obtaining the results follow up investigations and treatment in case of abnormal smears. Thus, despite the low consumable cost, high quality cytology is expensive in absolute terms and may not necessarily be the most cost-effective option for screening (Goldie SJ 2005).

Cervical cancer is one of the few preventable human cancers; its prevention is based total at the early diagnosis of precancerous lesions whose treatment generally makes the development of cancer almost not possible. However, in developing countries, cervical cancer remains the most common cause of cancer-related deaths among women. In developed countries, the incidence and mortality of this cancer have decreased drastically because of the efforts made to detect precancerous lesions early (Monsonogo J. 2006).

Globally, cervical cancer is the fourth most common cancer in women, with an estimated 560,505 new cases and 284,923 deaths in 2015. The vast majority, around 85% of cervical cancer cases and 87% of cervical cancer deaths occur in the less developed regions. In the cervical cancer accounts for almost 12% of all female cancers and 10% of all female cancer deaths because of poor access to screening and treatment services it is the second most common cancer and third most common cause of cancer deaths among women in the less developed regions. In India, cervical cancer is the second most common cancer, with an estimated 132,314 new cases and 73,337 deaths in the year 2015 (Ferlay 2014).

STATEMENT OF THE PROBLEM

“A study to assess the effectiveness of structured teaching programme (STP) regarding knowledge on prevention of cervical cancer among reproductive women at selected areas of Ranga Reddy District, Hyderabad”.

OBJECTIVES

1. To determine the pre test level of knowledge of reproductive women regarding prevention of cervical cancer
2. To develop and conduct structured teaching programme regarding knowledge on prevention of cervical cancer among reproductive women.
3. To evaluate the effectiveness of structured teaching programme regarding knowledge on prevention of cervical cancer among reproductive women.
4. To find out the association between the pretest scores of the knowledge of reproductive women with selected demographic variables.

HYPOTHESIS:

H₁: There will be a significant difference between pretest and posttest level of knowledge scores of reproductive women regarding prevention of cervical cancer at 0.05 level of significance.

H₂: There will be a significant association between pretest level of knowledge with the selected demographic variables at 0.05 level of significance.

RESEARCH VARIABLES

Independent Variable:

Structured Teaching Programmed regarding knowledge on prevention of cervical cancer

Dependent Variable:

Knowledge of reproductive women on prevention of cervical cancer

Demographic Variables

Age , Religion, Education, Occupation, Monthly Income, Family History of Cancer , Marital status, Age at Marriage and History of Screening for cervical cancer.

ASSUMPTIONS:

The study assumed that,

- ❖ The reproductive women may have lack of awareness regarding prevention of cervical cancer
- ❖ Structured Teaching programme will improve the knowledge regarding prevention of cervical cancer.

OPERATIONAL DEFINITIONS

1. Assess: It refers to measure the knowledge level of reproductive women regarding prevention of cervical cancer.

2. Effectiveness: refers to the outcome of structured teaching programme regarding prevention of cervical cancer among reproductive women.

3. Knowledge: It refers to the level of awareness and understanding of reproductive women regarding prevention of cervical cancer, as measured by structured interview schedule. It includes specific clinical symptoms, etiologic (risk factors, diagnosis, screening method, treatment and preventive aspect of cervical cancer.

4. Reproductive Women:

Women aged between 18-45 years, living in Green hills colony, Hyderabad

5. Prevention of cervical cancer-

Activity that reduce the occurrence of cervical cancer

DELIMITATIONS:

The study is delimited to

- ❖ The clients who have been living in selected urban areas in Ranga Reddy District, Hyderabad.

CONCEPTUAL FRAME WORK

A conceptual frame work refers to concepts that offer a frame work of proposition for conducting research. Polit and Hungler (2004). The conceptual frame work deals with inter related concepts or abstractions that are assembled together in some rational scheme by their relevance to a common theme. A framework may serve as a spring board for scientific advancement.

The present study aimed at evaluating the effectiveness of Structured Teaching programmed on knowledge regarding prevention of cervical cancer among reproductive women. The Conceptual frame work selected for this study was based on "Kings Theory of Goal Attainment model" proposed by Imogene king in the year (1989). The theory's focus on interpersonal system reflect her beliefs that the practice of nursing is differentiated from that of other health professions by what nurses do with and for individuals. The interaction is influenced by the perception and leads to mutual goal setting which are to be achieved by the Nurse and the Client. In the present study, interaction takes place between the investigator and the reproductive women.

The concepts of theory are perception, judgment action& reaction, interaction and transaction. Perception refers to each person's representation of reality. Perceptions are related to past experiences, concept of self, socio-economic group, educational back group. In this study the investigator perceives the reproductive women ideas, attitudes, age, religion, education, occupation, income, & parity . Based

on these findings the investigator prepares a questionnaire to assess the knowledge of reproductive women on " prevention of cervical cancer ". Judgment or decision making is a dynamic and systematic process by which goal-directed choice of perceived alternatives is made and acted upon by individuals to answer a question and attain a goal. In this study the action of investigator is applied questionnaire or conducted structured interview program to reproductive women and assess the knowledge on prevention of cervical cancer, it indicates the reaction of the respondents.

Perception: Perception is “Each person’s representation of reality” the elements of perception are imparting of energy from the environment and organizing it by information, transforming energy, processing information and exporting information in the form of over behaviors”.

In this study investigator perceives the need to assess the knowledge regarding prevention of cervical cancer among reproductive women.

Action: Action is “The physical and mental activity to achieve the goal what the individual perceive”.

Phase -1

The investigator prepares the structured interview questionnaire on prevention of cervical cancer.

Phase -2

Preparation of Structured Teaching Programmed on prevention of cervical cancer

Nurse action: Reproductive women act by giving consent to participate in the study.

Communication: Communication is “a process whereby information is given from one person to another either directly or indirectly. Communication is the information component of the interactions”.

Here, the investigator communicates by administering self administering structured knowledge questionnaire (pre test) to Reproductive women.

Interaction: Interaction is defined as “a process of perception and communication between person and environment and between person to person, represented by verbal and non-verbal behaviors that are goal directed”.

In this study the investigator administered the structured teaching programme on prevention of cervical cancer to reproductive women. Post test was given again with the same structured knowledge questionnaire. Women responded to structured knowledge questionnaire.

Transactions: Transaction is defined as “observable behaviors of human being interacting with their environment”. When transactions occur between Investigator and reproductive women and goals are attained.

In this study the investigator evaluate the improvement in knowledge of reproductive women on

prevention of Cervical Cancer.

5. REVIEW OF LITERATURE

Review of literature includes systematic identification, place, scrutiny and summary of written materials that contain information on research problem. The literature review is based on an extensive survey of books, journals and international nursing index. Research and non-research literature were reviewed to broaden the understanding and gain insight into the problem under study. The literature reviewed for the present study has been organized and presented under the following headings.

1. Studies related to prevalence of cervical cancer.
- 2 Studies related to awareness on screening for cervical cancer
- 3 Studies related to knowledge, attitude and practice on prevention of cervical cancer
- 4 Studies related to structured teaching programme on cervical cancer

Ross Liam Cameron et al, (2019) executed a study in Scotland to evaluate the capability impact of a selective HPV vaccination programme for men to establish a base line HPV prevalence to assess the potential impact of the programme for this study they targeted men who have intercourse with men who are disproportionately through HPV anogenital infection and related disease. For this study residual rectal swabs are collected from 1248 men for testing of presence of HPV and HPV-type incidence. The examiner findings suggest that 72.8% swabs were positive for HPV with 59.1% of samples positive for at least one high risk type. At least one of HPV 6,11,16 and 18 was detected in approximately half of the swabs. HPV prevalence generally increased with age but did not significantly differ between older age group.

Jaideep Shenoy 2018 conducted a joint study at Mangalore by (ASSOCHAM) National institute of cancer prevention and research reveals that India alone account for 1/4 of Global burden of cervical cancer. It account for 17% of all cancer death among women age between 13 and 69 years. It is estimated that cervical cancer will occur in approximately 1 in 53 Indian. Women during their life time compare with 1 in 100 women the more developed region of the world. According to National Institute Of Cancer Prevention Of Research January 21,2019 one woman dies of cervical cancer every 8 minutes in India. According to GLOBOCAN 2018 \new cases register 96,922 deaths due to cervical cancer 60,078. median age is 38 years (21-67 yrs). IN India women accounting for 22.86% of all cancer cases in women and 12% of all cancer cases both men & women .Rural women are at higher risk of developing cervical cancer as compare to their urban counter parts. Cervical cancer is less common in muslim than in hindu women.

Shrestha AD (2018) carried out a study to make comprehensive report on prevalence, incidence and mortality of cervical cancer in low and middle income countries for this study selected computerized search with the

medical subject heading major topics cervical cancer ,cervical neoplasm, epidemiology ,(prevalence or incidence or mortality)and HPV. The study found that the highest reported age standardized incidence rate as 17.9/100,000/year in Zimbabwe in 2000 and the lowest as 0.11/100,000/year in China in 2006. Further, the highest reported age standardized mortality rate was 16/100,000/year in India in 2015 and the lowest 1.8/100,000/year in Colombia in 2013. In addition, coitarche, tobacco smoking, number of sexual partners and family history of cervical cancer were reported as significant risk factors.

Anitha kumari, sangeeta Pankaj et al (2018)done are prospective study on analysis of patients of cervical cancer at tertiary centre in Bihar. In this study 518 patients with cervical cancer were participated. The study results shows that prevalence of cervical cancer among gynecological malignancy was 52% it's the second most common cancer after breast cancer. Patients hailed from various districts of Bihar 89%, India and from Nepal 10.61%.The majority (>50%) were age 40-59 years. Stage information was available for 71.81% of patients, of which stage-1, 12.36%, stage-2, 35.21%, stage-3,50% and stage-4,2.41%. Squalors cell carcinoma was the most common reported histopathology.

Nwabi chie chine, Rosliza A.M (2017); executed a study at University Putra Malasia on global burden of cervical cancer and distribution of the disease steady with various regions by an electronic search through Google scholar and pre quest central was under taken the best estimates on cervical cancer incidence and mortality from recent data since 2018. The study findings show that 528,000 new cases of cervical cancer and 266,000 deaths in 2012. It is the fourth most common cancer globally. The incidence of cervical cancer varied according to countries with world age -standardized rates (ASR) ranging from 4.4 to 75.9 per 1,00,000 population. About 85% of all new cervical cancer cases and 87% of all cervical cancer deaths occur in less developed regions.

Saurabh Bobdy,jignasa sathward et al (2016)carried out a study to evaluate the burden of cervical cancer in India for present study they used med line and web of science electronic data base were search from January 1990-2015 and used key words of cervical cancer .screening .early detection .cervical cytology and visual inspection and .the study to shows that cervical cancer contributes to approximately 6-29% of all cancer in women .the highest incidence shows in Mizoram is 23.07/ 1 lakh and the lowest incidence in 4.91 /1 lakh in Dibrugarh district .the study concludes that in developing countries because of lack of necessary infrastructure quality control high quality cytology screening may not be feasible for videos scale implementation.

Radha Bai Prabhu T (2016)performed a study to analyse the prevalence and management of abnormal cervical cytology in pregnancy. Among the 300 pregnant women, 90 (30%) were primi gravidae and 210 (70%) were multi gravidae. 80% were between 21 and 30 years of age. 290(96.6%) women have never had a pap smear in the past. Conventional Pap smear was taken at < 12 weeks of gestation in 56% of cases, between 13-20 weeks of gestation in 24% of cases, > 21 weeks of gestation in 20% of cases. ASCUS, LSIL and HSIL were reported in one case each. In those with LSIL and HSIL, Colposcopy directed biopsy was reported as

CIN 1 and CIN 2 respectively. These two cases were kept under observation during the antenatal period. The CIN II lesion persisted on postpartum follow up and was treated with LLETZ.

Rubina Mukhtar, Rubaida Mehmood et al. (2015) carried out a retrospective descriptive study at Multan Institute of Nuclear Medicine and Radiotherapy, Pakistan for five years to find the prevalence of cervical carcinoma by review of 537 clinical records with parameters of socio demographic and reproductive parameters. Frequency of cancer cervix and stage of disease at the time of presentation were recorded. Through this study they discovered 78% of patients show irregular bleeding, 29% of patients have vaginal discharge and 3% of patients show pelvic pain.

Nichole Fratangelo (2018) executed a study on skipping of pap smear test among women found that 35 % women are too shy to get the test because of their body shape, 34 % would not go because of their vulva shape and 38 % because of the way they smell.

Priti Mishra, et al (2018) conducted a retrospective study amongst 200 women attending gynae OPD of Military Hospital, Shillong, Meghalaya, India between January 2016 to December 2017. Pap smear test was done, and classification was done as per Bethesda gadget 2014. 105 women had normal cytology findings and 23 had abnormal cytology.

Ashok Verma et al., (2017) did study on pap smear test on 200 women in the age group of 21 – 65 years. He found that none of the women had pap smear test in their life earlier and only 5% women knew that the tests are available to detect cervical cancer. **Jaqui Soccio et al (2015)** conducted study on pap smear test the study result shows the women with drug and alcohol addiction have high incidences of risk factors for cervical cancers and abnormal pap smears.

Somdatta Patra (2017) achieved a community-based, cross-sectional study to find out awareness about cervical cancer among women and their willingness to utilize screening services in an urban resettlement colony of Delhi, India. A total of 373 women were included in the study. Mean age of study participants was 39.14 years. Two-third of the study population was illiterate. Half of the study population was aware of cervical cancer, and only one-fourth of population was willing to participate in a screening test. Willingness was higher among educated, ever user of family planning method and having knowledge about at least one risk factor, signs or symptoms, or possibility of early diagnosis of cancer cervix.

Tesfahun Hailemariam, Bizunesh Yohannes et al (2017) performed a cross sectional study on occurrence of cervical cancer and associated risk factors among women attending cervical cancer screening and diagnosis centre at Yirgalem General Hospital, Southern Ethiopia. In Ethiopia, the incidence was 17.3%, mortality 16.5% and five year prevalence was 18.2%. This study revealed that being human immunodeficiency virus positive, sexually transmitted infection history and early age at initiation of sexual intercourse have statistically significantly associated with cervical cancer in multi variety analysis. The study shows that importance of early screening on mass campaign and focus from the Govt. and other stake holders by strengthening both cancer prevention and control programme on implementation strategies through due attention on the associated risk factors of the study.

Nainakumar et al., (2016) conducted a study to know the recent advances in screening, 15,2016 prevention as well as management of cervical cancer at an early stage to reduce the burden of deaths resulting from this disease for this study they selected various English language journals and peer -reviewed articles on Pubmed, MEDLINE, Embase and Google scholar till 2015. The study proved that cervical cancer is commonest gynecological cancer effecting women it is also one of the commonest cancers of females that can be detected and treated completely at pre cancerous stages.

Hae Won Kim, Duck Hee Kim (2015) executed a study to determine how aware mothers are about cervical cancer prevention of their adolescent daughters, with a view to developing strategies for expanding primary cervical cancer prevention for adolescent girls through the mothers' involvement. Five themes emerged. In general, the mothers' awareness of cervical cancer was not clear, and they exhibited a lack of awareness of the importance of having a regular Papanicolaou screening test. The mothers recognized that they were role models for their daughters, and realized and accepted the necessity of educating their daughters regarding cervical cancer; however, they perceived barriers related to the prevention of cervical cancer in their daughters.

Jansi Rani et al., (2014) conducted a cross sectional survey of women attending Gynaecology Out-Patient Department (OPD) in a tertiary care hospital in Puducherry. Mean age of the study population was 40.45 ± 12 years. Less than half of the study population (178, 44.5%) knew about cervical cancer. Less than one-fourth of the population knew about screening services for prevention of cervical cancer, and majority (389, 97.2%) were not aware of vaccination as prevention for cervical cancer.

7. METHODOLOGY

Methodology is a systematic, theoretical analysis of the methods applied to a field of study. It includes research approach design, variables, setting population, sampling techniques, sample size, inclusion criteria, exclusive criteria, development and description of tool, content validity and reliability pilot study, procedure for data collection and plan for data analysis (Nancy Burns, Susan K, Grove 2007).

The present chapter deals with methodological approach to assess the effectiveness of structure teaching program regarding knowledge on prevention of cervical cancer among reproductive women in selected areas of Ranga Reddy district, Hyderabad.

RESEARCH APPROACH

Pre-experimental approach is used for this study. Research approach is the most significant part of any research. The appropriate choice of research approach depends upon the purpose of the research study, which was under taken. According to Nancy Burns (1993) the descriptive research is the exploration and description of phenomena in real life situation. The selected research approach is pre experimental approach.

RESEARCH DESIGN

The research design provides an overall plan for conducting the study. Pre experimental design is selected for the present study in which total sample is taken as one group and is pre tested with the help of structured interview schedule. The investigator administers the independent variable (STP) to the entire sample irrespective of their pretest knowledge scores. The effectiveness of independent variable on dependent variable was tested by post test.

SETTING OF THE STUDY

The setting refers to the area where the study was conducted. The present study was conducted in Green hills colony, Ranga Reddy district, Hyderabad, Telangana state.

POPULATION

A population is a complete set of persons or subject that possess same common characteristics that are of interest to the researcher (Polit & Hungler 1995). The population for the present study are reproductive women .

SAMPLE

In the present study includes the reproductive women aged between 18-45 years who residing at selected urban areas in Ranga Reddy District, Hyderabad.

SAMPLING TECHNIQUE

The Non-probability, convenient sampling technique was used for present study to select the samples from Green Hills Colony, Ranga Reddy District, Hyderabad, Telangana State.

SAMPLE SIZE

The total sample size was 300

SAMPLING CRITERIA

1 Inclusion criteria

The study included reproductive women who were:

- Age between 18-45 years
- Married or unmarried
- Willing to participate in the study
- Could understand and speak Telugu and English .

Exclusion criteria

The study excluded reproductive women who were

- Having Cancer cervix
- Women is on treatment for cancer cervix

- Sick women who were not able to participate
- Reproductive women who are not willing to participate in the study.

DEVELOPMENT AND DESCRIPTION OF THE TOOL

The researcher has developed a structure questionnaire after reviewing the literature and considering the opinion of nursing experts, gynecologists and, oncologists. The tool was prepared and validated by experts. The modifications and suggestions of experts were incorporated in final preparation of the tool by the investigator.

The tool consisting of two parts

Part I: Demographic Variable Questionnaire

Deals with identification of Demographic data of the reproductive women that is age, religion, education, occupation, Monthly income, cancer history, marital status, age at marriage, parity and History of screening.

Part II: Knowledge Questionnaire

Deals with assessment of knowledge of reproductive women regarding prevention of cervical cancer. In this study, specific questions developed to measure knowledge of multiple aspects of cervical cancer (e.g. anatomical origin of cervical cancer, the etiology of cervical cancer or mode of transmission, the purpose for screening, and symptoms of cervical cancer) and screenings (e.g. the name of a screening method or description of the process, an appropriate age for first screening, and the recommended time interval between screenings).

It consisted of '50' multiple choice questions to assess the knowledge regarding cancer cervix and its prevention. Each question has '4' options out of which one correct and three wrong options. Each correct answer carries one mark and wrong answer carries zero mark. Total score was '50'.

SCORE INTERPRETATION:

1. Part 2: Knowledge Questionnaire. Total '50' items and the total score was '50'. The scores were interpreted in the following manner.

<50% - Below average knowledge

50-75% - Average knowledge

>75% - Above average knowledge

VALIDITY AND RELIABILITY OF THE TOOLS

CONTENT VALIDITY

The tool and teaching module were given to experts in nursing, oncologists and gynecologist, for content validity. All the suggestions given by the experts were considered and corrections were made after discussing with the research guide to prepare the final tool.

PILOT STUDY

Pilot study was conducted at Bodu Uppal, Hyderabad to assess the effectiveness of knowledge regarding prevention of cervical cancer among reproductive women and practicability, feasibility and appropriateness of the study and to plan for statistical analysis of the data.

In order to test relevance and practicability of the study, the pilot study was conducted among '30' members of reproductive women. There were given pretest followed by administered structured teaching programme on knowledge regarding prevention cervical cancer. Post test was given after seven days of implementing structured teaching programme. Post test was conducted by using the same questionnaire to same group. Statistical analysis was done with 'r' test. The results found that the tool was reliable, feasible and practicable.

RELIABILITY

The reliability of the tool was established by test - retest method for knowledge items. In order to determine reliability of questionnaire, the correlation coefficient was calculated by using Karl Pearson formula. The questionnaire was administered twice (pretest & posttest) at two different times to the same samples, the scores obtained "r" was 0.95.

ETHICAL CONSIDERATION

Permission Letter obtained by colony president and consent was taken from samples before intervention. Anonymity & Confidentiality maintained.

METHOD OF DATA COLLECTION:

The investigator constructed the instruments based on the objectives of the study through literature review and experts guidance. The data collection was done with interview technique. Data collection tools are developed such as knowledge questionnaire regarding prevention of cervical cancer.

DATA COLLECTION PROCEDURE

Having obtained a formal permission, the data was collected from 300 reproductive women. The data was collected from 1st December to 31st May'17. Samples were met at their homes by home visit. The investigator introduced self and purpose of the study was briefed up. Confidentiality was ensured. In pre test demographic data and knowledge assessment was done with the help of structured questionnaire by using simple interview technique. Structured teaching programme on prevention of cancer cervix was administered on the same day in a small group (8members). Post test was conducted 7daysafter structured teaching programme.

PLAN FOR DATA ANALYSIS

1. DESCRIPTIVE STATISTICS

a. Frequency and percentage distribution were used to analyze the demographic variables of reproductive women.

- b. Mean and standard deviation were used to analyze the level of knowledge on prevention of cervical cancer.

2. INFERENCE STATISTICS

- a. The "t" test was used to assess the difference between pretest level of knowledge and posttest level of knowledge of reproductive women towards prevention of cervical cancer.
 - b. The "Chi square" was done to study the association between the demographic variables and knowledge.
- This chapter detailed on the research design & approach, study setting, sampling, development and description of the tool, data collection procedure and plan for data analysis.

ANALYSIS AND INTERPRETATION OF DATA

Statistical analysis is a method of rendering quantitative information meaningful and intelligible. Without the aid of statistics the quantitative data collected in a research project would be little more than chaotic mass of numbers. According to Polit and Hungler(2008) statistical procedures enable the researcher to reduce, summarize, organize, interpret and communicate numeric information. They also point out interpretation of the statistical findings is essentially a search for the broader meaning and implications and implications of those findings. The result of analysis need to be interpreted with due consideration of the overall aims of the project, its theoretical framework, the theoretical, the specific hypothesis being tested, the existing body of related research knowledge.

This chapter deals with analysis and interpretation of data collected from reproductive women between 18-45 years of age. Pretest was conducted by structure interview schedule to assess the knowledge of reproductive women on prevention of cervical cancer and structure teaching programme were administered and post test was conducted by using same Structure interview schedule. Analysis and interpretation was done with help of descriptive and inferential statistics to examine the objectives and test the hypothesis of study.

HYPOTHESIS

H₁: There will be a significant difference between pretest and posttest knowledge scores of reproductive women regarding prevention of cervical cancer as measured/assessed with the structure questionnaire at 0.05 level of significance

H₂: There will be significant association between pretest level of knowledge scores and the selected demographic variables of reproductive women as measured at 0.05 level of significance.

DATA ANALYSIS CATEGORIES

Data analysis and interpretation were done with help of descriptive and inferential statistics. Mean, Standard Deviation, Standard Error, Paired T-test, and chi square value was computed from the course obtained from pretest and posttest scores. The major findings were organized in the form of tables and diagrams with appropriate statistical tools and represented under the following sections.

Section 1. Frequency and Percentage distribution were used to analyze the demographic variables of reproductive women

Section 2. Mean and Standard Deviation were used to analyze the level of knowledge on prevention of cervical cancer.

Section 3. The "t" test was used to assess the difference between pretest level of knowledge and protest level of knowledge of reproductive women towards the prevention of cervical cancer.

Section 4. Effectiveness of structured teaching programme on prevention of cervical cancer

Section 5.The "Chi-square" was done to study the association between the demographic variables and knowledge.

FREQUENCY AND PERCENTAGE DISTRIBUTION OF
DEMOGRAPHIC VARIABLES

Table- 1: Frequency and percentage distribution of Reproductive women according to age.

N=300

Age	Frequency	Percent
<20	78	26.0
21-30	87	29.0
31-40	78	26.0
>40	57	19.0
Total	300	100.0

The above Table represents that, the majority of the participation in this study reproductive women were 87(29.0%), between 21 to 30 yrs. 78(26.0%) of them belongs to below the age group of below 20 years, 78(26.0%) reproductive women were below to31-40 years and 57(19.0%) of them belongs to the age group of below 40 years.

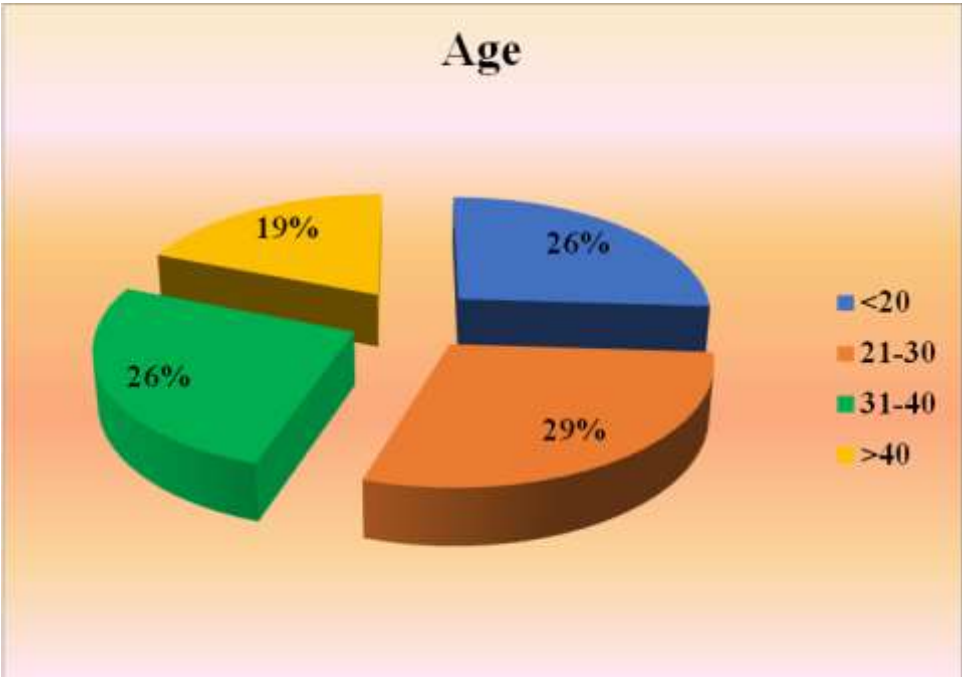


Fig. 3: Frequency and percentage distribution of samples according to age.

Table-2: Frequency and percentage distribution of Reproductive women according to religion.

N= 300

Religion	Frequency	Percent
Hindu	135	45.0
Muslim	72	24.0
Christian	93	31.0
Total	300	100.0

Above Table shows that majority of reproductive women were 135(45.0%)were Hindus, 93(31.0%) were Christians, 72(24.0%) were Muslims, there is no samples from other category.

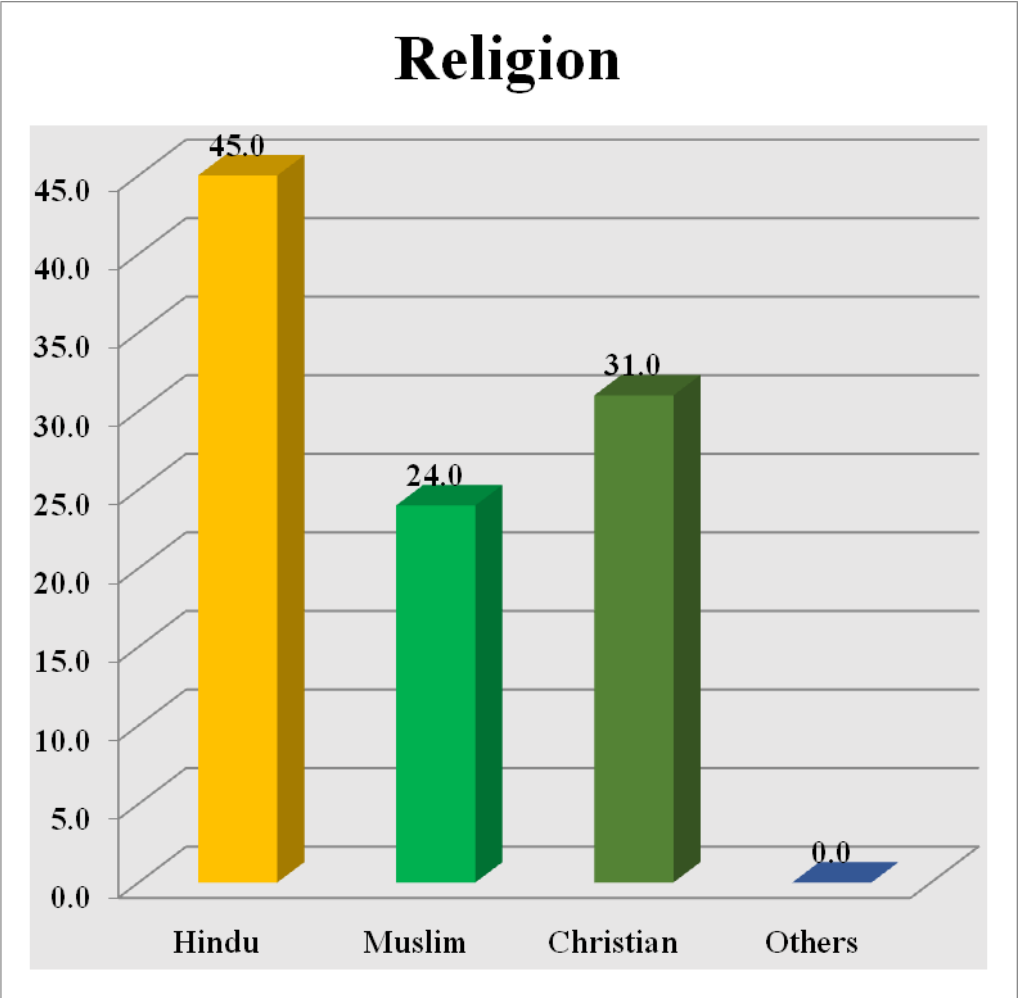


Fig. 4: Frequency and percentage distribution of samples according to religion.

Table 3: Frequency and percentage distribution of Reproductive women according to Educational Status.

N= 300

Education	Frequency	Percent
Illiterate	27	9.0
Primary	36	12.0
Secondary	60	20.0
Intermediate / Diploma	84	28.0
Degree & Higher	93	31.0
Total	300	100.0

Above Table shows that majority of reproductive women were 93(31.0%) Degree & Higher Educational Status, 84(28.0%) were Intermediate/ diploma, 60(20.0%) were Secondary, 36(12.0%) Primary and 27(9.0) were illiterate.

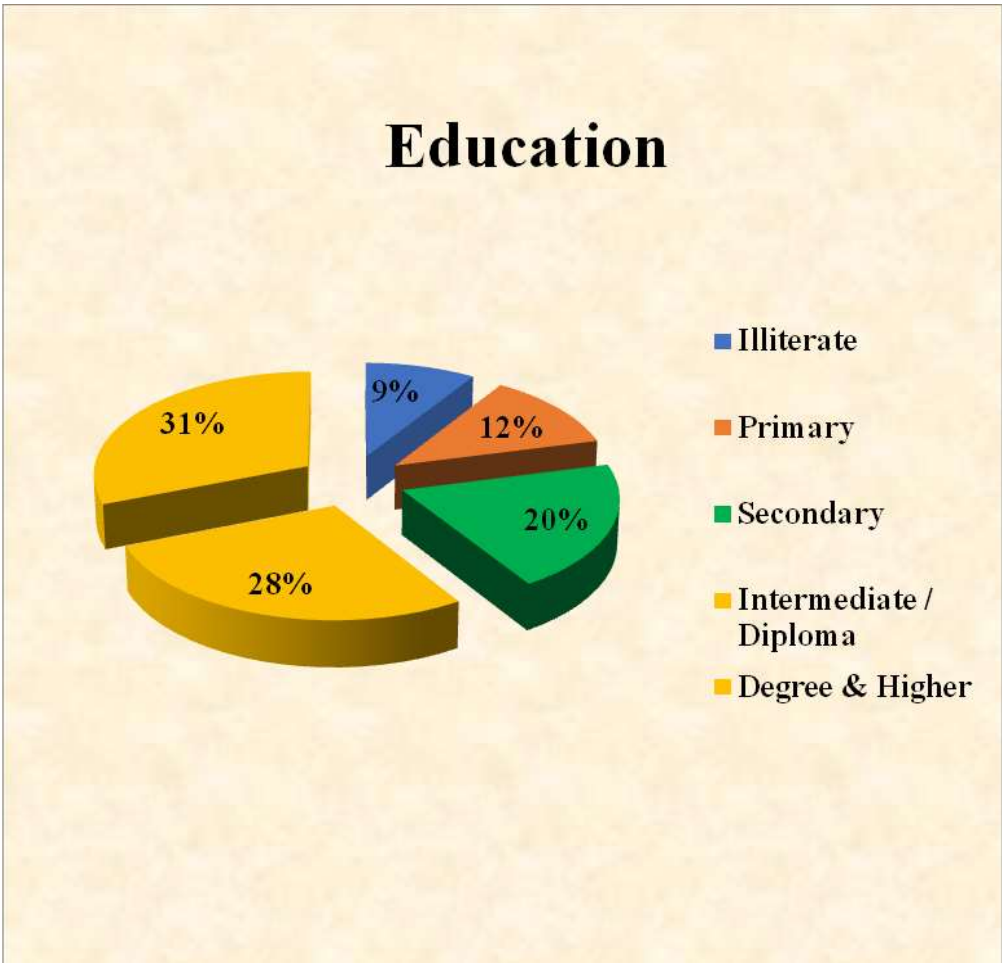


Fig. 5: Frequency and percentage distribution of Reproductive women according to Educational Status.

Table 4: Frequency and percentage distribution of Reproductive women according to Occupation.

N=300

Occupation	Frequency	Percent
Homemaker	150	50.0
Labour	15	5.0

Private Employee	36	12.0
Government Employee	27	9.0
Not Working	72	24.0
Total	300	100.0

Above Table shows that majority of reproductive women were 150(50.0%) were Homemaker, 72(24.0%) were not working, 36(12.0%) were Private Employees, 27(9.0%) were Government Employees, 15(5%) were Labour.

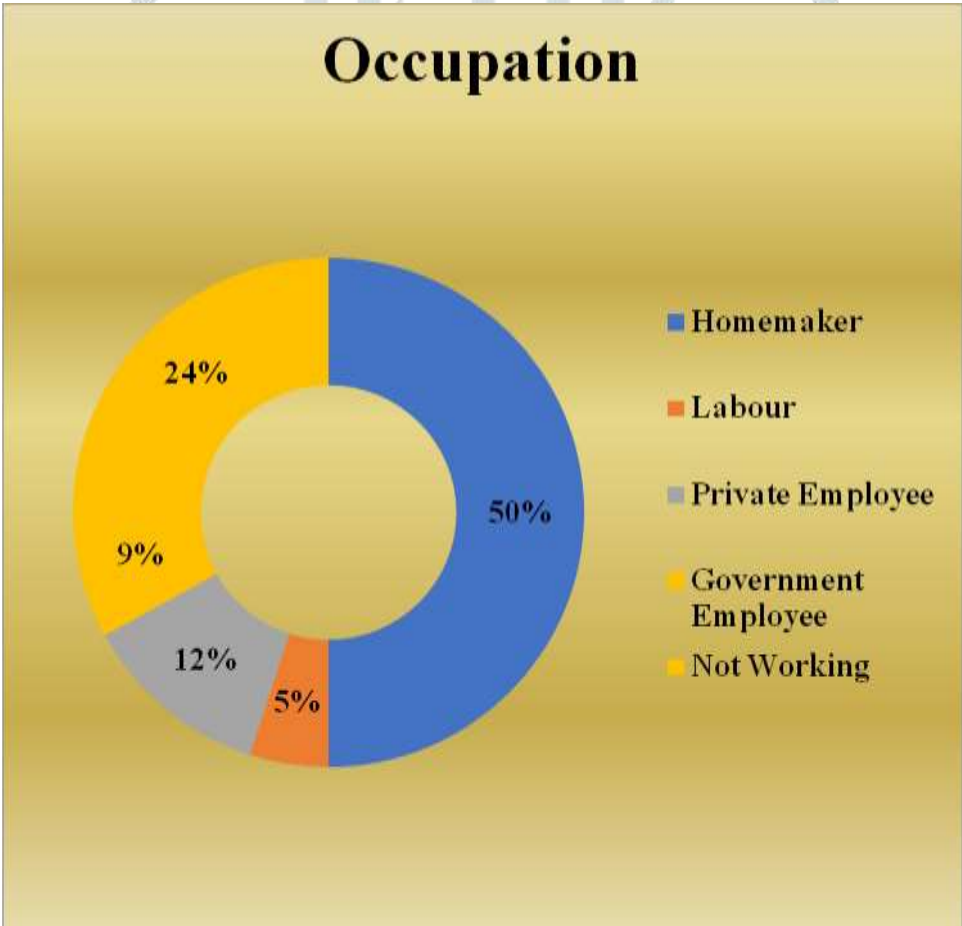


Fig. 6: Frequency and percentage distribution of Reproductive women according to Occupation

Table 5: Frequency and percentage distribution of Reproductive women according to Monthly Income.

N=300

Monthly Income	Frequency	Percent
< Rs.5000	15	5.0
Rs.5001-10000	15	5.0
Rs.10001-15000	60	20.0
> Rs.15000	210	70.0
Total	300	100.0

Above Table shows that majority of reproductive women were 210(70%) who had above Rs.15000 salary. 60(20%) who had Rs.10001-15000 salary, 15(5%) who had Rs.5001-10000 salary and 15(5.0%) who had less than Rs.5000 salary.



Fig. 7: Frequency and percentage distribution of Reproductive women according to Monthly Income.

Table.6: Frequency and percentage distribution of Reproductive women according to History of cancer.

N= 300

History of cancer	Frequency	Percent
Yes	42	14.0
No	258	86.0
Total	300	100.0

Above Table shows that majority of reproductive women were 258(86.0%) did not have the cancer history and 42(14.0) had cancer history.

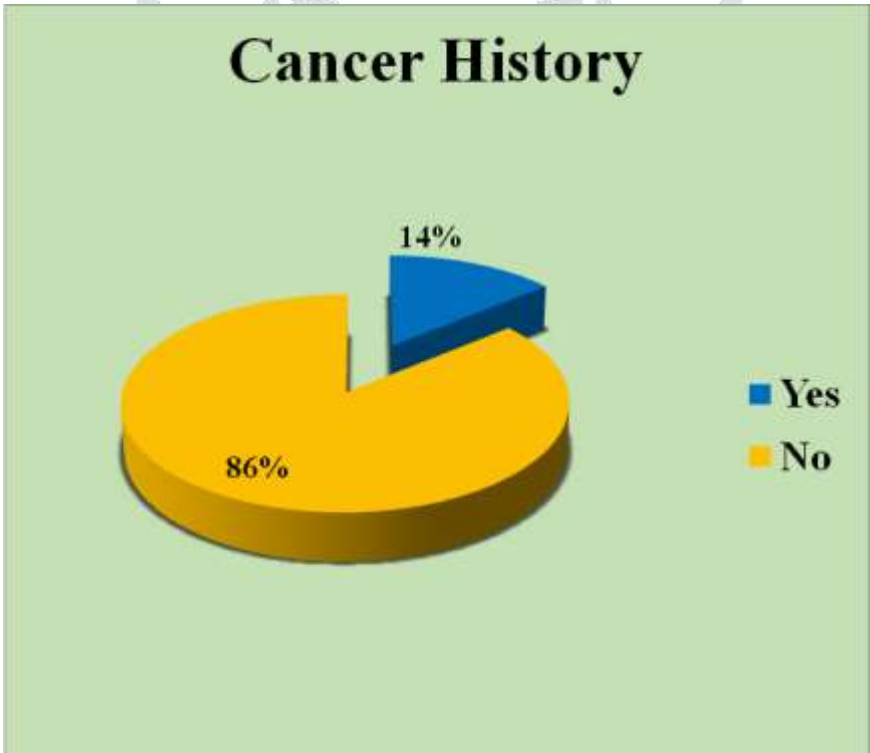


Fig. 8: Frequency and percentage distribution of Reproductive women according to Cancer History.

Table7: Frequency and percentage distribution of Reproductive women according to Marital Status.

N= 300

Marital Status	Frequency	Percent
Married	228	76.0
Unmarried	72	24.0
Total	300	100.0

Above Table shows that majority of reproductive women 228(74.0%) were married, 72(24.0%) were unmarried.

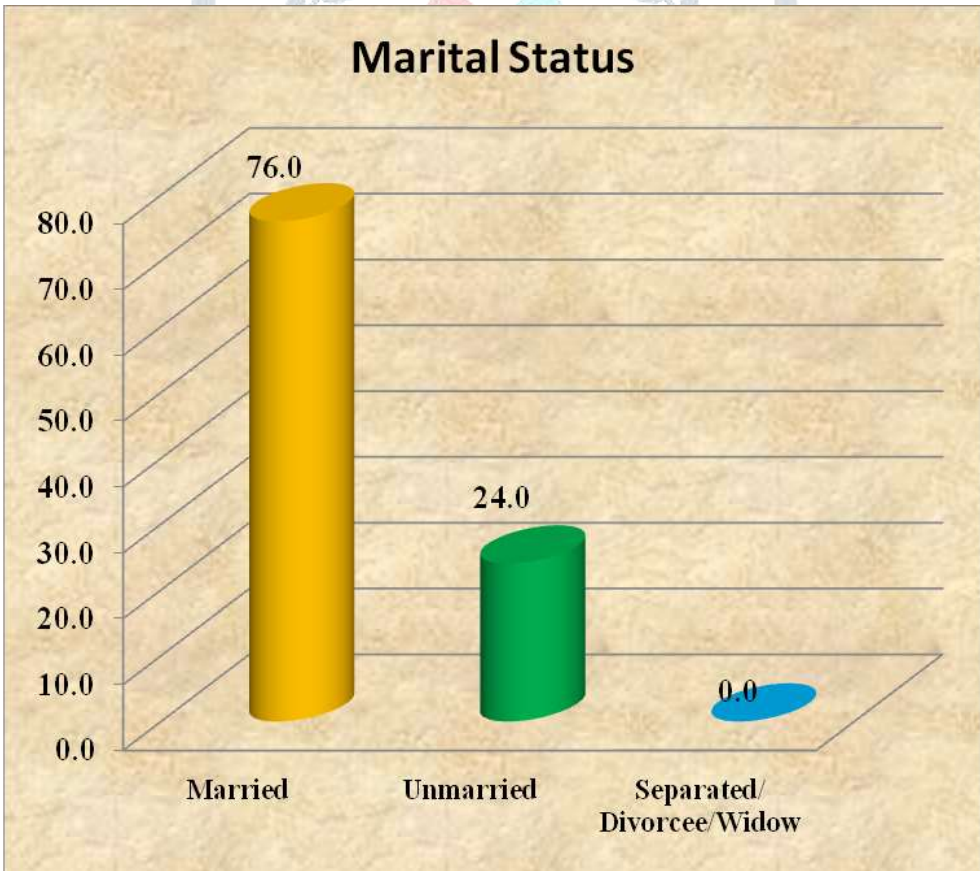


Fig. 9: Frequency and percentage distribution of Reproductive women according to Marital Status

Table 8: Frequency and percentage distribution of Reproductive women according to Age at Marriage.

N=300

Age at Marriage	Frequency	Percent
<20 Yrs	105	35.0
21-25 Yrs	105	35.0
26-30 Yrs	18	6.0
Not Applicable (Unmarried)	72	24.0
Total	300	100.0

Above Table shows that majority of reproductive women 105(35.0%) were less than 20 years, 105(35.0%) were between 21 to 25, 72(24.0%) were not applicable and 18(6.0%) were between 26-30 years.

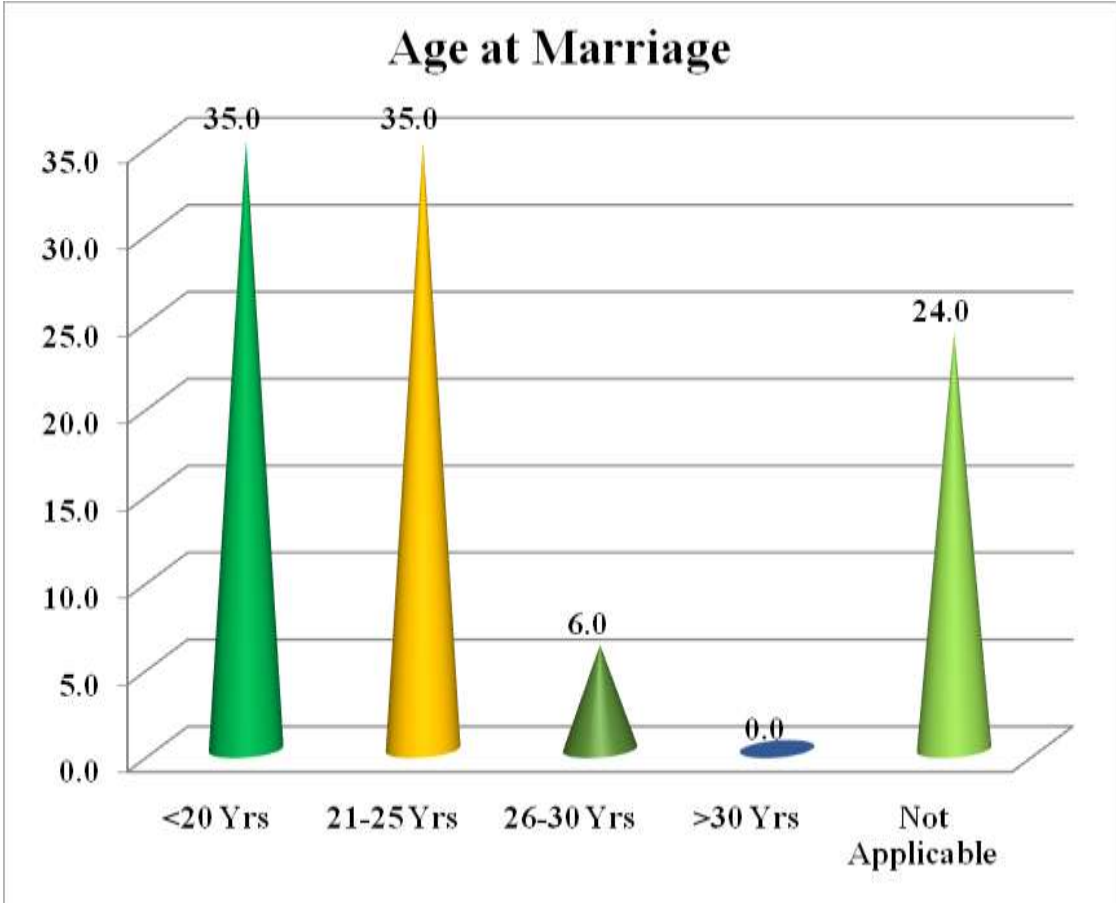


Fig. 10: Frequency and percentage distribution of Reproductive women according to Age of Marriage.

Table 9: Frequency and percentage distribution of Reproductive women according to Parity.

N=300

Parity	Frequency	Percent
No Children	18	6.0
1-2 Children	132	44.0
3-4 Children	54	18.0
More Than 4 Children	24	8.0
Not Applicable (Unmarried)	72	24.0
Total	300	100.0

Above Table shows that the majority of reproductive women 132(44.0%) have 1-2 children, 72(24.0%) were not applicable, 54(18%) have 3-4 children, 24(8%) have more than 4 children and 18(6%) did not have children.

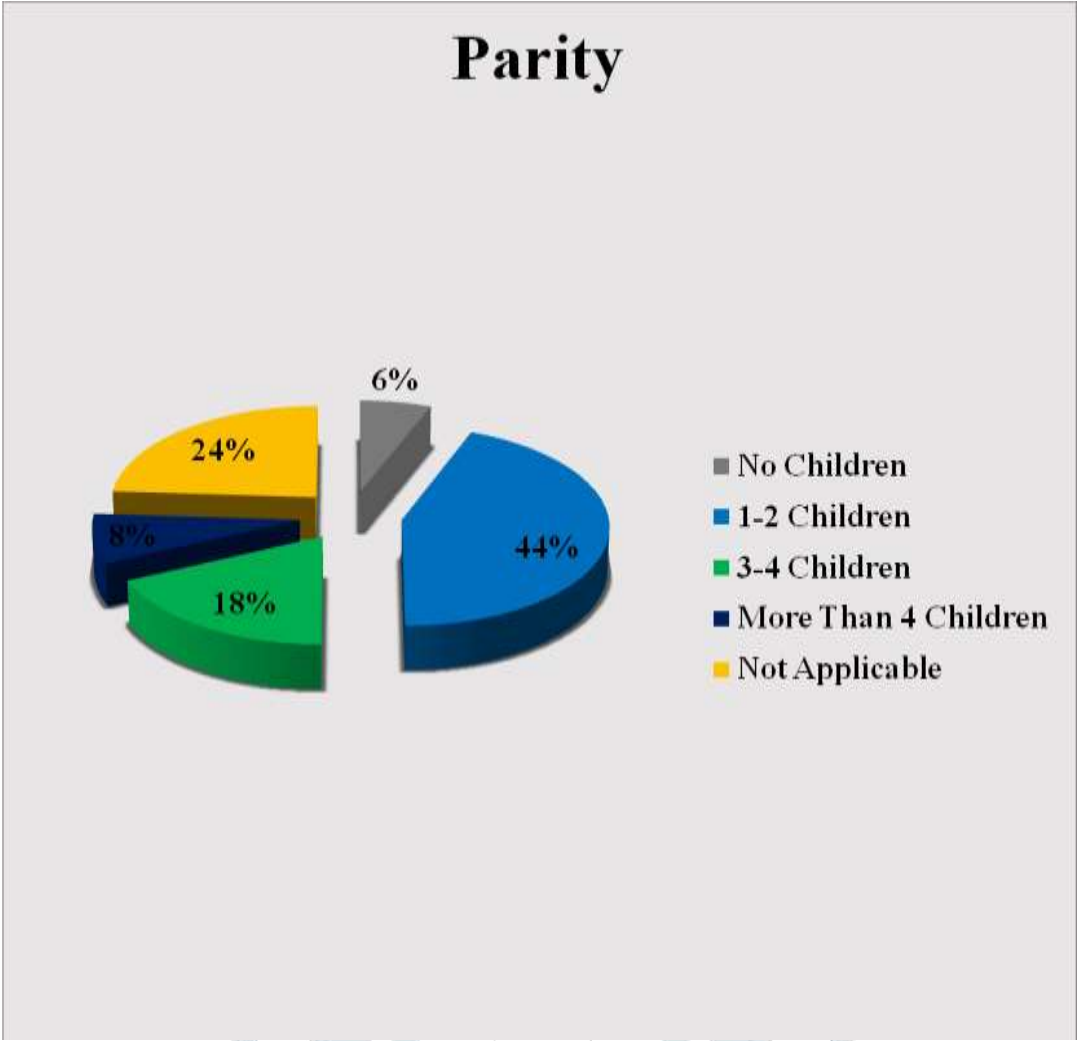


Fig. 11: Frequency and percentage distribution of Reproductive women according to Parity.

Table 10: Frequency and percentage distribution of Reproductive women according to History of Screening.

N=300

History of Screening	Frequency	Percent
Ever Screened	33	11.0
Never Screened	267	89.0
Total	300	100.0

Above Table shows that the majority of reproductive women 267(89.0%) were never screened and 33(11.0%) were screened.

9 - MAJOR FINDINGS OF THE STUDY

The present study conducted in Green Hills colony, Kothapet, Rangareddy District, Hyderabad on assess the knowledge of reproductive women(15-49 yrs)regarding prevention of cervical cancer. In this study most of the respondents are (21-30yrs) 58(29%) age group and least are >40yrs of the age.26% of the reproductive women are married below 20 yrs of the age. Most of the women belongs to Hindu religion 90 (45%), Muslim 48(24%) and Christian 62 (31%).Most of the respondents 62(31%) have degree and higher education, followed by intermediate 56(28%),secondary education 40(20%),primary24(12%) and illiterates are 18(9%).

Most of the respondents on this study are home-makers 100 (50%), followed by not working are 48 (24%), working in private sector 24 (12%), working in government sector 18 (9%) and only 10 (5%) are working as labour. The monthly income of the respondents in this study is categorized as >Rs. 15,000 income scale are 140 (70%), Rs. 10,001-15,000 are 40 (20%), Rs. 5001-10,000 are 10 (5%) and < Rs. 5,000 are 10 (5%). Most of the families have no history of Cervical cancer 172 (86%) and only 28 (14%) have a history of cervical cancer.

Most of the participants in this study are married 148 (74%), unmarried are 48 (24%), separate/divorced/widow are 4 (2%). Most of the respondents are married < 20 years and 21-25 are 70 (35%), 26-30years are 12 (6%) and respondents under not applicable are 48 (24%). Most of the reproductive women who have 1-2 children are 88 (48%), 3-4 children are 36 (18%), more than 4 children are 16 (8%) and reproductive women under not applicable are 48 (24%). 178 (89%) were never screened and 22 (11%) were screened for cervical cancer.

In this study the knowledge assessment was done by structure interview schedule prepared in the basis of selected demographic variable and meaning of cervical cancer, risk factors/ etiology, clinical manifestations, diagnosis, treatment, prevention and complications of cervical cancer. Pre-test was conducted for 200 samples by structured interview schedule and later structure teaching program was conducted. Post test was conducted after 7days of pre-test by same interview schedule with same group by same interview module. The obtained total mean knowledge score in pre-test are 17.49 (34.98%), SD is 3.86 (7.72%) and in post- test mean knowledge score is 39.21 (78.42%), SD is 2.93 (5.86%).

The results obtained in pre-test are 80 (40%) are below average, 120 (60%) are average knowledge score and nobody has above average knowledge. In post-test, nobody has below average knowledge, 4% reproductive women have average knowledge and 96% women show above average knowledge.

The study shows that the association between the demographic variables and the knowledge of reproductive women on prevention of cervical cancer according to age, religion, education and screening shows that there is no significant association with the knowledge of reproductive women at 5% level of significance. Occupation,

income, history of cancer in the family, marital status, parity and age at marriage shows significant association with knowledge of reproductive women on prevention of cervical cancer at 5% level of significance.

SCHEME OF THE WORK

Pilot study was conducted for 1 month for 30 re-productive women (25-10-16 to 25-11-16) at Boddu uppal, Ranga Reddy district, Hyderabad which is feasible and reliable.

The main study was conducted for 300 re-productive women (1-12-17 to 31-5-17) at Green Hills Colony, Ranga Reddy district Hyderabad. By convenient sampling technique was used for selection of samples. Pre test was conducted by structured interview schedule used for collection of data. Structured teaching programme was conducted. Post test was conducted after 7days of pre test by same structure interview schedule which was used in pre test. Analysis and interpretation was done by descriptive and inferential statistics.

IMPLICATIONS

The results obtained from the study helped the researcher to drive certain implications for nursing practice, nursing education, nursing administration and nursing research.

NURSING PRACTICE

- The researcher can play an active participation in cervical cancer prevention counseling to educate the women regarding risk factors of cervical cancer.
- Health promotion is a vital function of the nurse, a nurse can use this structured teaching program among reproductive women in rural community.
- Participation in screening program and workshops on cervical cancer will improve the nurse's knowledge and direct communication with women in real situation.

NURSING EDUCATION

- The nursing curriculum consists of knowledge related to teaching strategies, posting in field practice and giving opportunities to the nursing students in participation, implementation of health programs. So that the nursing students can use different teaching methods to impart the appropriate knowledge about cervical cancer and preventive measures. The student learning experience should provide an opportunity to conduct health education campaigns.
- Every individual in health profession has responsibility to educate the public. There must be adequate guidance, supervision and evaluation of nursing students to ensure adequate knowledge and practice on prevention and management of cervical cancer.

Nurses at post graduate level working in maternity hospitals should update the women's knowledge regarding importance of HPV vaccine and screening for cervical cancer

NURSING ADMINISTRATION

- The nurse as an administrator should plan and organize to motivate the nursing personal in conducting health education programs which are beneficial to the community.
- Ensure an efficient administration, monitory and evaluation system to generate the necessary momentum for successful implementation of screening programs on cervical cancer in order to improve the qualitative services.

NURSING RESEARCH

- Lack of awareness and inadequate health services are leads to more incidences and prevalence of Cervical Cancer. So there is need to conduct more research studies on specific areas to inculcate healthier, preventive and primitive aspects among focused groups.
- The study will motivate the beginning researchers to conduct study with different variables on large scale.
- The study will help the nurse researches to conduct experimental research in improving knowledge, attitude and awareness of women regarding prevention of cervical cancer.

RECOMMENDATIONS

- The study should be replicated in different settings with large number of samples.
- The study can be conducted on selected high risk groups.
- An experimental study can be done with control group.
- Comparative study can be done between rural and urban community.
- A study can be carried out among school teachers regarding importance of HPV

Vaccines.

- A study should be conducted to access the knowledge of sexual hygiene and healthy sexual practices in women.

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