A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT

A DISSERTATION SUBMITTED TO THE TAMILNADU
Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI,
IN PARTIAL FULFILLMENT FOR THE DEGREE OF

MASTER OF SCIENCE IN NURSING

COMMUNITY HEALTH NURSING

BY

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SRESAKTHIMAYEIL INSTITUTE OF NURSING AND RESEARCH
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KUMARAPALAYAM (PO),
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OCTOBER – 2019

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EXAMINERS:

1. ……..

2. …….

CERTIFICATE

This is to certify that this dissertation entitled "**A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT**", of the candidate **Reg.No. 301727454** for the award of Master of Science in Nursing in the branch of Community Health Nursing. I personally verified the plagiarism detector v 1092.com website for the plagiarism check. I found that the uploaded thesis file contains from introduction to conclusion pages and results shows 14 percentage of plagiarism in the dissertation.

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DECLARATION

I, 301727454, hereby declare that this dissertation entitled "**A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"** has been prepared by me under the guidance and direct supervision of **Dr. Mrs. R. JAMUNARANI, M.Sc., (N), Ph.D., Professor cum Principal, and Mrs.M.AROCKIAMARY, M.Sc., (N), Reader, Department of Community Health Nursing,** Sresakthimayeil Institute of Nursing and Research, (J.K.K. Nattraja Educational Institution), KUMARAPALAYAM, Namakkal District as the requirement for partial fulfillment of **MASTER OF SCIENCE IN NURSING** degree under **THE TAMILNADU Dr.M.G.R. MEDICAL UNIVERSITY, CHENNAI – 32.** This dissertation has not been previously formed and this will not be used in further for award of any other degree/ diploma. This dissertation represents independent work on the part of the candidate.

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"A positive action combined with positive thinking results in success"

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ABSTRACT

Statement of the Problem: A study to assess the effectiveness of computer assisted teaching program on knowledge regarding oral cancer among industrial workers in Olapalyam village at Namakkal District. **Objectives:** (1) To assess the level of pre test and post test knowledge regarding oral cancer among industrial workers. (2) To assess the effectiveness of computer assisted teaching programme on knowledge regarding oral cancer among industrial workers. (3) To find out the association between post test knowledge regarding oral cancer among industrial workers with their selected socio demographic variables. **Research Design:** Pre -experimental with one group pretest posttest research design was adopted. **Material and Methods:** Non probability convenience sampling technique was used to select each 50 samples in experimental group. Structured interview questionnaire was used to assess the level of knowledge regarding oral cancer among industrial workers. Experimental group received the intervention of computer assisted teaching Programme package on oral cancer was given for 30 minutes through power point presentation. **Results:** During pretest none (0%) of the industrial workers had Adequate knowledge, 34% of industrial workers had moderately adequate knowledge and 66% of industrial workers had inadequate knowledge whereas in post test after the implementation of computer assisted teaching programme,none (0%) of the industrial workers had Inadequate knowledge, 14% of industrial workers had moderately adequate knowledge and 86% of industrial workers had adequate knowledge. There was a significant association was found between the level of knowledge regarding oral cancer among industrial workers with their selected demographical variables like Age, Sex, religion, marital status, monthly income and etc. **Conclusion:** The study proved that the computer assisted teaching Programme was effective in improving knowledge regarding oral cancer among industrial workers.

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CHAPTER – I

INTRODUCTION

"Courage is not the absence of fear, but rather the judgment that something else is more important than fear."

– Ambrose Redmond

The word cancer comes from Latin word 'Carcinoma' which means a 'crab'. Cancer is the most dreaded disease and largest killer in the world next only to heart ailments. Cancer can spread very rapidly and eventually prove fatal, if it is not treated properly and in time.

Carcinogenesis is a multistage oral cancer including precursor lesions and invasive and metastatic lesions, and relatively easy access to explore clinicopathologic oral squamous carcinoma tumors designate as an ideal model to investigate the cancerous oral cancer. Cancer is a unique disease characterized by abnormal growth of cells which have the ability to invade adjacent tissues and even distant organs. If the cancer progresses beyond the stage that it can be successfully removed, it may even result in death of the individual.

Oral cancer accounts for approximately 3% of all human cancers and is currently a major health problem worldwide, both in frequency of lesions and their incidence in different age groups as well as by many risk factors involved. Over 90% of malignant tumors with oral cancers are squamous cell carcinomas, estimating over 125,000 annual deaths worldwide related to this tumor.

Oral cancer remains a major health problem in India, and only dedicated, sustained efforts towards early detection and prevention will reduce the burden of this disease. India has revealed the benefit of such public health interventions, demonstrating a significant parallel reduction in oral cancer incidence.

NEED FOR THE STUDY

In India, oral cancer accounts for about 40% of all cancers of the body and is a major public health problem with sufficient morbidity and mortality, emerging as a killer disease. The age standardized incidence rate of oral cancer in India is 12.6/100000 population.

Oral cancer appears to be increasing in incidence, and mortality has hardly improved over the past 25 years. However, there is no doubt that prevention is the most important aspect, particularly patient education and the reduction of lifestyle risk habits and environmental factors.

GLOBAL SCENARIO

WHO- Around 9.6 million people worldwide are estimated to die from cancer in 2018.There are an estimated 657,000 new cases of cancers of the oral cavity and pharynx each year, and more than 330,000 deaths. The Cancer burden rises to 18.1 million new cases and 9.6 million cancer deaths in 2018

Cancer of the oral cavity (Oral cancer) is the 11th most common malignancy in the world. Despite the general global trend of a slight decrease in the incidence of oral cancer, tongue cancer incidence is increasing.

NATIONAL SCENARIO

Globocan (2018) Oral cancer is the most common cancer in India amongst men (16.1 % of all cancers), every year 92,011 new cases are registered, oral cancer is the second most common cancer in India amongst women (10.4 % of all cancers), every year 1, 19,992 new cases are registered, Total number of deaths are 72,616 on both genders, Around 80-90% of oral cancers are directly attributable to tobacco use, the mean age of oral cancer is 50 years the incident rate for oral cancer among females is significantly higher than males.

World Dental Federation (2018) -Recently, a trend has been observed towards increased incidence of oral cancer among young adults. This increase in incidence is only observed in patients with tongue cancer. In an analysis of 482 consecutive patients presenting with head and neck cancer to a tertiary care cancer centre in India, 135 out of the 286 (47%) oral cavity cancer patients did not have any known risk habits.

The National Center of Health Statistics and GLOBCAN (2014) IARC. In the result 369,200 new cases of oral cancer were reported worldwide, with two-thirds of the tumours diagnosed in developing countries. These tumours are responsible for approximately 145,328 deaths worldwide per year

Oral cancer is major public health problem in the Indian subcontinent, where it ranks among the top three types of cancer in the country. Presently in India, it is a major cause of morbidity and mortality.

Swathi Sharma, *et.al.,* (2018) A study was conducted on oral cancer statistics in India on the basis of first report of 29 population-based cancer registries, the data on age-adjusted rates of incidence of oral cancer and other associated sites for all ages (0–75 years) were collected from the report of the National Cancer Registry Programme 2012–2014 in 29 population-based control registries. The result of the study stated that among both males and females, mouth cancer had maximum age adjusted incidence rates (64.8) in the central zone, while oropharynx cancer had minimum a in all regions.The study concluded that oral cancer incidence increases with age with typical pattern of cancer of associated sites of oral cavity seen in the northeast region

Hareufah (2017) conducted a study on global incidence and risk factors of oral cancer were conducted. Data were collected from worldwide databases, such as Survival Epidemiology and End Result. The highest incidence of these cancers is mainly reported in South and Southeast Asia and some countries in southern Europe. They witnessed more cases of anterior tongue cancers mainly affecting the young age patient group. Several countries in Europe showed a significant increase in oral cancer prevalence, such as in Germany. Studies have reported an alarming lack of awareness about oral cancer, its symptoms, causes, and these gaps in knowledge need to be addressed by further public education, possibly targeted to high-risk groups.

Anshuman Kumar, *et.al.,* (2017) conducted a study was on Oral cancer incidence trends in Delhi, the data of oral cancer proportion and incidence for the year 1990–2014 were taken from Delhi. The data were segregated by sex, age, and

anatomical site and were analyzed to calculate age-specific incidence rates and expressed in cases per 100,000 persons/year. The result of the study stated that the highest incidence for both genders was seen in the age group 50–59 years and the lowest incidence for both genders was in youngest age group (<20 years) for all the years from 1990 to 2014. The relative proportion of oral cancer among all types of cancer in Delhi has shown alarming rise from the year 2003 onward. The study concluded the increasing relative proportion of oral cancer can be implicated in increased consumption of gutkha chewers in the last decade of the 20th Century.

Rajeshkumar Konduru, *et.al.,* (2016) conducted a population based cross sectional study to assess the level of oral cancer awareness among the population residing in rural villages of Kancheepuram district. Among the total interviewed (N=500) participants, 252 (50.4%) (CI-46.02-54.78) of the participants were aware about lung cancer followed by oral cancer 219; 43.8% (CI-39.45-48.15). Among the participants who were aware about oral cancer (n=219), most of the people were aware that alcohol (150; 68.5% (CI-62.34-74.65) and tobacco usage (147; 67.1 (CI-60.9-73.35)) are risk factors. This study concludes that general awareness about the oral cancer is very poor in these rural areas in South India and there is a need to device public health programme to improve the awareness and active screening of high risk population in rural areas area.

Safia Ali Al-Attas (2014) conducted a cross sectional study was on prevalence of Potentially Malignant Oral Mucosal Lesions among Tobacco Users in Jeddah, Saudi Arabia. A sample size of 599 was collected and each participant underwent clinical conventional oral examination and filled a questionnaire

providing information on demographics, tobacco use and other relevant habits. The most common form of tobacco used was cigarette smoking (65.6 %) followed by Shisha or Moasel (38.1%), while chewing tobacco, betel nuts and gat accounted for 21-2%, 7.7%, and 5% respectively,. The study concluded that smoking was associated with a wide range of oral mucosal lesions , those suspicious for malignancy being linked with chewable forms, indicating serious effects.

Toru Nagao, *et.al.,* (2013) conducted a study was on Oral precancer and the associated risk factors among industrial workers in Japan's overseas enterprises in the UK. In the study four hundred and eighty four subjects attended for oral mucosal screening. (mean age 39.9 years. 63.4% examined were male. 31.3% of males and 26.6% of females smoked daily.. The study concluded that the Japanese nationals working in managerial positions in the UK and daily regular smokers in the industries visited were found to be at a high risk of oral pre cancer.

The above mentioned studies showed that oral cancer and its prevalence have imposed its foot prints into the Indian population. These consequences increases the mortality and morbidity rate in the country. But many study proved that appropriate teaching regarding oral cancer can prevent prevalence and occurrence of cancer and its complications. Hence the awareness to risk factors, primary prevention through the elimination of tobacco consumption, moderation of alcohol intake and chemoprevention are urgently needed

So the investigator is interested to conduct the study to assess the effectiveness of computer assisted teaching program on knowledge regarding oral cancer among industrial workers in a selected rural area.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of computer assisted teaching program on knowledge regarding oral cancer among industrial workers in Olapalyam Village at Namakkal District.

OBJECTIVES

1. To assess the level of pre test and post test knowledge regarding oral cancer among industrial workers.
2. To assess the effectiveness of computer assisted teaching programme on knowledge regarding oral cancer among industrial workers
3. To find out the association between post test knowledge regarding oral cancer among industrial workers with their selected socio demographic variables

HYPOTHESIS

H_1 : There was a significant difference between the pre test and post test knowledge score of industrial workers.

H_2 : There was a significant association between the post test knowledge score among industrial workers with their selected socio demographic variables.

OPERATIONAL DEFINITIONS

Assess

It is a statistical measurement of knowledge scores regarding oral cancer among industrial workers by structured questionnaire.

Knowledge

In this study it refers to the written responses received from the industrial workers to the knowledge items listed in the structured interview questionnaire.

Effectiveness

In this study it refers to significant difference between the pre-test and post-test score of knowledge regarding oral cancer among industrial workers.

Computer Assisted Teaching Programme

In this study it refers to systematically arranged group of instruction provided through computer assisted teaching programme regarding oral cancer.

Oral Cancer

In this study it refers to the knowledge on which the industrial workers knowledge level is been assessed via structured questionnaire.

Industrial Workers

In this study it refers to a group of people who are all working in industries in and around Olapalayam village whose value of knowledge regarding oral cancer

ASSUMPTIONS

- Industrial workers of the Olapalayam village will have minimum knowledge regarding oral cancer

- Computer assisted teaching program will enhance knowledge of industrial workers

DELIMITATION

- The study is limited to only industrial workers in selected rural area.

- It is limited to 50 industrial workers who are present at the time of study.

- The study is delimited to four weeks.

PROJECTED OUTCOME

- Present study would help to evaluate the knowledge regarding prevention of oral cancer among industrial workers

- The study findings will be helpful in creating awareness and preventing oral cancer among the industrial workers in rural area.

CONCEPTUAL FRAME WORK

A conceptual framework is defined as theoretical approach to the study of problems that are scientifically based which emphasizes arrangement and classification of concept

The conceptual framework for the study was derived from **Ludwing Van Bertalanffy General modified general system theory (1968).** It serves as a model for viewing people as interacting with the environment. According to this theory a system consists of interacting components within a boundary that filters the type and rate of exchange within an environment.

System can be opened or closed. Open system are open for the exchange matter, energy and information with their environment from which the system receives inputs and gives output in the forms of matter, energy and information. The open system receives various inputs. Inputs are sources needed by the system. Inputs are transformed in a throughput here the matter, energy and information are continuously processed by the system and released as outputs. The system returns output to the environment. The feedback is environment response of the system. Feedback may be positive, negative or neutral.

The system has four components

Input

Input is the type of information that enters in to the system. In this study, input is the demographic data, assessing the knowledge on oral cancer by using structured interview questionnaire.

Throughput

Through-put is the manipulation and activity phase. A system transforms, creates and organizes the process known as throughput, which results in a reorganization of the input. In this study through put is the Computer assisted teaching programme regarding knowledge on oral cancer. That is after the implementation of the Computer assisted teaching programme on oral cancer ,a changes takes place in the industrial workers knowledge. The computer assisted teaching programme helps the industrial workers to understand the meaning, causes, causative agent and risk factors, prevention, management and rehabilitation of oral cancer.

Output

Out-put is the end product of a system. Output is the change in knowledge after the implementation of computer assisted teaching programme regarding oral cancer which was measured using a structured interview questionnaire. In this study the output encompasses the knowledge aspects as inadequate knowledge, moderately adequate knowledge and adequate knowledge on oral cancer

Feedback

Feedback emphasizes to strengthen the input and throughput, if there is any inadequacy in output. It lays emphasis on strengthening the input and throughput. It is necessary if the result showed any poor knowledge.

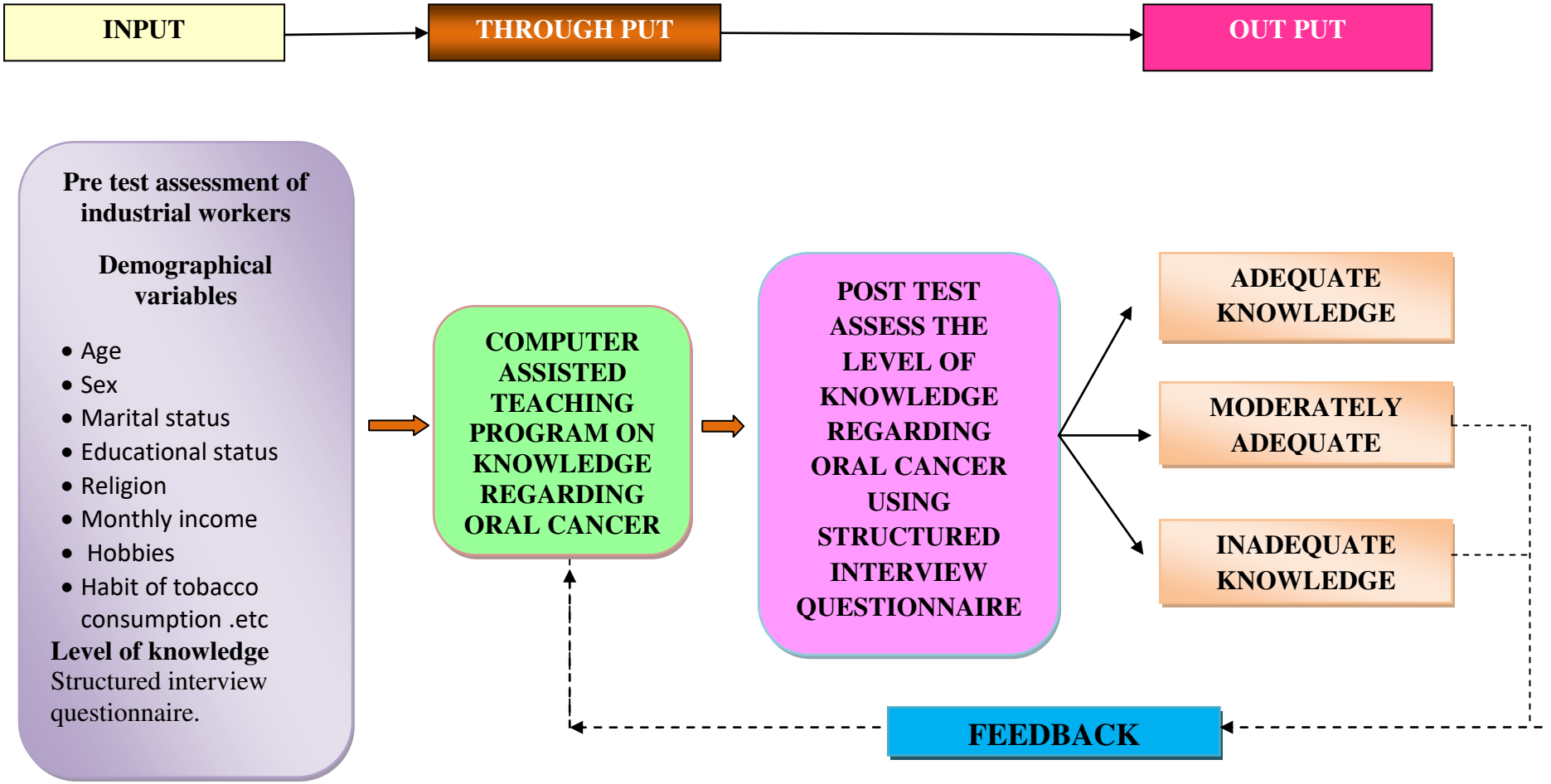

Fig. 1.1: Conceptual frame work based on Ludwig Von Bertalanffy modified general system model to assess the effectiveness of Computer assisted teaching regarding Oral cancer (1968)

CHAPTER – II

REVIEW OF LITERATURE

Review of literature is a summary of research on a topic of interest, often prepared to put research problem in the context as the basis for an implementation project. **(Polit and Hungler, 2012)**

A literature review is an account of the previous efforts and achievements of scholars and researchers on an phenomenon. **(Suresh K Sharma, 2014)**

Review of literature explains the research and non research literature to broaden the understanding and gain insight into the selected problem under study. A review helps to lay the foundation for a study and can also inspire new research ideas. The task of reviewing literature involves the identification, selection, critical analysis and written description of existing information on a topic.

Review of literature is grouped into:

1. Review of literature related to risk factor about oral cancer

2. Review of literature related to knowledge on oral cancer.

3. Review of literature related to prevention of oral cancer

4. Review of literature related to prevalence of oral cancer

I. REVIEW OF LITERATURE RELATED TO RISK FACTORS ON ORAL CANCER

Mahapatra, *et.al.,* (2015) conducted a case-control study to find the association between gutka consumption and oral cancer, and to study the association between oral cancer and other tobacco products. The study consists of 134 cases and 268 controls, the study was carried out at the Kasturba medical hospital in Manipal, India. The participants were personally interviewed by the investigator using a structured questionnaire on consumption of tobacco, poly-ingredient dip products, alcohol, dietary practices, oral hygiene practices and demographic status. The result came as the prevalence of leukoplakia was significantly elevated among tobacco users as compared to non-users (11% vs 2.5%; $p<0.001$) The percentage of leukoplakia was almost similar in both tobacco smokers and chewers (9% vs 11%; $p=0.304$. The findings of the present study showed a positive effect of tobacco use and prevalence of leukoplakia. Also the prevalence was very high among Gond tribe, a marginalized population living in central India. The findings of the present study showed a positive effect of tobacco use and prevalence of leukoplakia..

Khushboo Singh, *et.al.,* (2014) conducted a study on Relative Risk of Various Head and Neck Cancers among Different Blood Groups. The study was conducted among Three hundred sixty two diagnosed cases of different type of head and neck cancers and 400 controls were selected from four hospitals of New Delhi, India. The information regarding the type of head and neck cancer was obtained from the case sheets of the patients regarding their socio demographic profile,

dietary history using a structured performa. In the result oral cancer patients showed maximum number in blood group O followed by B, A and AB. Significant pattern of distribution was seen among the patients of esophageal cancer, laryngeal cancer and salivary gland cancer as well (p= 0.003, p=0.000 p=0.112 respectively. The present study reveals that there is an inherited element in the susceptibility or protection against different types of head and neck cancers. Blood group A was found to be a potential risk factor for the development of oral cancers, esophageal cancers and salivary gland cancers while blood group B was found to be a potential risk factor for laryngeal cancers.

II. REVIEW OF LITERATURE RELATED TO KNOWLEDGE ON ORAL CANCER

Neel Shimpi, *et.al.,* (2018) conducted a cross-sectional study on Patient awareness/knowledge towards oral cancer. An 21-question survey was distributed to patients in waiting rooms of a large integrated medical-dental health system serving north-central Wisconsin. The result of the study stated that the knowledge about tobacco and alcohol use and increased OC risk was reported by 94% and 40%, respectively. About 50% reported knowledgeability regarding cancer-associated symptomology. Tobacco cessation was reported by 20% of responders. Receipt of education on OC from healthcare providers and human papilloma virus links to OC causation was reported by 38 and 21%, respectively. In conclusion the study concluded that patients recognized links between tobacco and OC risk but demonstrated lower knowledge of other causal factors.

Tathagata Bhattacharjee, *et.al.,* (2018) conducted a study on Oral cancer awareness and attitude among people with different occupations. The study was conducted N. R. S. Medical College and Hospital, Kolkata, West Bengal. Sixteen closed-ended questions were used to assess the awareness of oral cancer. Responses were scored in accordance with the defined rules. Patients' attitude toward oral cancer screening was also assessed using ten additional questions under four headings. Information regarding the oral habits was recorded using the WHO steps questionnaire. The result was statistically significant difference ($P = 0.0001$) in general awareness of oral cancer was seen among various occupational groups.

Saraswathi Gopal, *et.al.,* (2016) conducted a study on the awareness and knowledge of oral cancer among dental patients visiting Meenakshiammal Dental College, Chennai.. The study was carried out to evaluate the awareness of oral cancer A self-administered questionnaire with ten structured questions were prepared and distributed to 500 patients above 20-60 years of age group to obtain the information. The result of awareness questionnaire showed that 47.6% of the respondents were aware of the term called oral cancer and the survey result showed that most of the patients related oral cancer occurrence to older age (68.3%). About 60.2% of patients had knowledge about the signs, symptoms and complications of oral cancer. In the conclusion the dental patients revealed a lack of public knowledge and need for more structured awareness programs.

Akshaya Srikanth Bhagavathula, *et.al.,* (2015) conducted a study to assess knowledge and awareness of oral cancer in the early identification of risk factors among undergraduate dental students. A total of 162 undergraduate dental students

at International Islamic University, Malaysia, were approached to participate in the study. A 9-item pretested questionnaire contains questions on oral examination, oral cancer risk factors, and requests for further information. In the result of the study the response rate of the study was 70.3% (114/162), with 26 (22.8%) males and 88 (77.2%) females. The study concluded that there is a lack of awareness about risk factors among undergraduate dental students regarding oral cancer.

Devadiga, *et.al.*, (2015) conducted a study to assess the knowledge of risk factors for oral cancer among adults attending the dental hospitals in Karnataka. Structured interview questionnaire was used to collect the data. The result of the study was some 69.8% (n=166) and 37.8% (n=90) respectively were able to correctly identify tobacco and alcohol as risk factors for oral cancer. Only 20.2% (n=48) and 18.1% (n=43) respectively were able to correctly identify a white lesion and a red lesion as early signs of oral cancer. In conclusion there is a lack of knowledge of risk factors and signs of oral cancer was low and misinformation was high among adults.

K.S Vassi reddy (2015) conducted a cross-sectional study to assess the awareness and knowledge of oral cancer including its risk factors, signs and symptoms, and beliefs in a population of Guntur area.. In the result it was founded that oral cancer was the least mentioned cancer (68%). There was awareness of the relationship between oral cancer and smoking among 98% subjects, but less of the association with alcohol misuse (28%). In the conclusion the researcher stated that there is a general lack of awareness and knowledge on oral cancer in a population of Guntur area.

Radhika R Pai, *et.al.,* (2015) conducted a descriptive study on Nurses' Knowledge and Education about Oral Care of Cancer Patients Undergoing Chemotherapy and Radiation Therapy among 158 staff nurses working in oncology related areas from 4 different hospitals of Dakshina Kannada district and Udupi district of Karnataka state, India. In the result majority 81 (51.3%) of the staff nurses had poor knowledge of oral care in cancer patients whereas 87 (55.1%) reported that knowledge acquired through basic education in oral care is not sufficient. Most of the staff nurses 115 (72.8%) did not receive basic education in oral care of cancer patients. There was significant association between knowledge and variables such as designation (.005), years of work experience (.040) and years of experience in cancer wards (.000) at 0.05 levels. The conclusion of the study was the lack of knowledge suggest the need to develop and implement continuing nursing education programs on oral care specifically for patients receiving cancer treatments.

Roopali shankeshwari, *et.al.,* (2015) a study was conducted Awareness regarding oral cancer and oral precancerous lesions among rural population of Belgaum district, India. Data were collected via face to face interviews using a pretested and validated questionnaire in the Belagaum village. The questionnaire comprised two parts: part one had questions concerning socio-demographic data and part two consisted of 25 questions pertaining to people's attitudes to and awareness of risk factors for oral cancer and precancerous lesions.In the result the participants, 17% identified all the symptoms of oral cancer and 27.8% identified all the symptoms of oral precancerous lesions. Approximately 90% of the participants had never noticed statutory warnings on tobacco and alcohol products. In conclusion the

study highlights a need for education concerning the risk factors for oral cancer, its clinical manifestations and the impact of adverse habits on long term health.

Ramandeep, *et.al.,* (2014) conducted *a* cross-sectional study on Oral health literacy among clients visiting a Rural Dental College in north India- The study conducted on 450 participants who visited the Out Patient Department (OPD) of Gian Sagar Dental College and Hospital for a period of two months (Nov-Dec, 2013). A questionnaire was given to each of the participants. Oral health literacy was. In the result Low oral health literacy scores were reported in 60.2% (271) participants. More than 60% of the study participants had knowledge about dental terms such as 'dental caries,' and 'oral cancer.' Only 22% of the graduates had a high literacy score.). In the conclusion the majority of the participants had low literacy scores.

Yogesh S Kumar, *et.al.,* (2014) conducted a study on Level of Cancer Awareness among Women of Low Socioeconomic Status in Mumbai Slums. Data of consenting participants, collected using structured questionnaire, was differentiated into good and poor level of awareness using point based grading procedure. The result of the study shows mean age of 182 participants, majority (90.5%) belonging to lower socioeconomic strata, was 43.0±8.8 years. Knowledge about cancer (84.6%) was good compared to knowledge of cancer screening (35.1%), awareness being higher among richer and more educated. Major sources of information were friends or relatives (46.1%) and media (35.2%). Only 6.6% had undergone prior screening. In the conclusion of the study in spite of appreciable knowledge about

cancer, creating awareness about screening, its availability, and motivating the general population for screening is necessary.

III. REVIEW OF LITERATURE RELATED TO PREVENTION OF ORAL CANCER

Delfin Lovelina Francis, *et.al.,* (2018) conducted a study on knowledge about causes and prevention of oral diseases among higher secondary school students in Vellore District, Tamil Nadu. The survey was carried out among 400 schoolchildren who were in the age group of 16–18 years studying in various schools of Walajapet in Vellore district. Data on knowledge about oral diseases were collected by means of self-administered questionnaire. The studies result was the secondary school students had adequate level of knowledge on causes and prevention dental caries, 267 (66.7%) school students were aware of causes and prevention of periodontal diseases, only 195 (48.7%) school students had awareness on cause and prevention of oral cancer, and 305 (76.2%) students were familiar with causes and prevention of dental malocclusion. The study's conclusion was the majority of schoolchildren showed adequate knowledge towards the causes and prevention of dental caries.

Fateme Arbabi-Kalat, *et.al.,* (2017) conducted a study on Effect of Education on Promoting Oral Cancers Knowledge of High School Students in Zahedan, Iran. 400 male and 400 female high school students were evaluated. The students were asked to fill out a standard questionnaire on oral cancer awareness. Three months after the distribution of the pamphlets, the same questionnaire was filled out by the same subjects. Results shows that there were no significant

differences in knowledge scores between male and female students before the distribution of pamphlets, with scores of 5.6 ± 4.3 and 5.6 ± 1.7 in females and males, respectively (P = 0.96)., the knowledge scores of males and females had increased, with statistically significant differences. In the present study, despite the fact that the educational pamphlet was useful, it had low efficacy, which might be attributed to the more interesting nature of other more active educational methods, such as lectures or workshops for this age group.

Ummar managlath, *et.al.,* (2015) conducted a study on Recent trends in prevention of oral cancer, the study was conducted in the Muslim education society institute Kerala ,the patients was assessed by metastasis record, physical examination Psychosocial assessment, radiographic examination, cytology biopsy and etc. The result of the study was retinoids, beta carotins, N-acetylcysteine are few chemical factors that prevents oral cancer. The conclusion of the study was despite advances in cancer treatment, the survival rates of patients suffering from head and neck cancer has not improved substantially. The data emphasize the necessity of early detection of the disease as survival is influenced by the extent of the disease at the time of diagnosis.

Jin ye fu, *et.al.,* (2014) conducted a study to evaluate the relation of tea consumption with the risk of oral cancer incidence. The study was conducted on hospitalized population for evaluating the association of tea consumption with oral cancer risk in China. Black tea and green tea were separately analyzed. 723 cases and 857 controls were included. Unconditional multiple logistic regression model was used to calculate odds ratios (ORs) and 95% confidence intervals (CIs) of oral

cancer for tea consumption. the result of the study was the green tea consumption ⩾8 g/day compared with <4 g/day were 0.72 (95% CI 0.54, 0.93) for men, and 0.93 (95% CI 0.74, 1.26) for women. The ORs for black tea consumption ⩾6 g/day compared with <2 g/day were 0.97 (95% CI 0.74, 1.20) for men, and 0.91 (95% CI 0.68, 1.23) for women. Green tea intake was significantly associated with reduced risk of oral cancer in men, but not in women, and the association was stronger in heavily smoking men. There was no indication that black tea consumption was associated with decreased oral cancer risk. The study concluded that that green tea consumption may decrease the risk of oral cancer in men especially for those smoking heavily.

Mohammad Akram, *et.al.,* (2014) conducted a cross sectional study on Patient Related Factors Associated with Delayed Reporting in Oral Cavity and Oropharyngeal Cancer. The Study was conducted at JN Medical College (Aligarh Muslim University), a government tertiary care hospital of northern India. observational study was conducted using a structured questionnaire.. The final result of the study stated that delay in reporting to HCP was present in 156 (60%) patients. Among socio demographic factors delayed reporting was highly significant with older age group (P = 0.001), low socioeconomic status (P = 0.02), rural residence (P = 0.026) and with insufficient knowledge of Head and Neck cancer (P = 0.014), absence of fear (P = <.001) and use of alternate therapy (P = 0.001) were significant factors responsible for delay. Disclosure to other and motivation were statistically insignificant in our study. The study concludes that guidance towards interventions to reduce patient delay.

Melda Misirlioglu, ***et.al.,*** **(2013),** conducted a study to determine the level of oral cancer awareness and knowledge among patients referred to the Department of Oral and Maxillofacial Radiology in Central Anatolia. The study was conducted with 1,125 patients who applied to the school of dentistry for routine dental examinations. Results show that only 48.9% of all patients showed awareness of oral cancer, with awareness especially poor among lower socioeconomic groups. Awareness of oral cancer risk factors and signs and symptoms did not vary significantly between men and women (P> 0.5); however, older participants (aged 40-64 years) were more familiar with oral cancer signs than younger participants. More than half of all participants (56.8%) were unaware of the common clinical presentations of oral cancer. The study concludes that knowledge regarding oral cancer to be quite low.

Alphan Shanon Kumar V.K. (2013) conducted a study on effectiveness of self instructional module on knowledge regarding prevention of oral cancer among polytechnic students in selected institutions at Bengaluru, 50 students from a polytechnic in Bangalore was selected as the samples, A cross sectional study was conducted on population consisting of patient group enrolled in 2 case-control studies nested within a prospective cohort with Head and Neck Squamous Cell Carcinoma. The result of the study stated that oral HPV infection developing increased with increases in the number of recent oral sex partners (P _ .046, for trend) or open-mouthed kissing partners (P _ .023, for trend) but not vaginal sex partners. The study concluded that Oral sex and open-mouthed kissing are associated with the development of oral HPV infection and necessary health education program has to be conducted.

IV. REVIEW OF LITERATURE RELATED TO PREVALENCE OF ORAL CANCER

Padhiar Rutvij Ajay, *et.al.,* (2018) conducted a study to report the prevalence of oral cancer and its association with habits, age, gender, and site in Western population of Maharashtra. Data were collected from the previous records of patients. A total of 81,325 patients' data were obtained. Details regarding patient's habits, age, gender, and site with OC were recorded .Results shows that the prevalence of OC was 0.1%. The majority of patients were tobacco chewers (41.5%), followed by the group of those who were smokers, tobacco chewers, and alcoholic (28.1%). Majority of patients were in the age group of 60 years and above, followed by 40–59 with a male predominance, and buccal mucosa was the most common site followed by alveolus. This study concludes that there is a need to spread awareness about tobacco-related cancer and immediate consultation on suspicion of cancer.

Dr P Saravanan (2014) conducted a descriptive study On Neck Node Dissections For Oral Malignancies. The study was performed in Rajiv Gandhi Government General Hospital. This study was performed on 50 patients with oral cavity malignancy who underwent neck dissection, the study will be a prospective one and patients who are candidates to undergo neck node dissection are as samples. The result this study states male patients are affected more commonly than female depicting the fact that harmful practices related to tobacco usage and alcohol consumption are widely prevalent among the male population thus placing them at risk for carcinoma of the oral cavity secondly the age incidence of oral malignancies

were mostly 40 to 60 years. In conclusion it was founded that patients with oral cavity malignancy spread of the primary disease through the lymphatic channels in to the neck nodes occurs more frequently.

Punit batnagar, *et.al.,* (2014) conducted a study on Prevalence study of oral mucosal lesions, mucosal variants, and treatment required for patients reporting to a dental school in North India.. The study was conducted in the dental outpatient department at the Institute of Dental Studies and Technologies, Modinagar, Uttar Pradesh, India. The result of the sytudy stated that Overall prevalence of OML was 1736 (16.8%), the most prevalent being smoker's palate (10.44%) followed by leukoplakia (2.83%), oral submucous fibrosis (1.97%), oral candidiasis (1.61%), recurrent aphthous stomatitis (1.53%), oral lichen planus (0.8%) and others (0.78%). The highest prevalence of the tobacco habit in both forms was recorded in the group aged 40–44 years and those aged between 60 and 64 years who wore dentures. Patients who consumed tobacco in any form or wore dentures had a significantly higher prevalence of OML ($P < 0.001$). In conclusion the researcher highlights diagnostic criteria, multifactorial risk factors to make standard measurements of OML a basis for planning and evaluating oral health programs for data collection.

CHAPTER – III

METHODOLOGY

This chapter describes the methodology adopted in this study to assess the effectiveness of computer assisted teaching programme on knowledge regarding oral cancer among industrial workers at selected rural areas, Namakkal.

This phase of study deals with research approach, research design, variables, setting of the study, population, sample, criteria for sample selection, sample size, sampling technique, development and description of the tool, content validity, reliability of the tool, pilot study, procedure for data collection, and plan for data analysis.

RESEARCH APPROACH

The research approach adopted for this study was Quantitative evaluative research approach.

RESEARCH DESIGN

The research design selected for present study was Pre experimental one group pre-test and post-test designs.

VARIABLES

Independent Variable

The independent variable of this study was computer assisted teaching programme on knowledge regarding oral cancer.

Dependent Variable

The dependent variable of the study was knowledge regarding oral cancer among industrial workers

Demographic Variables

The Demographic variables are age, sex, marital status, educational status, Religion, place of residence, monthly income, hobbies, habit of tobacco consumption, habit of alcohol consumption, dietary, availability of health services, sources of health information, previous exposure to information regarding oral cancer, is there any family history of oral cancer.

SETTING OF THE STUDY

The study was carried out in Olapalayam village (Komarapalayam) Olapalayam has a total population of 668 peoples among this male were 318, female were 350. There are about 186 houses in Olapalayam village. So the research conducted the study in this area

POPULATION

The population selected for the study was the industrial workers.

SAMPLE

The samples for this study were industrial workers who fulfilled inclusion criteria.

SAMPLE SIZE

The sample size consists of 50 industrial workers who are the residence at Olapalayam village

SAMPLING TECHNIQUE

Sampling technique adopted for this study was non probability convenient sampling technique.

SAMPLING CRITERIA

The sampling criteria to be selected based on the following criteria.

Inclusion Criteria

Industrial workers

- who are in the age group above 20 years.
- who can able to read and write Tamil.
- who were willing to participate in the study.

Exclusion Criteria

Industrial workers

- who cannot able to read and write Tamil.
- who were not willing to participate in the study.

DEVELOPMENT AND DESCRIPTION OF THE TOOL

The tool constructed for the study has two parts

PART- I: Consists of 2 sections

PART-II: Consists of Intervention tool

PART - I: DATA COLLECTION TOOL

Section A: Assessment of demographic variables: age, sex, marital status, educational status, Religion, place of residence, monthly income, hobbies, habit of tobacco consumption, habit of alcohol consumption, dietary, availability of health services, sources of health information, previous exposure to information regarding oral cancer, is there any family history of oral cancer.

Section B: Assessment of Knowledge on oral cancer

A structured interview questionnaire was developed by the researcher in order to assess the level of knowledge regarding oral cancer. It comprised of 30 structured interview questionnaire with a maximum score of 30 and minimum score of 0.

Scoring and Interpretation

Score	Percentage of scores	Level of knowledge
Below 15	0-50%	Inadequate
15-22	51-75%	Moderately adequate
Above 23	76-100%	Adequate

PART – II: INTERVENTION TOOL – COMPUTER ASSISTED TEACHING PROGRAMME

Computer assisted teaching programme aimed to help the industrial workers to gain knowledge regarding oral cancer . It comprises of

- Introduction and Incidence of oral cancer
- Definition of oral cancer
- Causes and risk factor of oral cancer.
- **S**igns and symptoms of oral cancer
- Prevention of oral cancer.
- Management of oral cancer.
- Conclusion.

CONTENT VALIDITY

Content validity of the structured interview questionnaire and Computer assisted teaching programme established by sending the structured interview questionnaire and content of Computer assisted teaching programme to the experts from various field such as Community Health Nursing ,Community medicine and statistician. Their opinion and suggestion were taken to modify the questionnaire and Computer assisted teaching programme.

RELIABILITY OF THE TOOL

The reliability of the tool was checked by split half method by using the spear man brown formula test-retest and the reliability score obtained was 0.85.

PILOT STUDY

The investigator selected Vattamalai for conducting the pilot study. Totally 5 industrial workers were selected .Pilot study was conducted for a period of one week after obtaining formal permission from industry management and respective authorities. Analysis of the findings showed that the administration of computer assisted teaching programme had a significant knowledge on oral cancer among industrial workers. The results of the pilot study revealed the feasibility and practicability of the study.

PROCEDURE FOR DATA COLLECTION

Data collection was carried out for a period of four weeks. During the first week the researcher selected the industrial workers based on inclusion criteria. There were totally 50 working in various industries were selected as samples by non-probability convenience sampling technique. A brief self introduction was given to the participants and the purpose of the study was explained, informed consent was obtained from the samples. The researcher gave assurance on confidentiality of the data collection to win their cooperation. Data were collected by using structured interview questionnaire devised by the investigator for 30 minutes for each participant.

Immediately after pre test, computer assisted teaching regarding knowledge on oral cancer was shown to the industrial workers. The time period for computer assisted teaching programme was 20-25 minutes. After 7 days, post test was conducted by using the structured interview questionnaire . All the subjects were

very much cooperative and the investigator expressed the gratitude towards samples for their cooperation.

The data was collected and organized for analysis.

PLAN FOR DATA ANALYSIS

The data collected were analyzed using both descriptive and inferential statistics.

Descriptive Statistics

- Frequency and percentage distribution were used to analyze the demographic variables of the adolescents.
- Mean and standard deviation were used to analyze the pre and post test level of knowledge on oral cancer among industrial workers.

Inferential Statistics

- Paired ‘t’ test were used to compare the pre and post test level of knowledge on oral cancer among industrial workers.
- Chi square test were used find out the association between post test knowledge on oral cancers among industrial workers with their selected socio demographic variables.

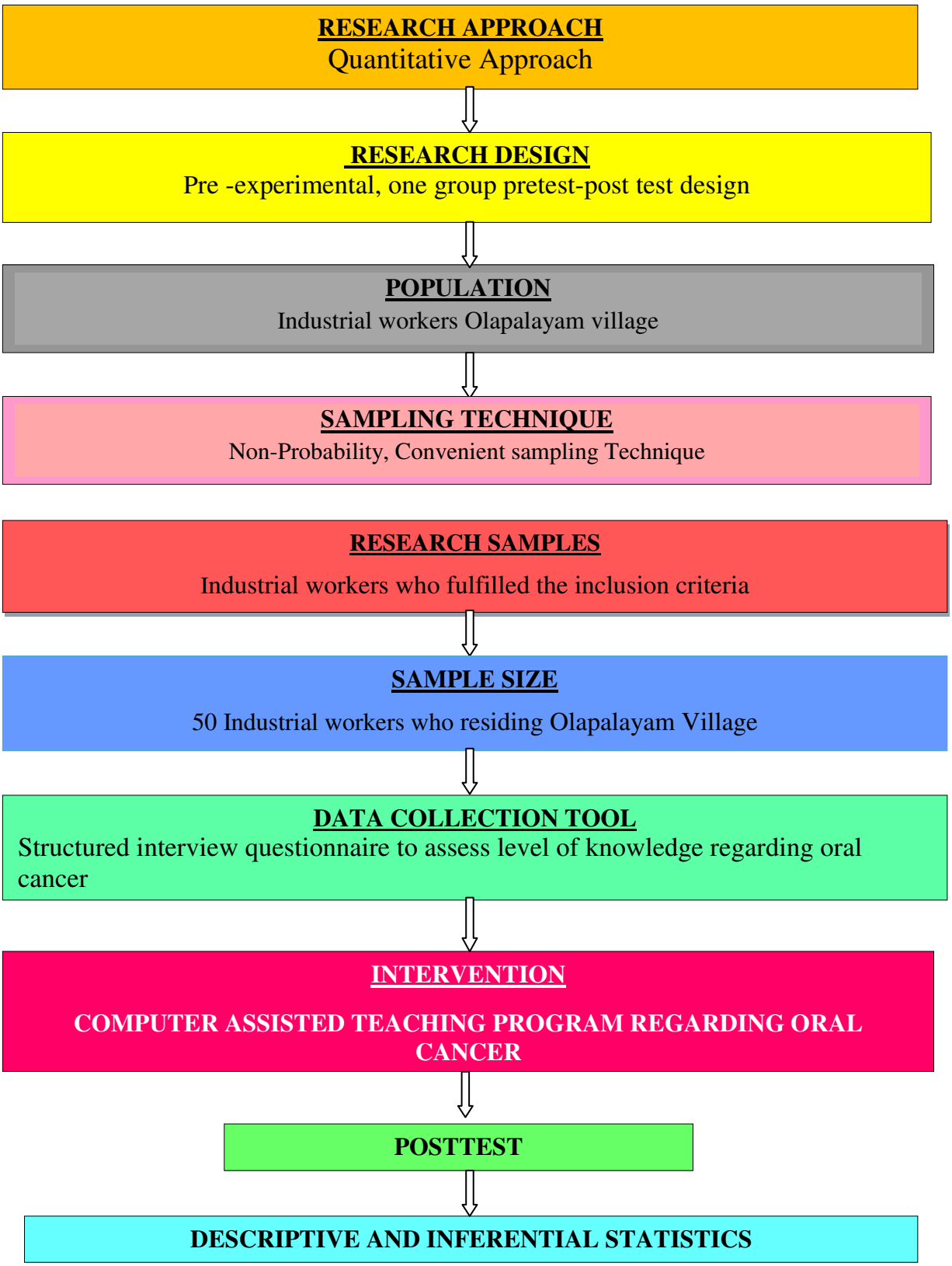

Fig. 3.1: SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

Analysis of data can be defined as "The systematic organization and synthesis of research and testing of research using those data"

This chapter deals with the analysis and interpretation of data collected from 50 industrial workers from Olapalayam village Kumarapalayam through structured interview questionnaire The present study was designed to assess the effectiveness of computer assisted teaching program on knowledge regarding oral cancer among industrial workers in selected rural area, the data has been coded and analyzed in the light of objectives and hypothesis of the study by using descriptive and inferential statistics (paired 't' test and chi-square test). Data was presented under the following headings.

Section-1: Description of the demographic data of industrial workers.

Section-2: Assessment of knowledge regarding oral cancer among industrial workers before the implementation of Computer assisted teaching programme

Section-3: Assessment of knowledge regarding oral cancer among industrial workers after the implementation of Computer assisted teaching programme

Section-4: Assessment of effectiveness of Computer assisted teaching programme on knowledge regarding oral cancer among industrial workers.

- Comparison of pre-test and post-test level of knowledge regarding oral cancer among industrial workers.

- Area wise comparison of mean, SD and mean percentage of pre –test and post –test level of knowledge regarding oral cancer among industrial workers.

- Assessment of effectiveness of Computer assisted teaching programme on knowledge regarding oral cancer among Industrial workers using paired 't' test

Section-5: Association between the pre test and post test knowledge among industrial workers with their selected demographic variables.

SECTION – I : DESCRIPTION OF FREQUENCY AND PERCENTAGE OF INDUSTRIAL WORKERS ACCORDING TO THE DEMOGRAPHIC VARIABLES

Fig. - 4.1

Frequency and percentage of industrial workers according to their demographic variables

(n = 50)

Demographic variables	f	%
1. Age		
a) 20 to30 years	14	28%
b) 31 to 40 years	23	46%
c) 41 to 50 years	9	18%
d) 50 years and above.	4	8%
2. Sex		
a) Male	38	3
b) Female.	12	24
3. Marital status		
a) Married	38	76
b) Unmarried	10	20
c) Divorced	2	4
4. Educational status		
a) Uneducated	3	6
b) Primary education	8	16
c) High school	28	56
d) Higher secondary	7	14
e) Degree and above	4	8

Demographic variables	f	%
5. Religion		
a) Hindu	42	84
b) Muslim	2	4
c) Christian	6	12
d) Others	0	0
6. Monthly income		
a) < Rs5000	0	0
b) Rs5001 to Rs10000	29	58
c) Rs10001 to Rs15000	21	42
d) Rs15001 and above	0	0
7. Hobbies		
a) Watching tv	18	36
b) Reading books	6	12
c) Playing games	19	38
d) No hobbies	7	14
8. Habits of tobacco consumption		
a) Yes	31	62
b) No	19	38
c) Sometimes.	0	0
9.Habits of alcohol consumption		
a) Yes	21	42
b) No	29	58
c) Sometimes	0	0

Demographic variables	f	%
10.Dietary pattern		
a) Vegetarian	45	90
b) Non-vegetarian	5	10
11. Availability of health services		
a) Health center	35	70
b) Government hospital	15	30
c) Private hospital	0	0
12. Sources of health information		
a) Newspaper/ TV/ other mass medias	35	70
b) Friends and relatives	7	14
c) Voluntary health agencies	8	16
d) Health personals	0	0
13. Previous exposure to information regarding oral cancer		
a) Yes	0	0
b) No	50	100
14. Is there any family history of oral cancer		
a) Yes	2	4
b) No.	48	96

From the above table 4.1 regarding **age** the highest percentage 23 (46%) of the industrial workers were in the age group of 31 years to 40 years, and regarding the lowest percentage 4 (8%) of the industrial workers were in the group 50 years and above.

Majority of the **industrial workers** were male 38 (76%), and the female industrial workers were 12 (24%).

Regarding the marital **status of the industrial workers** highest percentage 38 (76%) are married, and the lowest percentage 2 (4%) were divorced.

Regarding educational **status of the industrial workers** 28 (56%) of them were educated till high school, and the lowest percentage 3 (6%) of the industrial workers where uneducated.

Comparing in **religion** the highest percentage of industrial workers 42(84%) where Hindus, and the lowest percentage of industrial workers 2(4%) where Muslims

Comparing to **monthly income** highest percentage of income of industrial workers was 29(58%) Rs 5001 to 10000 and the lowest percentage of income of industrial workers 21(42%) was Rs 10001 to 15000

Regarding **hobbies** the highest percentage 19 (38%) of the industrial workers where having hobbies of playing games, and the lowest percentage 16 (12%) of the of the industrial workers where having hobbies of playing games.

In terms of **consumption of tobacco** the highest percentage 31 (62%) industrial workers had the habit of consuming tobacco, and the percentage 19 (38%) of the industrial workers did not have the habit of consuming tobacco.

In terms of **consumption of alcohol** the highest percentage 29(58%) industrial workers had the habit of consuming alcohol, and the percentage 21(42%) of the industrial workers did not have the habit of consuming alcohol.

Comparing in **dietary pattern** the largest percentage of the industrial workers 45(90%) where non vegetarians, and the least percentage of industrial workers 5(10%) where vegetarians

In terms of **availability of health services** for the majority industrial workers 35 (70%) get health services from Health centers and the industrial workers get lowest 15(30%) health services from government hospitals

Comparing **sources of health information's** the majority of the industrial workers 35 (70%) where availed information from mass Medias. and the lowest percentage 7(14%) previous history of health information was availed from the friends and relatives

Regarding the **previous exposure to information** towards oral cancer between the industrial workers where 0(0%) none of the workers had previous exposure to information regarding oral cancer.

Regarding **family history of oral cancer** highest percentage of industrial workers 48(96%) did not had any family history of oral cancer, and the lowest 2(4%) of the industrial workers had the family history of oral cancer

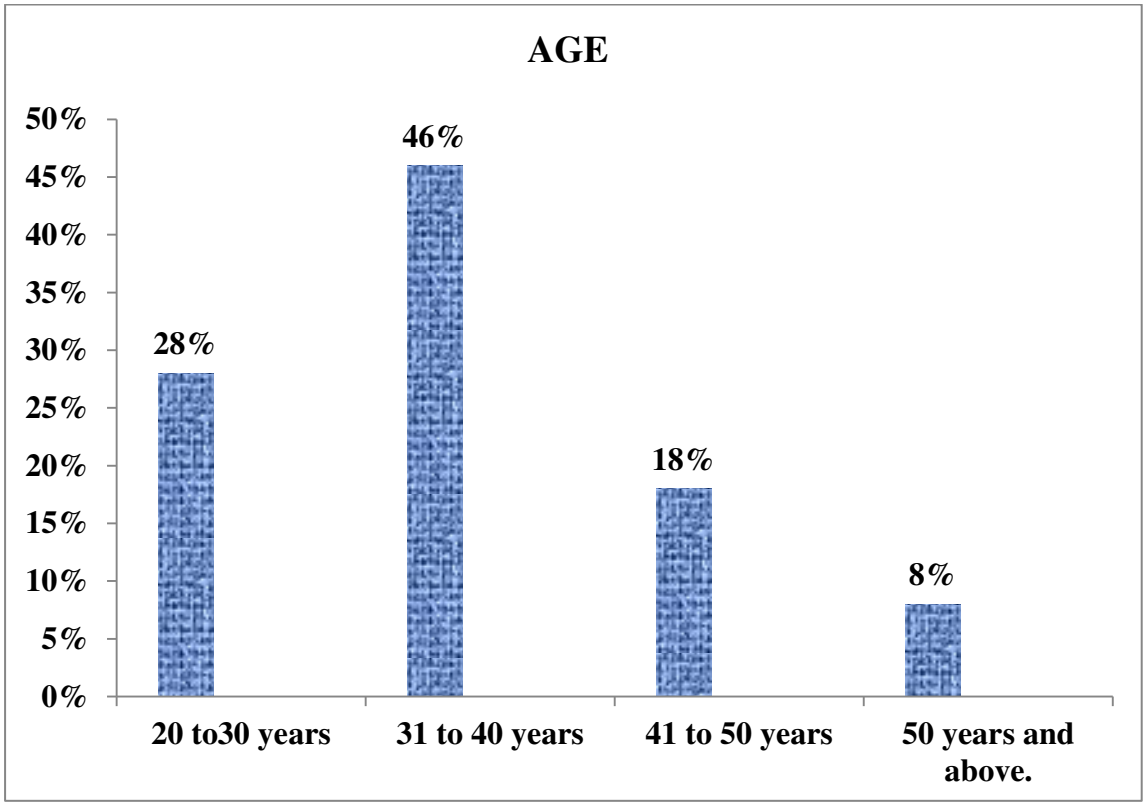

Fig. 4. 1: Frequency & percentage distribution of industrial workers according to Age

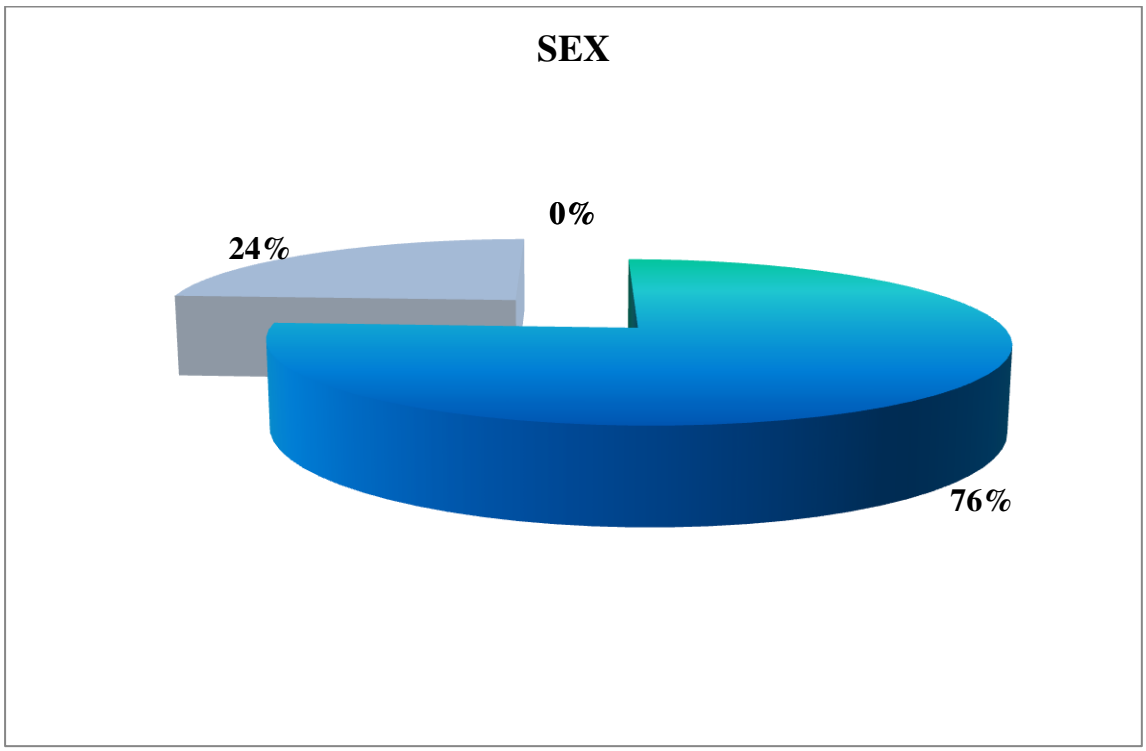

Fig. 4. 2: Frequency & percentage distribution of industrial workers according to sex

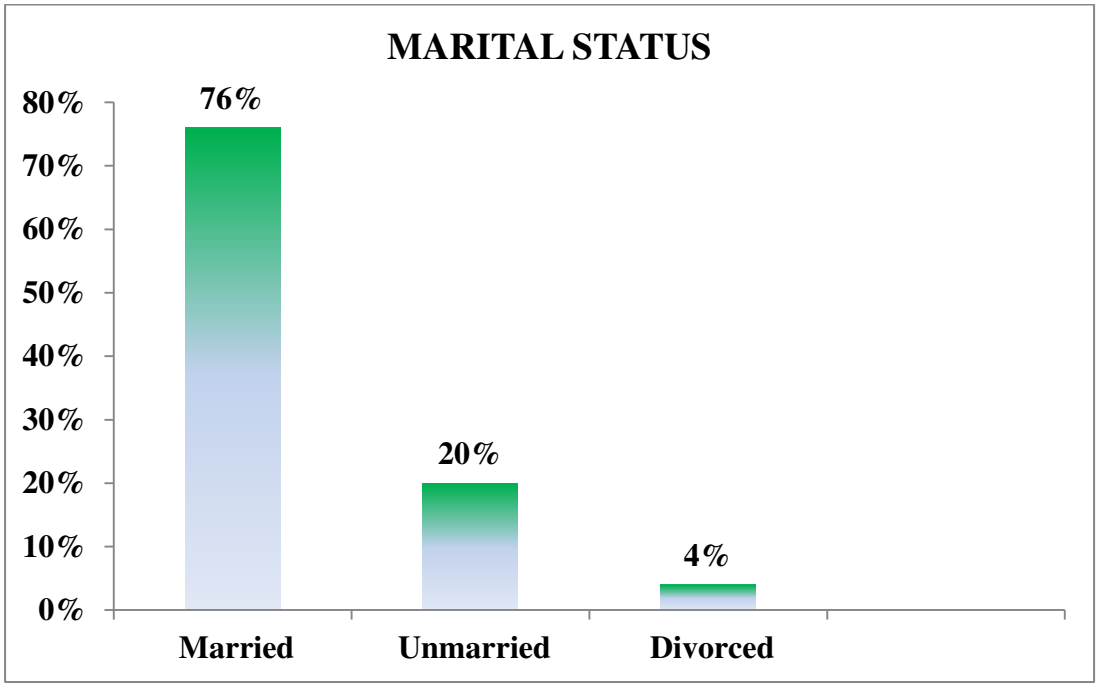

Fig. 4. 3: Frequency & percentage distribution of industrial workers according to marital status

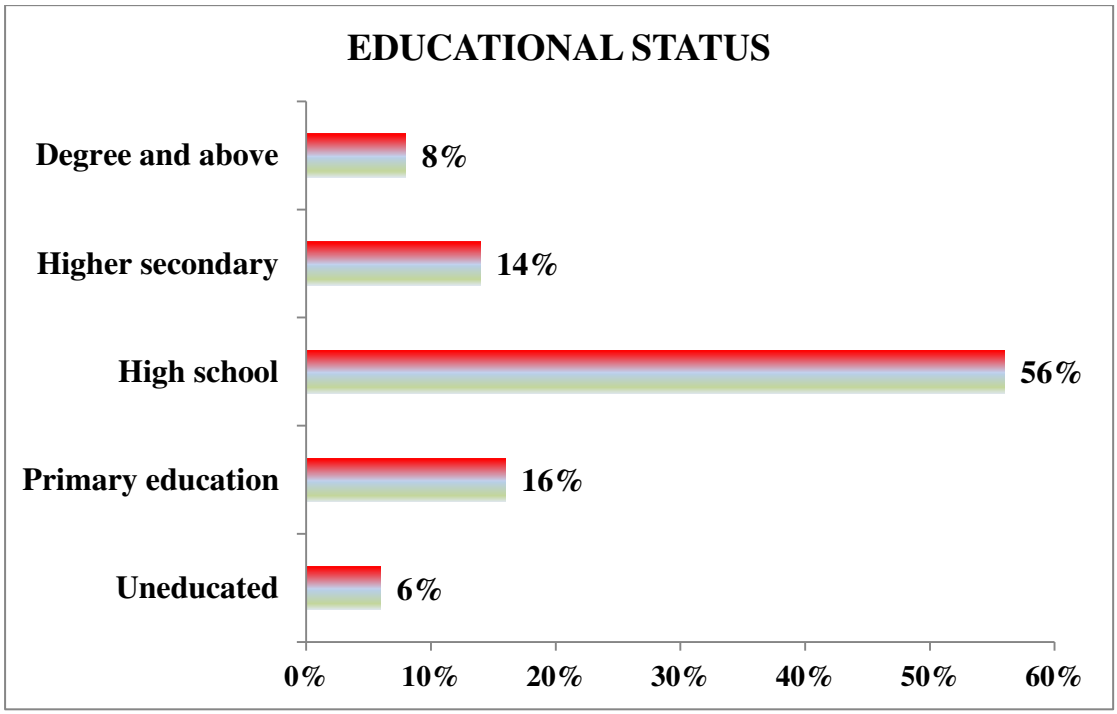

Fig. 4. 4: Frequency & percentage distribution of industrial workers according to educational status

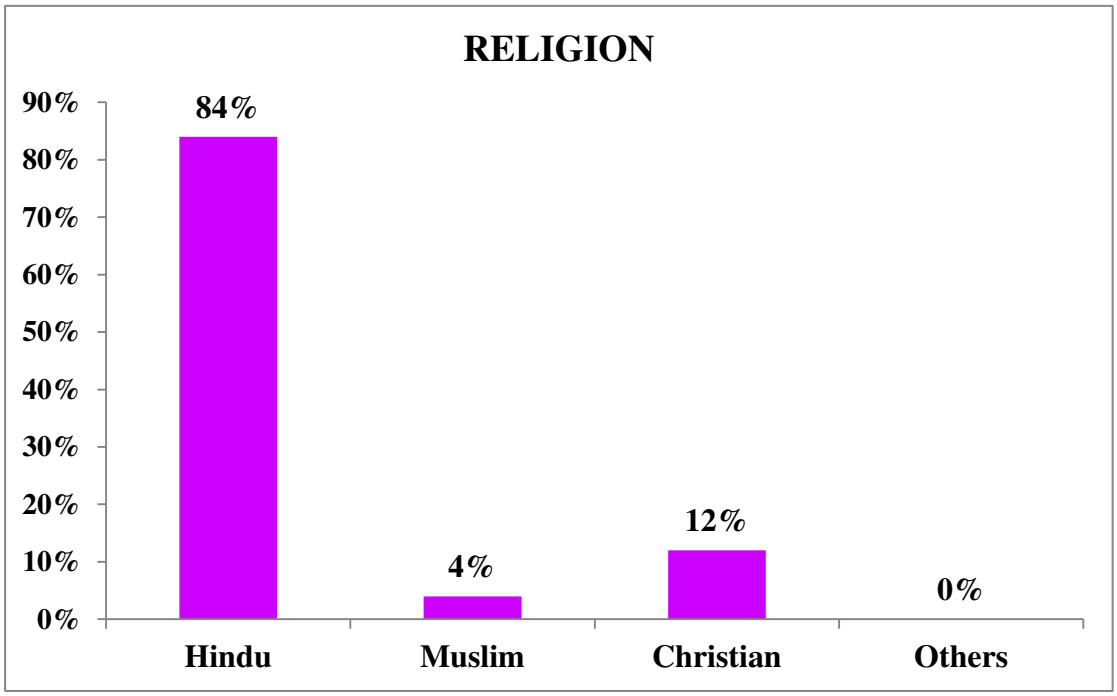

Fig. 4. 5: Frequency & percentage distribution of industrial workers according to their religion

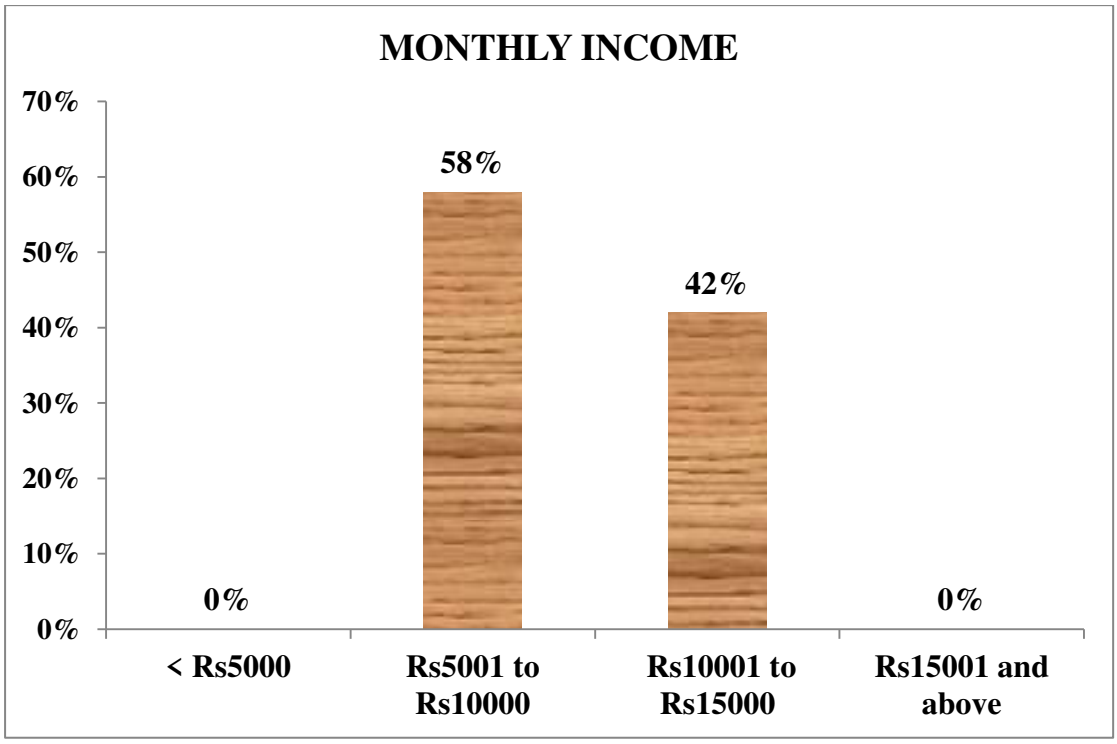

Fig. 4. 6: Frequency & percentage distribution of industrial workers according to their monthly income

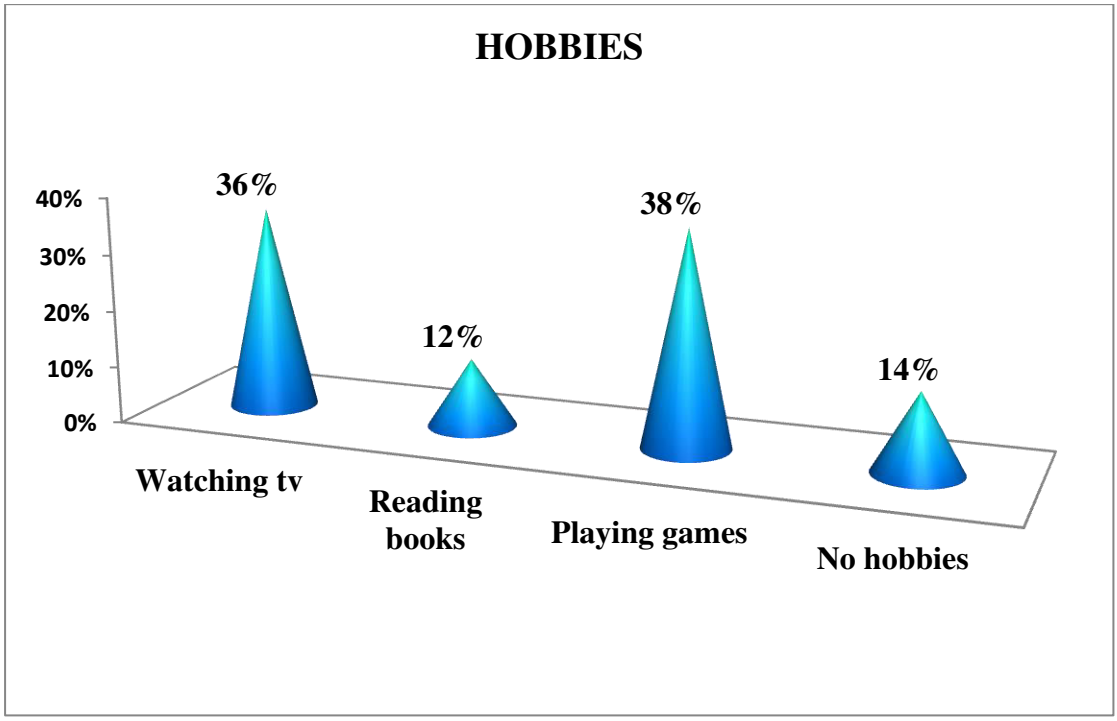

Fig. 4.7: Frequency & percentage distribution of industrial workers according to their hobbies

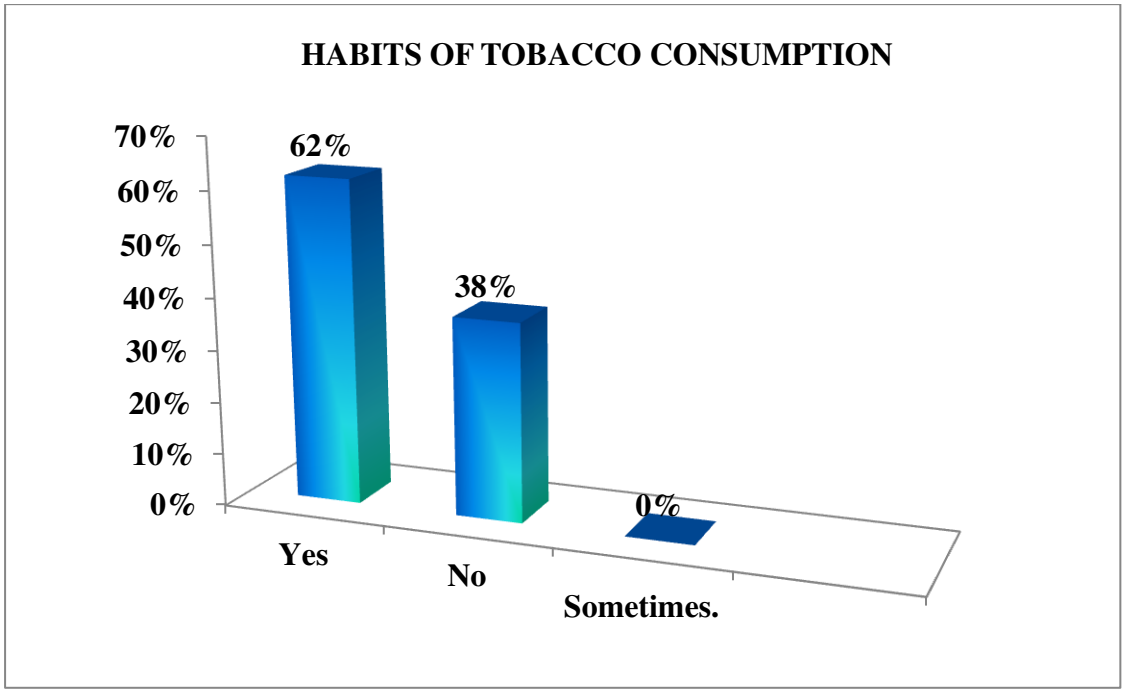

Fig. 4. 8: Frequency & percentage distribution of industrial workers according to habits of tobacco consumption

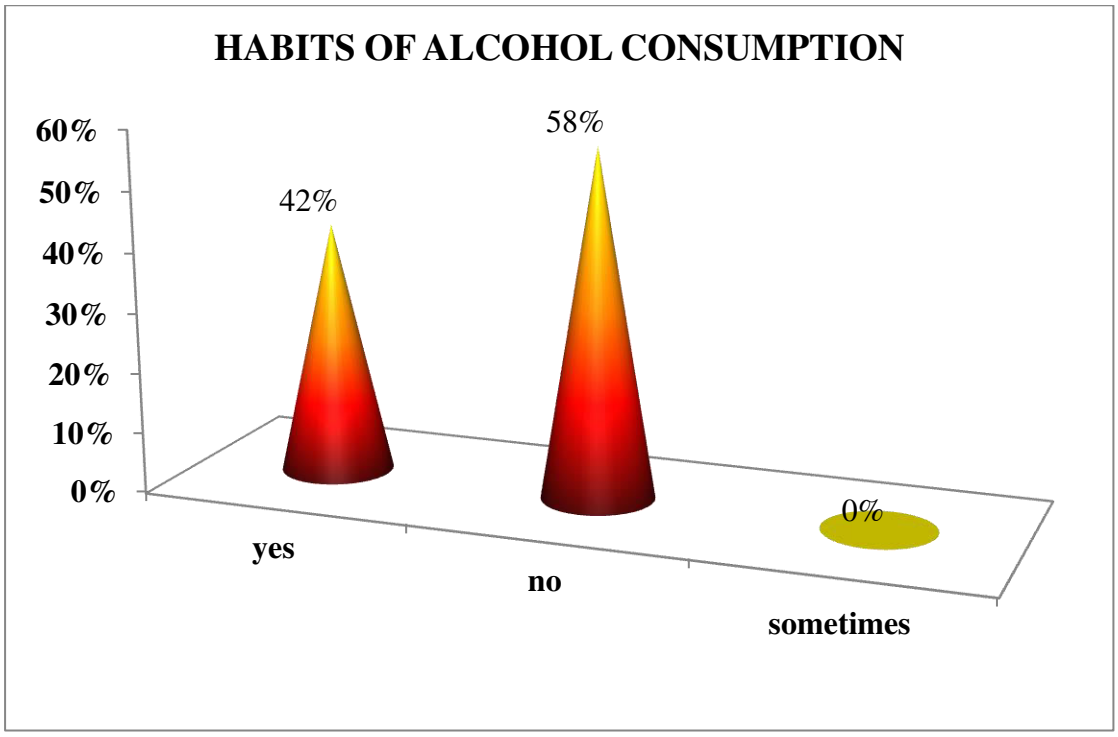

Fig. 4. 9: Frequency & percentage distribution of industrial workers according to habits of alcohol consumption

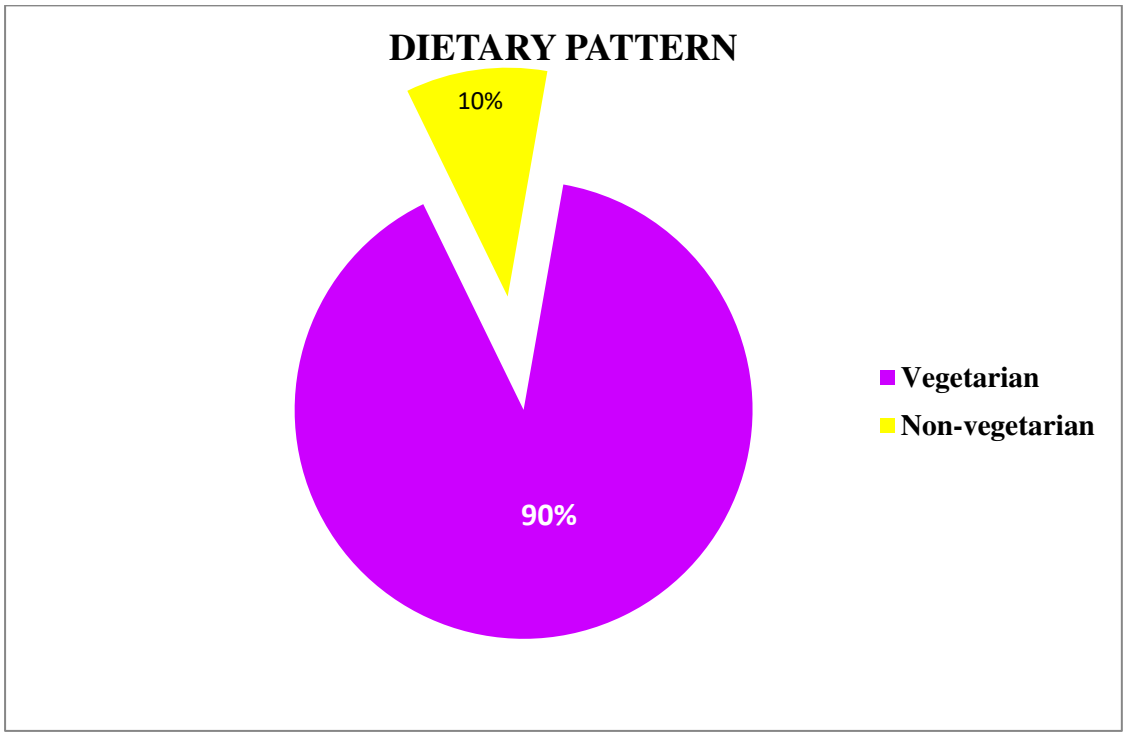

Fig. 4. 10: Frequency & percentage distribution of industrial workers according to dietary pattern

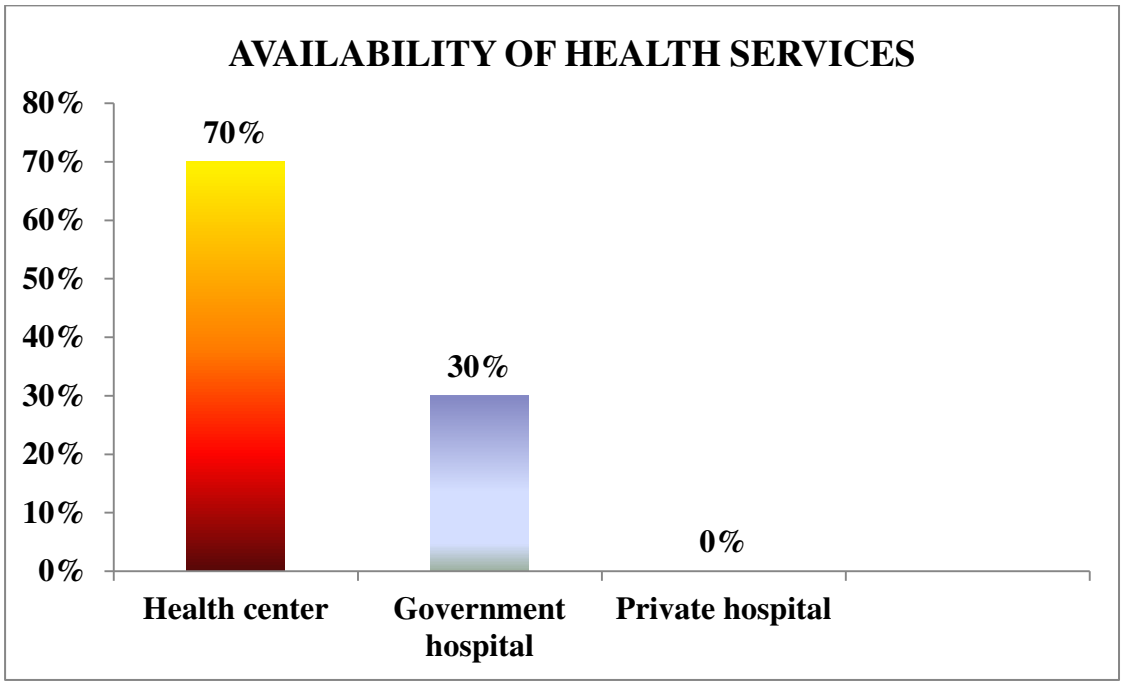

Fig. 4.11: Frequency & percentage distribution of industrial workers according to availability of health service

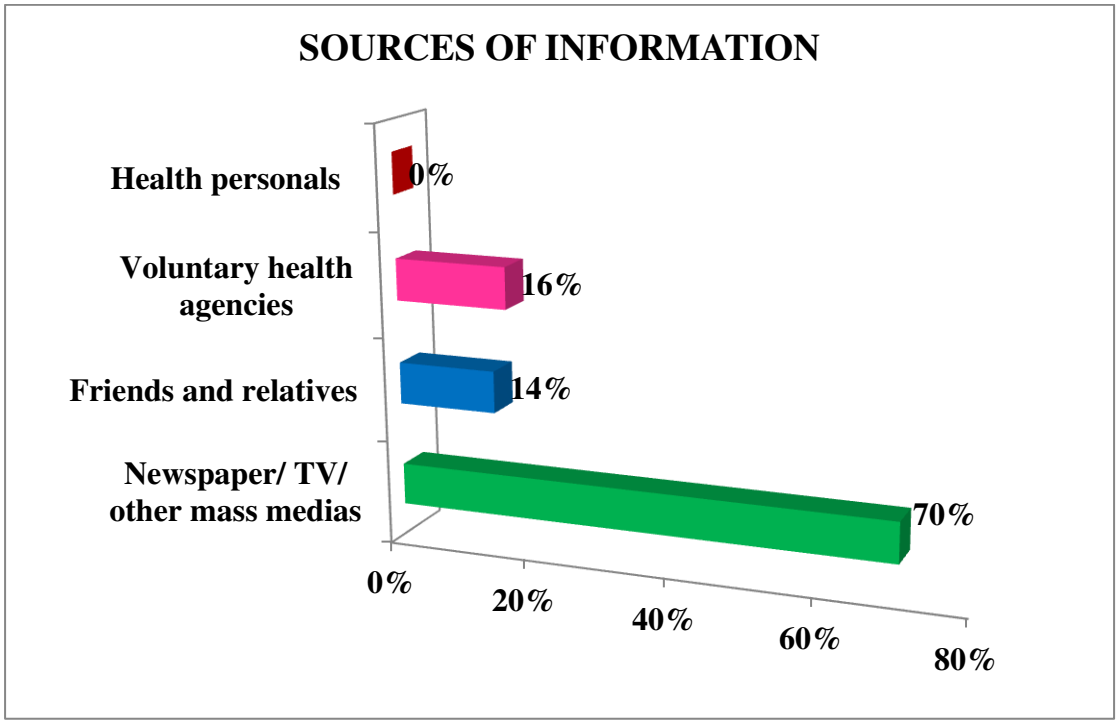

Fig. 4. 12: Frequency & percentage distribution of industrial workers according to sources of information

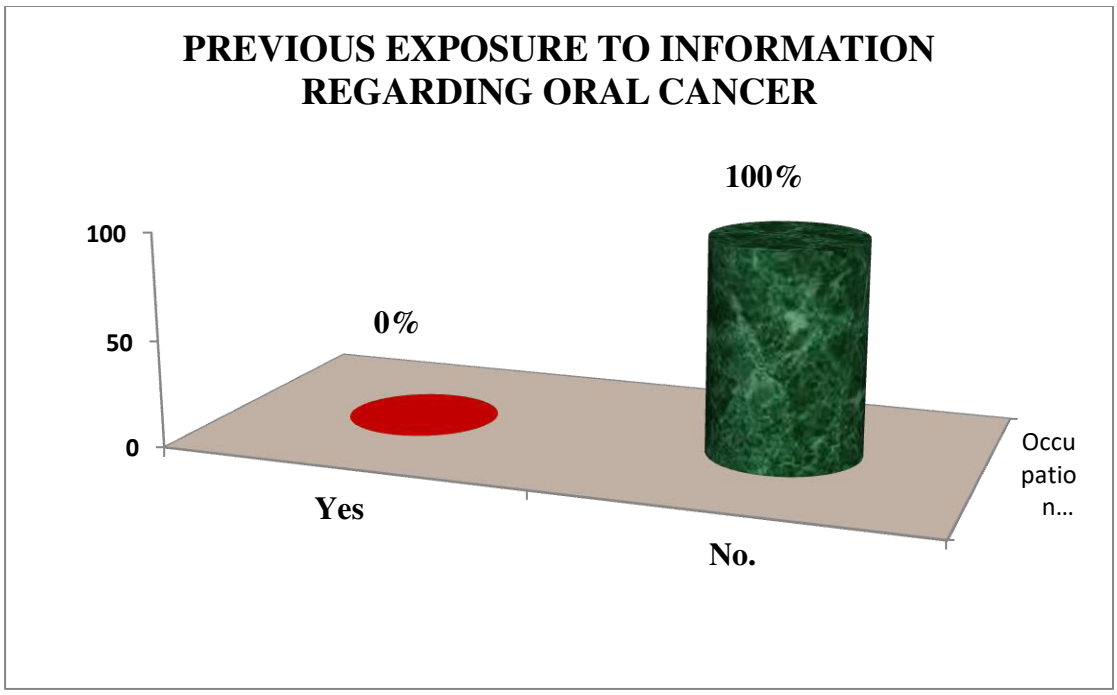

Fig. 4.13: Frequency & percentage distribution of industrial workers according to previous exposure to information regarding oral cancer

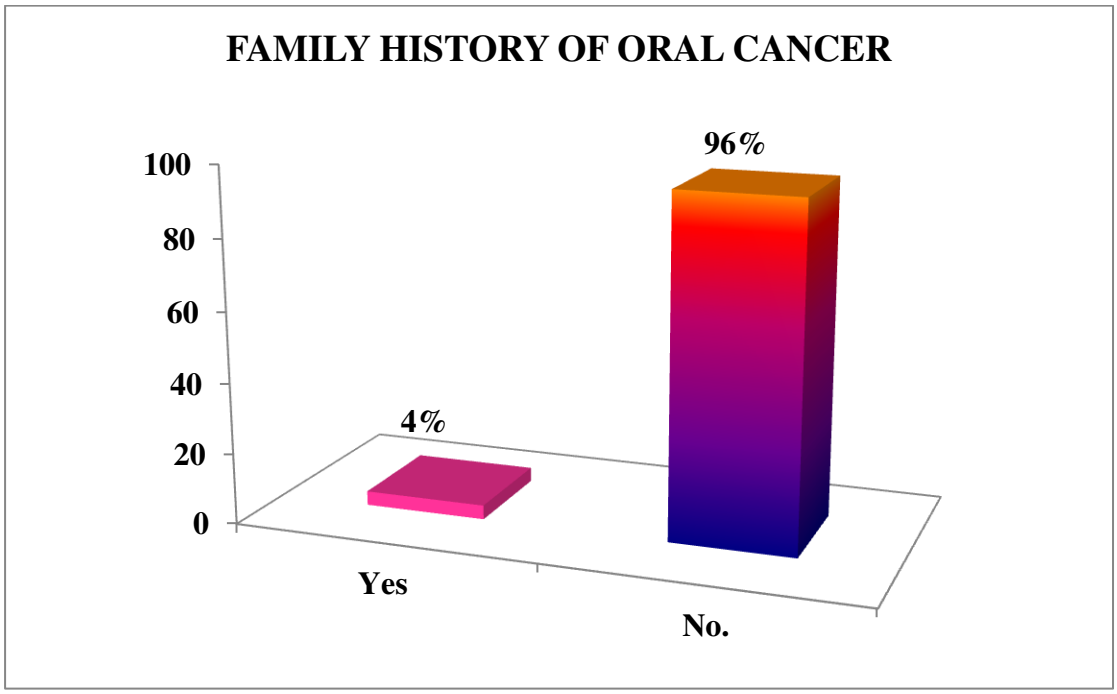

Fig. 4.14: Frequency & percentage distribution of industrial workers according to family history of oral cancer

DESCRIPTION OF THE DEMOGRAPHIC DATA

- Highest Frequency & percentage (46%) of the Industrial workers were in the age group of 31-40 years and the lowest Frequency & percentage (8%) of the Industrial workers were in the age groups of 50 years and above.

- Highest Frequency & percentage (76%) of the Industrial workers were Male and the lowest Frequency & percentage (24%) of Industrial workers were Females.

- Highest Frequency & percentage (76%) of the Industrial workers were married and the lowest Frequency & percentage (4%) of Industrial workers were divorced.

- Highest Frequency & percentage (56 %) of the industrial workers were studied High school, and the lowest (6%) of the industrial workers were illiterate.

- Highest Frequency & percentage (84%) of the Industrial workers were Hindus, and the lowest Frequency & percentage (4%) of Industrial workers were Muslims .

- Highest Frequency & percentage (58%) of the industrial workers monthly income were less thanRs.5001-Rs10000, and the lowest Frequency & percentage (42%) of the industrial workers monthly income were 10001-15000

- Highest Frequency & percentage (38%) of the industrial workers hobbies were playing games and the lowest Frequency & percentage (12%) of the industrial workers hobbies were reading books.

- Highest Frequency & percentage (62%) of the industrial workers were consuming tobacco and the lowest Frequency & percentage (38%) of the industrial workers were not consuming tobacco.

- Highest Frequency & percentage (58%) of the industrial workers were not consuming alcohol and the lowest Frequency & percentage (42%) of the industrial workers were consuming alcohol

- Highest Frequency & percentage (90%) of the industrial workers were consuming vegetarian diet and the lowest Frequency & percentage (10 %) of the industrial workers were consuming Non vegetarian diet.

- Highest Frequency & percentage (70%) of the availability of health service of industrial workers from health centre, and the lowest Frequency & percentage (30%) of the availability of health service of industrial workers were Government hospital.

- Highest Frequency & percentage (70%) of the source of information of industrial workers were Newspaper/TV/Mass Media and the lowest Frequency & percentage (14%) source of information of industrial workers were Friends and relatives.

- Highest Frequency & percentage (70%) of the source of information of industrial workers from Newspaper/TV/Mass Media and the lowest Frequency & percentage (14%) source of information of industrial workers were from friends and relatives.

- Highest Frequency & percentage (100%) of the industrial workers was not having previous exposure to information regarding oral cancer.

- Highest Frequency & percentage (96%) of the family history of oral cancer among industrial workers were No, and the lowest Frequency & percentage (4%) of family history of oral cancer in industrial workers were Yes.

SECTION - II: ASSESSMENT OF KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS BEFORE THE IMPLEMENTATION OF COMPUTER ASSISTED TEACHING PROGRAMME

Table – 4.2

Comparison of Mean, SD, and mean percentage of Pre-test knowledge scores about oral cancer among industrial workers

(N = 50)

Area	Max obtainable score	Pre-test score		
		Mean	SD	Mean (%)
Knowledge on oral cancer.	30	15.12	3.22	50.4%

Table 4.2 shows that the mean score 15.22±3.22 (SD) which is 50.4% of the total score obtained in the area of "Knowledge on oral cancer." It reveals that the industrial workers had poor knowledge before the implementation of Computer assisted teaching programme.

Table - 4.3

Assessment of Pre-test level of knowledge on oral cancer among industrial workers

(N = 50)

Level of knowledge	Pre test scores	
	Number	**Frequency & percentage**
Adequate (>76%)	0	0%
Moderate (51-75%)	17	34%
Inadequate (<50%)	33	66%

Table 4.3 shows that during pre-test none (0%) of the industrial workers had Adequate knowledge, 34% of industrial workers had moderately adequate knowledge and 66% of industrial workers had inadequate knowledge .

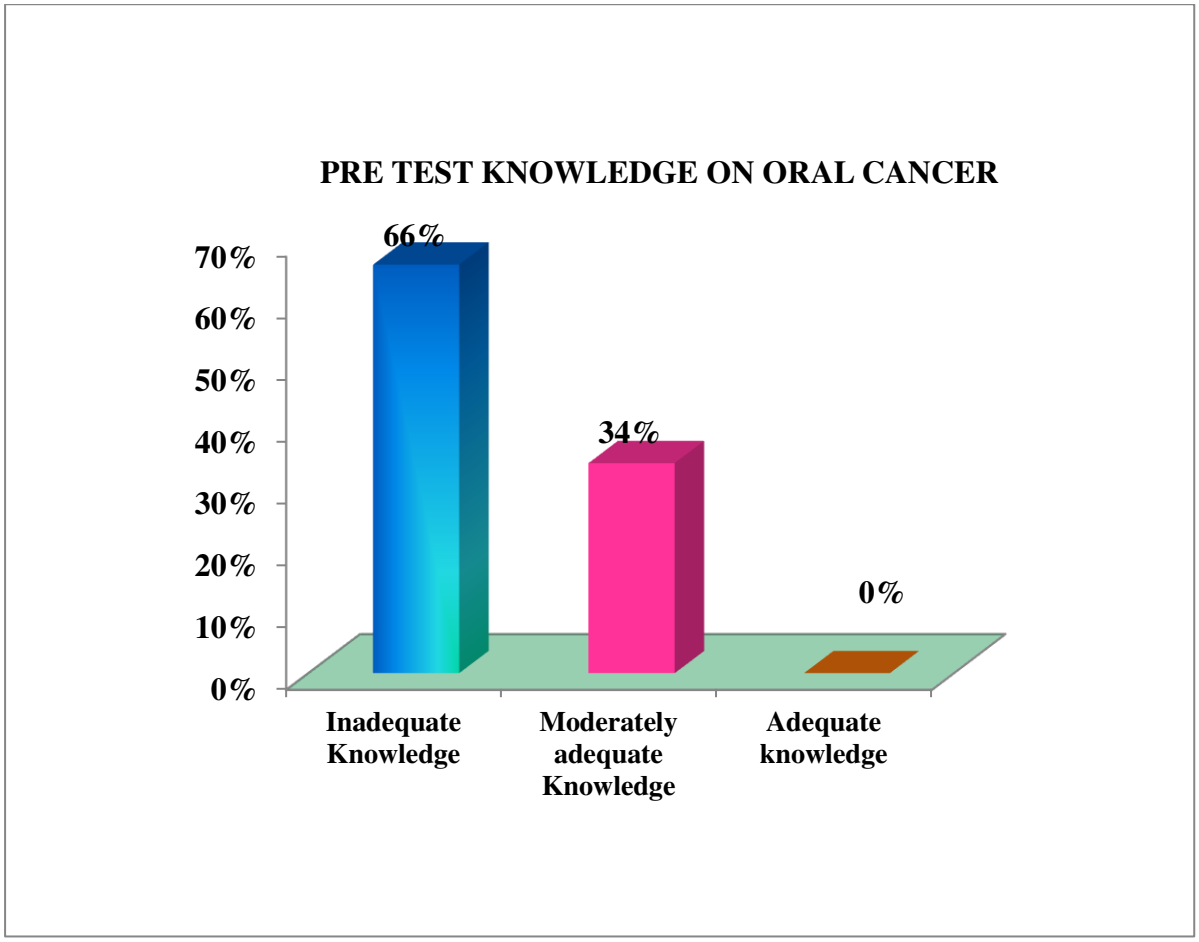

Fig. 4.15: Frequency & percentage distribution of Pre Test knowledge on oral cancer

SECTION – III: ASSESSMENT OF KNOWLEDGE ON ORAL CANCER AMONG INDUSTRIAL WORKERS AFTER THE IMPLEMENTATION OF COMPUTER ASSISTED TEACHING PROGRAMME

Table – 4.4

Comparison of mean, SD, and mean percentage of post test knowledge scores about oral cancer among industrial workers

(N =50)

Area	Max obtainable score	Post-test score		
		Mean	SD	Mean (%)
Knowledge on oral cancer.	30	23.12	2.09	77%

Table.4.4 shows that the highest mean score 23.12±2.09 (SD) which is 77% of the total score obtained in the area of "Knowledge on oral cancer." It reveals that the industrial workers had above average knowledge after the implementation of Computer assisted teaching programme.

Table – 4.5

Assessment of Post test level of knowledge regarding oral cancer among industrial workers

(N = 50)

Level of knowledge	Post test scores	
	Number	**Frequency & percentage**
Adequate (>76%)	43	86%
Moderate (51-75%)	7	14%
Inadequate (<50%)	0	0%

Table 4.5 shows that during post -test after the implementation of computer assisted teaching programme ,none (0%) of the industrial workers had Inadequate knowledge, 14% of industrial workers had moderately adequate knowledge and 86% of industrial workers had adequate knowledge.

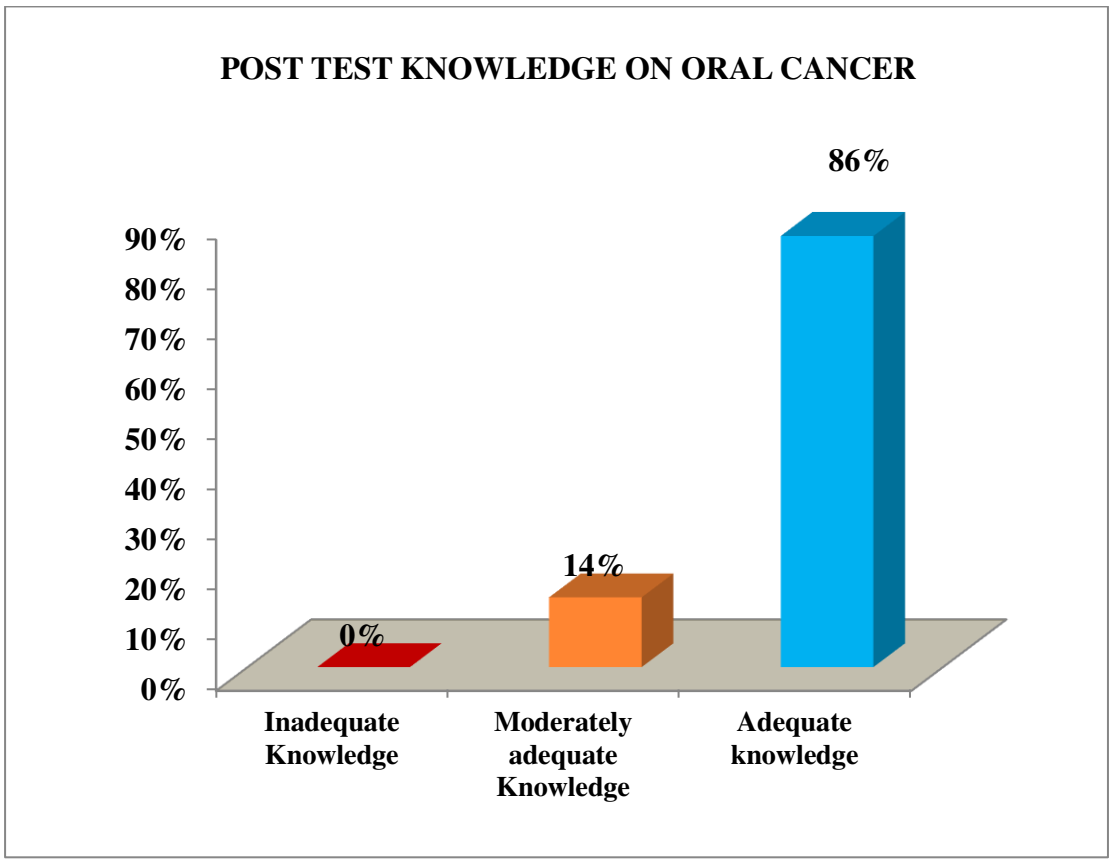

Fig. 4.16: Frequency & percentage distribution of Post test knowledge regarding oral cancer

SECTION – IV: ASSESSMENT OF EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAMME

- Comparison of pre-test and post-test level of knowledge regarding oral cancer among industrial workers.

- Comparison of mean, SD and mean Frequency & percentage of pre –test and post –test level of knowledge regarding oral cancer among industrial workers.

- Item wise comparison of pre test and post –test level of knowledge regarding oral cancer among industrial workers.

- Assessment of effectiveness of Computer assisted teaching programme on knowledge regarding oral cancer among Industrial workers using paired 't' test

Table – 4.6

Comparison of pre-test and post-test level of knowledge regarding oral cancer among industrial workers

(N = 50)

Level of knowledge	Pre test scores		Post test scores	
	Number	Frequency & percentage	Number	Frequency & percentage
Adequate (>76%)	0	0%	43	86%
Moderate (51-75%)	17	34%	7	14%
Inadequate (<50%)	33	66%	0	0%

Table 4.6 shows that during pre-test none (0%) of the industrial workers had Adequate knowledge, 34% of industrial workers had moderately adequate knowledge and 66% of industrial workers had inadequate knowledge .whereas, during post -test after the implementation of computer assisted teaching programme ,none (0%) of the industrial workers had Inadequate knowledge, 14% of industrial workers had moderately adequate knowledge and 86% of industrial workers had adequate knowledge.

Hence it shows that computer assisted teaching programme is effective in improving the knowledge on oral cancer among industrial workers.

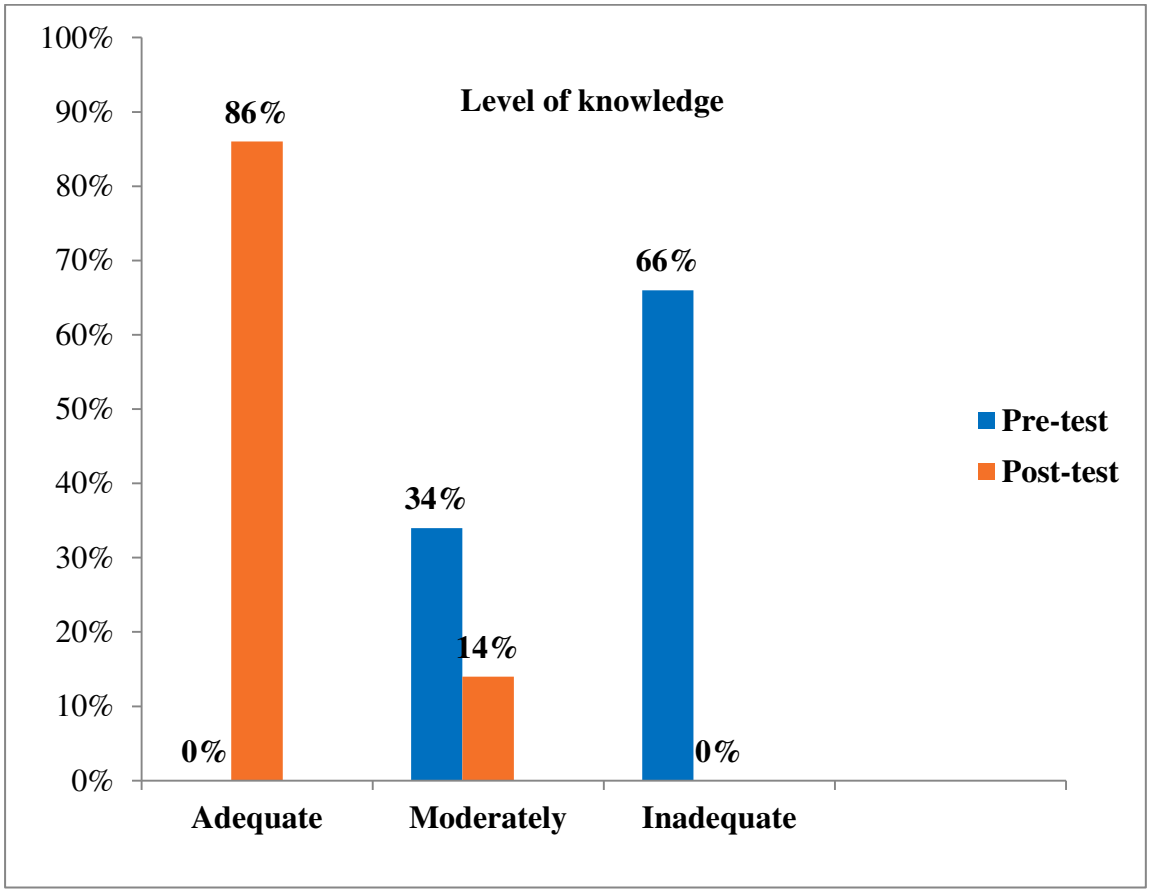

Fig. 4.17: Bar diagram showing Comparison of pre-test and post-test level of knowledge on oral cancer among Industrial workers.

Table – 4.7

Comparison of mean, SD, and mean percentage of pre-test and post- test knowledge scores on oral cancer among Industrial workers

Area	Max score	Pre test scores			Post test score			Difference in mean (%)
		Mean	SD	Mean %	Mean	SD	Mean %	
Knowledge on oral cancer	30	15.12	3.22	50.4%	23.12	2.09	77%	27

Table 4.7 shows the comparison of overall mean, SD and mean Frequency & percentage of pre-test and post- test knowledge scores reveals that during pre-test, the mean score 15.12±3.22 (SD) which is 50.4% of the total mean score, whereas in post-test, the mean score was 23.12± 2.09 (SD) which is 77% of the total mean score depicting difference of 27 % increase in mean Frequency & percentage of score. It reveals that the Computer assisted teaching programme was effective among industrial workers.

Table - 4.8

Paired 't' test, DF, p value of level of knowledge on oral cancer among industrial workers

Level	't' value	df	Table value	'p' value	Inference
Pre test and post test	18.77	49	2	P<0.05	Significant

Table 4.8 shows that the paired 't' test value was calculated to analyze the effectiveness of level of knowledge among industrial workers. The paired 't' test value for knowledge was 18.77, which is high when compared table value 2 at 49 degree of freedom. The computer assisted teaching program on knowledge regarding oral cancer among industrial workers was more effective.

SECTION – V: ASSOCIATION BETWEEN THE POST-TEST KNOWLEDGE ON ORAL CANCER AMONG INDUSTRIAL WORKERS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

Table – 4.9

Association between post-test knowledge on oral cancer among industrial workers with their selected demographic variables

(N = 50)

Demographic Variables	Post test				Total	Chi square
	Moderate		Adequate			
	f	%	f	%		
1. Age						
a) 20 to30 years	3	6.00	11	22.00	14	$\chi^2 = 1.06$ tv=12.59 NS
b) 31 to 40 years	2	4.00	21	42.00	23	
c) 41 to 50 years	1	2.00	8	16.00	9	
d) 50 years and above.	1	2.00	3	6.00	4	
2. Sex						$\chi 2 = 2.57$ tv=5.99 NS
a) Male	7	14.00	31	62.00	38	
b) Female.	0	0.00	12	24.00	12	
3. Marital status						$\chi^2 = 0.64$ tv=9.49 NS
a) Married	5	10.00	33	66.00	38	
b) Unmarried	2	4.00	8	16.00	10	
c) Divorced	0	0.00	2	4.00	2	
4. Educational status						$\chi^2 = 2.63$ tv=12.59 NS
a) Uneducated	1	2.00	2	4.00	3	
b) Primary education	0	0.00	8	16.00	8	
c) High school	4	8.00	24	48.00	28	
d) Higher secondary	1	2.00	6	12.00	7	
e) Degree and above	1	2.00	3	6.00	4	
5. Religion						$\chi^2 = 0.36$ tv=12.59 NS
a) Hindu	6	12.00	36	72.00	42	
b) Muslim	0	0.00	2	4.00	2	
c) Christian	1	2.00	5	10.00	6	
d) Others	0	0.00	0	0.00	0	

6. Monthly income						
a) < Rs5000	0	0.00	0	0.00	0	$\chi^2 = 0.002$ tv=12.59 NS
b) Rs5001 to Rs10000	4	8.00	25	50.00	29	
c) Rs10001 to Rs15000	3	6.00	18	36.00	21	
d) Rs15001 and above	0	0.00	0	0.00	0	
7. Hobbies						
a) Watching tv	1	2.00	17	34.00	18	$\chi^2 = 4.43$ tv=12.59 NS
b) Reading books	0	0.00	6	12.00	6	
c) Playing games	5	10.00	14	28.00	19	
d) No hobbies	1	2.00	6	12.00	7	
8. Habits of tobacco consumption						$\chi^2 = 0.30$ tv=9.49 NS
a) Yes	5	10.00	26	52.00	31	
b) No	2	4.00	17	34.00	19	
c) Sometimes.	0	0.00	0	0.00	0	
9.Habits of alcohol consumption						
a) Yes	4	8.00	17	34.00	21	$\chi^2 = 0.06$ tv=12.59 NS
b) No	3	6.00	26	52.00	29	
c) Sometimes	0	0.00	0	0.00	0	
10.Dietary Pattern						**$\chi 2 = 10.25$** tv=5.99 **S**
a) Vegetarian	6	12.00	39	78.00	45	
b) Non-vegetarian	4	8.00	1	2.00	5	
11. Availability of health services						
a) Health center	4	8.00	31	62.00	35	$\chi 2 = 0.064$ tv=9.49 NS
b) Government hospital	3	6.00	12	24.00	15	
c) Private hospital	0	0.00	0	0.00	0	
12. Sources of health information						
a) Newspaper/ TV/ other mass medias	5	10.00	30	60.00	35	**$\chi^2 = 27.2$** tv=12.59 **S**
b) Friends and relatives	0	0.00	7	14.00	7	
c) Voluntary health agencies	2	4.00	6	12.00	8	
d) Health personals	0	0.00	0	0.00	0	
13. Previous exposure to information regarding oral cancer						$\chi 2 = 00$ tv=5.99 NS
a) Yes	0	0.00	0	0.00	0	
b) No	7	14.00	43	86.00	50	

14. Is there any family history of oral cancer						$\chi 2 = 0.40$ tv=5.99 NS
a)	Yes	0	0.00	2	4.00	2
b)	No.	7	14.00	41	82.00	48

*** S = Significant NS= Not Significant ,P=0.05**

Table 4.8 shows that there was a significant association between post-test knowledge scores of industrial workers with demographic variables like. **Dietary Pattern and Sources of health information** Hence, stated true hypotheses related to association between pretest and post-test knowledge scores and demographic variables are accepted.

It can be interpreted that Computer assisted teaching programme was effective for all industrial workers irrespective of their difference in demographic variables.

CHAPTER – V

DISCUSSION

A pre experimental design with pre-test and post-test without control group was undertaken in the Olapalayam village. The data was collected from 50 industrial workers through simples random sampling technique method to assess the effectiveness of computer assisted teaching programme regarding knowledge on oral cancer among industrial workers at selected rural areas, Namakkal, through a closed ended questionnaire.

The collected data were analyzed by using descriptive statistics (Mean, Standard, Deviation, Frequency and percentage) and inferential statistics (paired 't' test, independent 't' test and chi square). The findings were computed based on the objectives of the study.

Description of the demographic variables

Regarding age the highest percentage 23 (46%) of the industrial workers were in the age group of 31 years to 40 years, Majority of the industrial workers were males 38 (76%), Regarding the marital status of the industrial workers highest percentage 38 (76%) are married, Regarding educational status of the industrial workers 28 (56%) of them were educated till high school, Comparing in religion the highest percentage of industrial workers 42(84%) where Hindus, Regarding the occupation highest 41 (82%) of the adolescents girl's mother were housewife, Comparing to monthly income highest percentage of income of industrial workers

was 29(58%) Rs 5001 to 10000, Regarding hobbies the highest percentage 19 (38%) of the industrial workers where having hobbies of playing games. In terms of consumption of tobacco the highest percentage 31 (62%) industrial workers had the habit of consuming tobacco, In terms of consumption of alcohol the highest percentage 29 (58%) industrial workers had the habit of consuming alcohol, Comparing in dietary pattern the largest percentage of the industrial workers 45(90%) where non vegetarian, In terms of availability of health services for the majority industrial workers 35(70%) get health services from Health centers. Comparing sources of health information's the majority of the industrial workers 35(70%) where from mass Medias, Regarding the previous exposure to information towards oral cancer between the industrial workers where 0(0%) none of the workers had previous exposure to information regarding oral cancer,Regarding family history of oral cancer highest percentage of industrial workers 48(96%) did not had any family history of oral cancer.

The collected data were analyzed by using descriptive statistics (Mean, Standard, Deviation, Frequency and percentage) and inferential statistics (paired 't' test, independent 't' test and chi square). The findings were computed based on the objectives of the study.

The first objective is to assess the knowledge regarding pre test and post test of industrial workers among oral cancer.

During pre-test, the mean score 15.12±3.22 (SD) which is 50.4% of the total mean score, whereas in post-test, the mean score was 23.12± 2.09 (SD) which is 77% of the total mean score depicting difference of 27 % increase in mean

percentage of score. It reveals that the industrial workers had above average knowledge after the implementation of computer assisted teaching programme.

Hence the stated research hypothesis "H_1- There will be a significant difference between the pre test and post test knowledge score of industrial workers." is accepted

The study findings was supported by similar study conducted by **Junior Sundresh et al.,(2016)** conducted a descriptive design to assess the effectiveness of planned teaching programme on awareness and knowledge of oral cancer among factory workers in Pune Results shows that during pretest, only 2.5% of people were aware about oral cancer and its early symptoms. Furthermore, 22.5% of people are not aware about oral cancer as well as 75% of people were had an average knowledge regarding oral cancer. After the health teaching programme, 47.5% of people shown excellent knowledge level and 50% of people shown a moderate level of knowledge as well as only 2.5% of people shown very poor knowledge level regarding oral cancer.

The second objective is to assess the effectiveness of computer assisted teaching programme on oral cancer among industrial workers

During pre-test, the mean score 15.12±3.22 (SD) which is 50.4% of the total mean score, whereas in post-test, the mean score was 23.12± 2.09 (SD) which is 77% of the total mean score depicting difference of 27 % increase in mean percentage of score. The calculated 't' value is 18.77 which is greater than the table value at 0.05 level shows that there is highly significant difference between the pre-

test and post-test score. It reveals that the industrial workers had above average knowledge after the implementation of computer assisted teaching programme.

The study findings was supported by similar study conducted by **G.Basavaraju (2014)** who conducted a study to assess the effectiveness of structured instructional module on knowledge, attitude and practice regarding prevention of oral cancer among adolescents in urban colleges of bangalore south, Karnataka. The results of the study showed that there was a significant increase in knowledge, attitude and practice scores after administration of Structured Instructional Module as evident by the improvement knowledge mean percentage 27.7% witht ‟ value 44.24 which is significant at 0.05 level in experimental group and improvement knowledge mean percentage 0.2% with t‟ value 1.37, which is non significant at 0.05 level in control group.

The third objectives is to find out the association between post test knowledge on oral cancer among industrial workers with their selected socio demographic variables

There was a significant association was found between pretest knowledge scores of industrial workers with demographic variables like Availability of health services. And there was a significant association was found between post-test knowledge scores of industrial workers with demographic variables like. Dietary Pattern and Sources of health information.

Hence, stated true hypotheses "H_2. There will be a significant association between the pre-test and post test knowledge score among industrial workers with their selected socio demographic variables" is accepted.

The study findings was supported by similar study conducted by **Bhagya Seela S., et al (2017)** on effectiveness of Structured Teaching Programme on Knowledge Regarding Preventive Measures of Oral Cancer among adolescents in Selected Junior College, Karminagar, Telangana. The study findings reveals that personal habits, occupation of the father, sources of information, family history of cancer had significant association with knowledge scores the Chi-square value is greater than critical value and there is no significant association between knowledge score and other demographic variables such as age, gender, etc.

From these findings it can be interpreted that Computer assisted teaching programme was effective in improving the knowledge of all industrial workers irrespective of their difference in demographic variables.

CHAPTER – VI

SUMMARY, CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS

SUMMARY

The present study was done to evaluate the effectiveness of computer assisted teaching program on knowledge regarding oral cancer among industrial workers in a selected rural area, Olapalayam village.

The objectives of the study were,

- To assess the level of pre test and post test knowledge regarding oral cancer among industrial workers.

- To assess the effectiveness of computer assisted teaching programme on knowledge regarding oral cancer among industrial workers

- To find out the association between post test knowledge regarding oral cancer among industrial workers with their selected socio demographic variables

The hypothesis of the study were,

H_1 : There was a significant difference between the pre test and post test knowledge score of industrial workers.

H_2 : There was a significant association between the post test knowledge score among industrial workers with their selected socio demographic variables.

The literature review from different sources include Medline search for published and unpublished research, a citation review of relevant primary and secondary articles, contact with primary investigators. These literatures provided information which enabled the investigator to design the study, to develop conceptual framework, methodology, data analysis and for interpretation.

The conceptual framework adapted for the study was based on Ludwig Von Bertalanffy, (1968) General system theory and it provided the comprehensive frame work for achieving the objectives of the study.

A pre experimental study was conducted. Convenient random sampling technique was used to obtain the samples. The structured interview questionnaire was used to assess the knowledge regarding oral cancer. Data were collected by using structured interview questionnaire devised by the investigator for 30 minutes for each participant.

Immediately after pre test, computer assisted teaching regarding knowledge on oral cancer was shown to the industrial workers. The time period for computer assisted teaching programme was 20-25 minutes. After 7 days, post test was conducted by using the structured interview questionnaire.

FINDINGS OF THE STUDY

- The major findings of the study includes the following

- Regarding age the highest percentage 23 (46%) of the industrial workers were in the age group of 31 years to 40 years.

- Majority of the industrial workers were males 38 (76%)

- Regarding the marital status of the industrial workers highest percentage 38 (76%) are married

- Regarding educational status of the industrial workers 28 (56%) of them were educated till high school.

- Comparing in religion the highest percentage of industrial workers 42(84%) where Hindus.

- Comparing to monthly income highest percentage of income of industrial workers was 29(58%) Rs 5001 to 10001

- Regarding hobbies the highest percentage 19 (38%) of the industrial workers where having hobbies of playing games.

- In terms of consumption of tobacco the highest percentage 31(62%) industrial workers had the habit of consuming tobacco.

- In terms of consumption of alcohol the highest percentage 29(58%) industrial workers had the habit of consuming alcohol.

- Comparing in dietary pattern the largest percentage of the industrial workers 45(90%) where non vegetarian

- In terms of availability of health services for the majority industrial workers 35(70%) get health services from Health centers.

- Comparing sources of health information's the majority of the industrial workers 35(70%) where from mass Medias.

- Regarding the previous exposure to information towards oral cancer between the industrial workers where 0(0%) none of the workers had previous exposure to information regarding oral cancer.

- Regarding family history of oral cancer highest percentage of industrial workers 48(96%) did not had any family history of oral cancer.

- During pre-test none (0%) of the industrial workers had Adequate knowledge, 34% of industrial workers had moderately adequate knowledge and 66% of industrial workers had inadequate knowledge .

- The pretest mean score was 15.22±3.22 (SD) which is 50.4% of the total score obtained in the area of "Knowledge on oral cancer."

- During post -test after the implementation of computer assisted teaching programme, none (0%) of the industrial workers had Inadequate knowledge, 14% of industrial workers had moderately adequate knowledge and 86% of industrial workers had adequate knowledge.

- The highest mean score 23.12±2.09 (SD) which is 77% of the total score obtained in the area of "Knowledge on oral cancer" during posttest .

- Comparison of overall mean, SD and mean percentage of pre-test and post-test knowledge scores reveals that during pre-test, the mean score 15.12±3.22 (SD) which is 50.4% of the total mean score, whereas in post-test, the mean score was 23.12± 2.09 (SD) which is 77% of the total mean score depicting difference of 27 % increase in mean percentage of score. It reveals that the Computer assisted teaching programme was effective among industrial workers.

- Out of thirty items, during post-test highest percentage (94%) correctly responded to item "Cancer is the uncontrolled proliferation of cells" with the effectiveness of 56%.

- The highest effectiveness (56%) was found for the same item "Cancer is the uncontrolled proliferation of cells"

- The lowest percentage (58%) correctly responded to item "Primordial prevention is the prognosis of oral cancer" with the effectiveness of 24%.

- The lowest effectiveness (10%) was obtained for item "Proper oral hygiene is the method that prevents oral cancer"

- The calculated 't' value is 18.77 which is greater than the table value at 0.05 level shows that there is highly significant difference between the pre-test and post-test score.

- Thus the difference observed in the mean score value of pre-test and post-test were true difference.

Hence, the stated statistical **hypothesis "H_1 There was a significant difference between the pre test and post test knowledge score of industrial workers"** is accepted.

There was a significant association between pretest and post-test knowledge scores of industrial workers when compared with demographic variables. Hence, stated true hypothesis **"H_2. There was a significant association between the pretest and post test knowledge score among industrial workers with their selected socio demographic variables"** is accepted.

CONCLUSION

Many cancers are preventable by controlling the modifiable risk factors such as tobacco use, alcohol use, unhealthy diet and physical inactivity, amongst others. In addition, a significant proportion of cancers can be cured, by surgery, radiotherapy or chemotherapy, especially if they are detected early. So an access to

health-care services and cancer-related awareness is highly variable in India, more in-depth analysis of the incidence of oral cancer in rural regions will be required.

The computer assisted teaching program was administered to the industrial workers in selected rural area. Pretest and post test assessment of industrial workers and other statistical findings indicated that the computer assisted teaching program is statistically significant in improving the knowledge regarding oral cancer.

Hence computer assisted teaching program has enhanced the knowledge of industrial workers, which is essential in preventing oral cancer in the future. Therefore the community nurse educator must constantly focus their effort on improving the knowledge community people on prevention of oral cancer, so that they in turn educate the general public who has the habits which are responsible for oral cancer to take preventive precautions of oral cancer. The computer assisted teaching program can be used to educate different sections of the population in different settings to improve the knowledge on prevention of oral cancer.

IMPLICATIONS

- The findings of the present study have several implications in the field of nursing education, nursing practice, nursing administration, nursing research.

- As the study suggests that community residents are at high risk group for developing habits like smoking, chewing tobacco, betel nut, alcohol etc.

- These habits give a sense of euphoria and may not create problems in the adolescent period but in the later life like oral cancer. Hence the industrial workers need to have knowledge on oral cancer, its causes, complications and consequences.

- The computer assisted teaching programme helps to create awareness to the industrial workers on prevention of oral cancer. There by it reduces morbidity and mortality related to oral cancer.

I. Nursing Education:

- The structured questionnaire module can be utilized by the nursing student to create awareness among college students about different causes and sites of oral cancer.

- The nursing teachers can use the computer assisted teaching programme to teach nursing students and prepare them to be aware of their role in keeping healthy nation through health promotion and disease prevention in the present and future year, which may help in achieving the goal of health for all

- The nursing educators can prepare the curriculum and able to prepare the nursing students to educate the college industrial workers on risk factors for various cancers and their consequences

- The nurse educators can periodically organize special education programme regarding ill effects of tobacco chewing and smoking and reduction strategies to prevent potential health problems like oral /cancer. Hence the use of education devise strategies should encourage active involvement of industrial workers to gain knowledge to promote healthy habits and there by helps to prevent oral cancer.

II. Nursing Practice:

- Community nursing personnel can use the module to teach the peripheral health workers they in turn educate general public on prevention of oral cancer.

- Nursing students and nurses can use the instructional module developed by the investigator in the prevention of oral cancer.

- Nurses working in cancer units can use this module to teach the patient and family on prevention of oral cancer.

III. Nursing Administration

- The nurse as an administrator can organize and conduct teaching programme for community health nurses in order to enhance their knowledge and keep them aware of the causes for oral cancer and its prevention.

- Nurse administrator can use the module and discuss in journal presentation to update the knowledge of the staff nurses regarding causes and prevention of oral cancer.

IV. Nursing research

- Research provides nurses the credibility to influence decision making, policy and protocol formulation regarding prevention of oral cancer.

- Findings of the present study suggest that educators and administrators should encourage nurses to read, discuss and conduct research studies so as to enable the nurse to make data based decision rather than intuitive decisions.

RECOMMENDATIONS

Based on the findings of the study the following recommendations were made

- The study can be replicated on larger samples in different settings.

- A longitudinal study can be conducted to see the effectiveness of teaching in bringing down the incidence of oral cancer.

- A longitudinal study can be conducted to find the cause and risk factors for oral cancer

- A true experimental study could be undertaken for the subjects with the habit of chewing and smoking tobacco with control group.

- A similar study can be conducted to find the prevalence of oral cancer..

- A comparative study can be done between subjects with the habits of smoking and chewing tobacco.

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ANNEXURE –I

LETTER SEEKING PERMISSION TO CONDUCT STUDY

From

301727454
II year M.Sc Nursing (Community Health Nursing),
Sresakthimayeil Institute of Nursing & Research,
(JKK Nattraja Educational Institutions)
Komarapalayam P.O,Namakkal Dt.

Forwarded through

The Principal
Sresakthimayeil Institute of Nursing & Research,
(JKK Nattraja Educational Institutions)
Komarapalayam P.O), Namakkal Dt.

Respected Sir,

Sub : Permission to conduct study - Regarding

I am M.Sc. (Community Health Nursing) II year student of Sresakthimayeil Institute of Nursing and Research. As a partial fulfillment of Master of Science in Nursing, I am going to conduct a research and submit the dissertation work to the Tamil Nadu Dr. M.G.R. Medical University, Chennai by October 2019.

The statement of the problem chosen for my study is **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT".**

I request you to permit me to conduct the proposed study under your jurisdiction and provide the necessary facilities for the study. Kindly do the needful.

Thanking you in anticipation,

Yours Faithfully,

(301727454)

PRINCIPAL
SRESAKTHIMAYEIL INSTITUTE OF
NURSING AND RESEARCH
KOMARAPALAYAM - 638 183.

SRESAKTHIMAYEIL INSTITUTE OF NURSING AND RESEARCH
KOMARAPALAYAM-638183

ANNEXURE – II

LETTER REQUESTING FOR OPINION & SUGGESTIONS OF EXPERTS FOR CONTENT AND TOOL VALIDATION

From

301727454
II year M.Sc Nursing (Community Health Nursing),
Sresakthimayeil Institute of Nursing & Research,
(JKK Nattraja Educational Institutions)
Komarapalayam P.O,Namakkal Dt.

Forwarded through

The Principal
Sresakthimayeil Institute of Nursing & Research,
(JKK Nattraja Educational Institutions)
Komarapalayam P.O), Namakkal Dt.

Respected Sir/Madam,

Subject: Request for Expert Opinion and Suggestion to establish validation of Content and Research Tool

I am a final year M.Sc Nursing student of Sresakthimayeil Institute of Nursing & Research, (JKK Nattraja Educational Institutions), Komarapalayam,have selected the topic on **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"** as a partial fulfillment of M.Sc (N) programme, which has to be submitted to the Tamil Nadu Dr.M.G.R Medical University.

The prepared study tool is enclosed so I humbly request you to go through and give your valuable suggestions, modification and opinions. Kindly do the needful.

Thanking you in anticipation.

PRINCIPAL
SRESAKTHIMAYEIL INSTITUTE OF NURSING AND RESEARCH
KOMARAPALAYAM - 638 183.

SRESAKTHIMAYEIL INSTITUTE OF NURSING AND RESEARCH * KOMARAPALAYAM-638183 *

Yours faithfully

(**301727454**)

ANNEXURE – III

LIST OF EXPERTS

1. **Dr. Mrs. R. Jamuna Rani, M.Sc. (Nursing), Ph.D,**
   Principal,
   Sresakthimayeil Institute of Nursing and Research,
   (J.K.K.N. Educational Institutions)
   Kumarapalayam.

2. **Prof. Mrs. M.Arockiamary, M.Sc., (N),**
   HOD, Community Health Nursing,
   Sresakthimayeil Institute of Nursing and Research,
   Kumarapalayam.

3. **Dr. S. Senkathiravan**
   Casuality Medical Officer,
   Indira Gandhi Medical College & Dhanvantri college of nursing,
   Research Institute, Kathirkamam,Namakkal (DT).

4. **Mrs. Merlin Rajakumari, M.Sc., (N)**
   Assistant Professor
   Pondicherry Institute of Medical Science,
   Pondicherry - 14.

5. **Mrs. J.Pramila Paul, M.Sc., (N)**
   Assistant Professor
   Pondicherry Institute of Medical Science,
   Pondicherry - 14.

6. **Prof. Mr. V.Mani,**
   Statistician,
   Sresakthimayeil Institute of Nursing and Research,
   Kumarapalayam.

APPENDIX – IV

CONTENT AND TOOL VALIDATION CERTIFICATE

Name	: **Dr. S. SENKATHIRAVAN**
Designation	: Casuality Medical Officer,
Name of the college	: Indira Gandhi Medical College & Research Institute, Kathirkamam, Puducherry – 605 009.

I hereby certify that I have validated the tool of **301727454-** II year M.Sc Nursing student of Community Health Nursing Department who has taken Dissertation on **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"**

Place : Pondicherry
Date :

Signature with seal
CASUALTY MEDICAL OFFICER
Indira Gandhi Medical College
& Research Institute
Kathirkamam, Puducherry-605009.

Name: Dr. S. SENKATHIRAVAN
Designation: casualty Medical Officer.

CONTENT AND TOOL VALIDATION CERTIFICATE

Name : **Mrs. MERLIN RAJAKUMARI, M.Sc., (N)**

Designation : Assistant Professor

Name of the college : Pondicherry Institute of Medical Science, Pondicherry - 14.

I hereby certify that I have validated the tool of **301727454-** II year M.Sc Nursing student of Community Health Nursing Department who has taken Dissertation on **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"**

Signature with seal

PRINCIPAL,
M.J.College of Nursing
Kohka - Junwani Road,
Bhilai, Distt-Durg-23 (C G)

Place: Bhilai.

CONTENT AND TOOL VALIDATION CERTIFICATE

Name : **Mrs. MERLIN RAJAKUMARI, M.Sc., (N)**

Designation : Assistant Professor

Name of the college : Pondicherry Institute of Medical Science, Pondicherry - 14.

I hereby certify that I have validated the tool of **301727454-** II year M.Sc Nursing student of Community Health Nursing Department who has taken Dissertation on **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"**

Place : PUDUCHERRY

Date :

Signature with seal

Name: MERLIN RAJAKUMARI (M.SC. C.H.N)

Designation: ASSISTANT PROFESSOR, CON.

PIMS,

PUDUCHERRY – 605014

CONTENT AND TOOL VALIDATION CERTIFICATE

Name : **Mrs.J.PRAMILA PAUL, M.Sc., (N)**

Designation : Assistant Professor

Name of the college : Pondicherry Institute of Medical Science, Pondicherry - 14.

I hereby certify that I have validated the tool of **301727454-** II year M.Sc Nursing student of Community Health Nursing Department who has taken Dissertation on **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"**

Place : PUDUCHERRY

Date :

J. Pramila Paul

Signature with seal

Name: PRAMILA PAUL. J (M.Sc, COMMUNITY HEALTH NURSING).

Designation: ASSISTANT PROFESSOR., COLLEGE OF NURSING.
PONDICHERRY INSTITUTE OF MEDICAL SCIENCES
PUDUCHERRY.-14

CONTENT AND TOOL VALIDATION CERTIFICATE

Name : **Dr.T.R.RAJARAM, MBBS.,**

Designation : Chief Surgeon

Place of the Hospital : Komarapalayam, Namakkal Dt.

I hereby certify that I have validated the tool of **301727454-** II year M.Sc Nursing student of Community Health Nursing Department who has taken Dissertation on **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"**

PLACE : Komarapalayam

SIGNATURE OF THE EXPERT

Dr.T.R.RAJARAM, M.B.B.S.,
Regd. No:34911
Chief Surgeon
KOMARAPALAYAM
NAMAKKAL DT.

APPENDIX –V

CERTIFICATE BY THE ENGLISH EDITOR

This is to certify that the dissertation entitled **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"** is a bonafied research work done by **301727454,** II year M.Sc Nursing, student of Sresakthimayeil Institute of Nursing & Research, (JKK Nattraja Educational Institutions), Komarapalayam P.O, Namakkal Dt.

R. Lakshmi Priya

Signature of the Editor

Dr. B.R. Ambedkar
Govt. Middle School
Pakkamudayanpet
Puducherry - 605 008

APPENDIX –VI

CERTIFICATE BY THE TAMIL EDITOR

This is to certify that the dissertation entitled "**A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"** is a bonafied research work done by **301727454,** II year M.Sc Nursing, student of Sresakthimayeil Institute of Nursing & Research, (JKK Nattraja Educational Institutions), Komarapalayam P.O, Namakkal Dt.

Signature of the Editor

Dr.B.R.Ambedkar
Govt. Middle School
Pakkamudayanpet
Puducherry - 605.008

APPENDIX –VII

CERTIFICATE BY THE STATISTICIAN

This is to certify that the dissertation entitled **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTER ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING ORAL CANCER AMONG INDUSTRIAL WORKERS IN SELECTED RURAL AREA AT NAMAKKAL DISTRICT"** has been statistically analyzed under the consultation and guidance of the statistician.

V. Mani

Signature of the Statistician

V. MANI., M.Sc., M.Phil.,

BIO-STATISTICIAN.

APPENDIX – VIII

QUESTIONNAIRE IN ENGLISH

SECTION - A: DEMOGRAPHIC DATA

1. Age
    a) 20 to30 years
    b) 31 to 40 years
    c) 41 to 50 years
    d) 50 years and above.
2. Sex
    a) Male
    b) Female.
3. Marital status
    a) Married
    b) Unmarried
    c) Divorced
4. Educational status
    a) Uneducated
    b) Primary education
    c) High school
    d) Higher secondary
    e) Degree and above
5. Religion
    a) Hindu
    b) Muslim
    c) Christian
    d) Others
6. Monthly income
    a) < Rs5000
    b) Rs5001 to Rs10000
    c) Rs10001 to Rs15000
    d) Rs15001 and above

7. Hobbies
    a) Watching television
    b) Reading books
    c) Playing games
    d) No hobbies
8. Habits of tobacco consumption
    a) Yes
    b) No
    c) Sometimes.
9. Habits of alcohol consumption
    a) Yes
    b) No
    c) Sometimes
10. Dietary
    a) Vegetarian
    b) Non-vegetarian
11. Availability of health services
    a) Health center
    b) Government hospital
    c) Private hospital
12. Sources of health information
    a) Newspaper/ TV/ other mass medias
    b) Friends and relatives
    c) Voluntary health agencies
    d) Health personals
13. Previous exposure to information regarding oral cancer
    a) Yes
    b) No
14. Is there any family history of oral cancer
    a) Yes
    b) No.

SECTION B: KNOWLEDGE QUESTIONNAIRE

1. What is cancer?

a) Inflammation of the body tissues

b) Is a communicable disease

c) Uncontrolled proliferation of cells

d) Is a aging process

2. Which is the most common cancer in Indian males

a) Lung cancer

b) Oral cancer

c) Prostate cancer

d) Gastric cancer

3. What is oral Cancer refers to

a) Malignant growth of tissues in oral cavity

b) Non healing ulcers

c) Necrosis of oral tissues

d) Bleeding in the gums

4. which are the part of the body where cancer occurs

a) Almost all the parts

b) Only on the vital organs

c) All the vital organs except heart

d) All the parts except vital organs

5. Which category does the oral cancer comes

a) Head and neck cancer

b) Head cancer

c) Neck cancer

d) Lymph cancer

6. Where does the lesion or tumor present in the oral cancer

a) Only in the mouth

b) Tongue, mouth , hard and soft palate, sinuses and pharynx

c) Teeth

d) Facial bones

7. Whether oral cancer metastasizes
    a) It doesn't metastasizes
    b) Metastasis happens
    c) Only in the nearby organs
    d) To the distant organs also
8. Which age group people are more prone for oral cancer
    a) 10 to 20 years
    b) 20 to 30
    c) 30 to 40
    d) 40 and above
9. Which group of people are having more chance of getting oral cancer
    a) Young males
    b) Young females
    c) Older males
    d) Older females
10. Which type of food causes injury to the oral cavity
    a) Hot and spicy foods
    b) Oily food
    c) Extreme hot and cold beverages
    d) Fluid diets
11. While consuming which vegetable there is a risk of getting oral cancer
    a) Brinjal
    b) Tomato
    c) Carrot
    d) Cucumber
12. Which is the physical factor that can cause oral cancer
    a) IR rays
    b) UV rays
    c) Pollution
    d) Climatic changes

13. What are the viruses causes oral cancer
    a) Human papilloma and epsin bar virus
    b) Human adeno virus and flavi virus
    c) Canine parvo virus
    d) Baculo virus and cauliflower mosaic virus
14. Which type of tobacco consuming increases the risk of oral cancer
    a) Tobacco smokers
    b) Tobacco chewers
    c) Tobacco sniffers
    d) Any type of tobacco user
15. Which type of alcohol consumers are more prone to get oral cancer
    a) Those who doesn't consume alcohol
    b) Heavy alcohol consumers
    c) A little amount daily
    d) Social drinkers
16. What is the risk factor for oral cancer in non smokers and non alcohol consumers
    a) Hereditary
    b) Unhygienic food practices
    c) Malnutrition
    d) Restlessness
17. What are the chances of getting oral cancer on exposing to UV rays
    a) Doesn't have any chances of getting oral cancer
    b) Continues exposure to UV rays will cause oral cancer
    c) Exposure to some limited period also causes oral cancer
    d) Even after covering the body from sun light the UV rays causes oral cancer
18. What is the color appearance in the oral cancer
    a) Red
    b) White
    c) Red and white
    d) Black

19. What are the early symptoms of oral cancer
    a) Ulcer on tongue, lip and mouth area
    b) Burning sensation in the oral cavity
    c) Teeth discoloration
    d) Halitosis
20. What are the later symptoms of the oral cancer
    a) Swallowing difficulties
    b) Mouth sores does not resolve in 14 days
    c) Pain and parasthesia
    d) Gingivitis
21. whether oral cancer re occurs after treatment
    a) Doesn't re occurs
    b) Reoccurs
    c) Occurs in some parts
    d) 50 % chances are there
22. Which type of dietary intake decreases the risks of cancer
    a) Egg intake
    b) Plant based intake
    c) Meat based intake
    d) Milk based
23. Which type of cooking increases the chances of oral cancer
    a) Baking
    b) Steaming
    c) Frying
    d) Boiling
24. Which is the method that prevents oral cancer
    a) Proper oral hygiene
    b) Regular intake of fluids
    c) Regular intake of fat rich diet
    d) Regular intake of flour

25. What is the daily brushing frequency to maintain a good oral hygiene

a) Daily once
b) Daily twice
c) Daily thrice
d) Two days once

26. When often we should visit the dentist

a) Once in every six months
b) Once in every year
c) Once in every two years
d) Once in every three years

27. What is the prognosis of oral cancer

a) Primordial prevention
b) Primary prevention
c) Secondary prevention
d) Tertiary prevention

28. Why majority of the oral cancer un noticed due to

a) Illiteracy
b) Ignoring color changes and soreness in oral cavity
c) Lack of awareness
d) Negligence

29. What is the most common management of oral cancer

a) Antibiotics
b) Radiation therapy
c) Chemotherapy
d) Surgery

30. Why Rehabilitation is necessary

a) To improve Chewing and speech
b) To improve Self esteem
c) To improve Tissue growth
d) Reduce inflammation

Keys

Question number	Answer	Question number	Answer
1	c	17	b
2	b	18	c
3	a	19	b
4	a	20	b
5	a	21	d
6	b	22	c
7	b	23	c
8	d	24	a
9	c	25	b
10	c	26	a
11	b	27	a
12	b	28	b
13	a	29	b
14	d	30	a
15	b		
16	a		

APPENDIX – IX

QUESTIONNAIRE IN TAMIL

பிரிவு A.

டெமோகிராஃபிக் தரவு

1. வயது

a) 20 முதல் 30 ஆண்டுகள்

b) 31 முதல் 40 ஆண்டுகள் வரை

c) 41 முதல் 50 ஆண்டுகள் வரை

d) 50 வயது மற்றும் அதற்கு மேற்பட்டவர்கள்.

2. பாலினம்

a) ஆண்

b)பெண்.

3. திருமண நிலை

a)) திருமணம்

b)) திருமணமாகாத

c)) விவாகரத்து

4. கல்வி நிலை

a) படிக்கவில்லையா

b) தொடக்கக் கல்வி

c) உயர்நிலைப்பள்ளி

d) உயர்நிலை

e) பட்டம் மற்றும் அதற்கு மேல்

5. மதம்

a) இந்து

b) முஸ்லீம்

c) கிரிஸ்துவர்

d) மற்றவர்கள்

6. மாத வருமானம்

a) <ரூ .5000

b) ரூ .5001 முதல் ரூ .10000 வரை

c) ரூ .10001 முதல் ரூ .15000 வரை

d) ரூ .15001 மற்றும் அதற்கு மேல்

7. பொழுதுபோக்குகள்

a) தொலைக்காட்சி பார்ப்பது

b) புத்தகங்களைப் படித்தல்

c) விளையாடுவது

d) பொழுதுபோக்குகள் இல்லை

8. புகையிலை நுகர்வு பழக்கம்

a) ஆம்

b) இல்லை

b) சில நேரங்களில்.

9. மது அருந்தும் பழக்கம்

a) ஆம்

b) இல்லை

c) சில நேரங்களில்

10. உணவுத்திட்ட

a) சைவம்

b) அசைவம்

11. சுகாதார சேவைகளின் கிடைக்கும் தன்மை

a) சுகாதார மையம்

b) அரசு மருத்துவமனை

c) தனியார் மருத்துவமனை

12. சுகாதார தகவல்களின் ஆதாரங்கள்

a) செய்தித்தாள் / டிவி / பிற வெகுஜன ஊடகங்கள்

b) நண்பர்கள் மற்றும் உறவினர்கள்

c) தன்னார்வ சுகாதார நிறுவனங்கள்

d) சுகாதார நபர்கள்

13. வாய புற்றுநோய் தொடர்பான தகவல்களுக்கு முந்தைய வெளிப்பாடு

a) ஆம்

b) இல்லை

14. வாய் புற்றுநோயின் குடும்ப வரலாறு ஏதேனும் உள்ளதா?

a) ஆம்

b) இல்லை

பிரிவு பி

அறிவு கேள்வி

1. **புற்றுநோய் என்றால் என்ன?**
   a) உடல் திசுக்களின் அழற்சி
   b) ஒரு தொற்று நோய்
   c) உயிரணுக்களின் கட்டுப்பாடற்ற பெருக்கம்
   d) ஒரு வயதான செயல்முறை
2. **இந்தியாவில் மிகவும் பொதுவான புற்றுநோய் எது?**
   a) நுரையீரல் புற்றுநோய்
   b) வாய்வழி புற்றுநோய்
   c) புரோஸ்டேட் புற்றுநோய்
   d) இரைப்பை புற்றுநோய்
3. **வாய்வழி புற்றுநோய் என் என்பதைக் எதைக் குறிக்கிறது**
   a) வாய்வழி குழியில் திசுக்களின் வீரியம் மிக்க வளர்ச்சி
   b) குணப்படுத்தாத புண்கள்
   c) வாய்வழி திசுக்களின் நெக்ரோசிஸ்
   d) ஈறுகளில் இரத்தப்போக்கு
4. **எந்த உடல் பகுதியில் புற்றுநோய் ஏற்படும்**
   a) கிட்டத்தட்ட அனைத்து பகுதிகளும்
   b) முக்கிய உறுப்புகளில் மட்டுமே
   c) இதயம் தவிர அனைத்து முக்கிய உறுப்புகளும்
   d) முக்கிய உறுப்புகளைத் தவிர அனைத்து பகுதிகளும்
5. **எந்த வகை வாய்வழி புற்றுநோய் வருகிறது**
   a) தலை மற்றும் கழுத்து புற்றுநோய்
   b) தலை புற்றுநோய்
   c) கழுத்து புற்றுநோய்
   d) நிணநீர் புற்றுநோய்

6. வாய்வழி புற்றுநோயில் புண் அல்லது கட்டி எங்குள்ளது?

a) வாயில் மட்டுமே

b) நாக்கு, வாய், கடினமான மற்றும் மென்மையான அண்ணம், சைனஸ்கள் மற்றும் குரல்வளை

c) பற்கள்

d) முக எலும்புகள்

7. வாய்வழி புற்றுநோய் வளர்ச்சியடைகிறதா

a) இது மெட்டாஸ்டாஸைஸ் செய்யாது

b) மெட்டாஸ்டாஸிஸ் நடக்கிறது

c) அருகிலுள்ள உறுப்புகளில் மட்டுமே

d) தொலைதூர உறுப்புகளுக்கும்

8. **எந்த வயதினருக்கு வாய்வழி புற்றுநோய் அதிகம் வருவதற்கான வாய்ப்புகள் உள்ளது**

a) 10 முதல் 20 ஆண்டுகள் வரை

b) 20 முதல் 30 வரை

c) 30 முதல் 40 வரை

d) 40 மற்றும் அதற்கு மேற்பட்டவை

9. **எந்தக் குழுவினருக்கு வாய்வழி புற்றுநோய் வருவதற்கான வாய்ப்புகள் அதிகம் உள்ளது**

a) இளம் ஆண்கள்

b) இளம் பெண்கள்

c) வயதான ஆண்கள்

d) வயதான பெண்கள்

10. எந்த வகை உணவு வாய்வழி குழிக்கு காயம் ஏற்படுத்துகிறது

a) சூடான மற்றும் காரமான உணவுகள்

b) எண்ணெய் உணவு

c) தீவிர சூடான மற்றும் குளிர் பானங்கள்

d) திரவ உணவுகள்

11. **எந்த காய்கறியை உட்கொள்ளும்போது வாய்வழி புற்றுநோய் வரும் அபாயம் உள்ளது**

a) கத்திரிக்காய்

b) தக்காளி

c) கேரட்

d) வெள்ளரி

12. **வாய்வழி புற்றுநோயை ஏற்படுத்தக்கூடிய சுற்றுச்சூழல் காரணி எது?**

a) ஐஆர் கதிர்கள்

b) புற ஊதா கதிர்கள்

c) மாசு

d) காலநிலை மாற்றங்கள்

13. எந்த வகையான வைரஸ்கள் வாய்வழி புற்றுநோயை ஏற்படுத்துகின்றன

a) மனித பாப்பிலோமா மற்றும் எப்சின் பார் வைரஸ்

b) மனித அடினோ வைரஸ் மற்றும் ஃபிளேவி வைரஸ்

c) கோரைன் பார்வோ வைரஸ்

d) பாகுலோ வைரஸ் மற்றும் காலிஃபிளவர் மொசைக் வைரஸ்

14. **எந்த வகையான புகையிலை உட்கொள்வதால் வாய்வழி புற்றுநோயின் அபாயம் அதிகரிக்கிறது**

a) புகையிலை புகைப்பவர்கள்

b) புகையிலை மெல்லும்

c) புகையிலை மோப்பம்

d) எந்த வகையான புகையிலை பயனரும்

15. **எந்த வகை ஆல்கஹால் நுகர்வோர் வாய்வழி புற்றுநோயைப் பெற அதிக வாய்ப்புள்ளது**

a) மது அருந்தாதவர்கள்

b) அதிக மது நுகர்வோர்

c) தினமும் ஒரு சிறிய தொகை

d) சமூக குடிகாரர்கள்

16. **புற ஊதா கதிர்கள் வெளிப்படுவதால் வாய்வழி புற்றுநோய் வருவதற்கான வாய்ப்புகள் அதிகம் உள்ளது**

a) வாய்வழி புற்றுநோய் வருவதற்கான வாய்ப்புகள் எதுவும் இல்லை

b) புற ஊதா கதிர்களை தொடர்ந்து வெளிப்படுத்துவது வாய்வழி புற்றுநோயை ஏற்படுத்தும்

c) சில வரையறுக்கப்பட்ட காலத்திற்கு வெளிப்பாடு வாய்வழி புற்றுநோயையும் ஏற்படுத்துகிறது

d) சூரிய ஒளியில் இருந்து உடலை மூடிய பிறகும் புற ஊதா கதிர்கள் வாய்வழி புற்றுநோயை ஏற்படுத்துகின்றன

17.புகைப்பிடிக்காதவர்கள் மற்றும் ஆல்கஹால் அல்லாத நுகர்வோர் வாய்வழி புற்றுநோய்க்கான ஆபத்து காரணி என்ன?

a) பரம்பரை

b) சுகாதாரமற்ற உணவு நடைமுறைகள்

c)ஊட்டச்சத்துக்குறைக்கு

d)அமைதியின்மை

18. வாய்வழி புற்றுநோயின் நிற தோற்றம் என்ன?

a) ரெட்

b) வெள்ளை

c) சிவப்பு மற்றும் வெள்ளை

d) கருப்பு

19. **வாய்வழி புற்றுநோயின் ஆரம்ப அறிகுறிகள் யாவை**

a) நாக்கு, உதடு மற்றும் வாய் பகுதியில் புண்

b) வாய்வழி குழியில் எரியும் உணர்வு

c) பற்கள் நிறமாற்றம்

d) துர்நாற்றத்தை

20. **வாய்வழி புற்றுநோயின் பிற்கால அறிகுறிகள் யாவை**

a) விழுங்குவதில் சிரமங்கள்

b) வாய் புண்கள் 14 நாட்களில் தீர்க்காது

c) வலி மற்றும் பரஸ்தீசியா

d) பற்குழிகளைக்

21. சிகிச்சையின் பின்னர் வாய்வழி புற்றுநோய் மீண்டும் ஏற்படுகிறதா

a) மீண்டும் ஏற்படாது

b) மீண்டும் நிகழ்கிறது

c) சில பகுதிகளில் நிகழ்கிறது

d) 50% வாய்ப்புகள் உள்ளன

22. எந்த வகை உணவு உட்கொள்வது புற்றுநோயின் அபாயங்களைக் குறைக்கிறது

a) முட்டை உட்கொள்ளல்

b) தாவர அடிப்படையிலான உட்கொள்ளல்

c) இறைச்சி அடிப்படையிலான உட்கொள்ளல்

d) பால் அடிப்படையிலானது

23. வாய்வழி புற்றுநோயைத் தடுக்கும் முறை எது?

a) சரியான வாய்வழி சுகாதாரம்

b) திரவங்களை வழக்கமாக உட்கொள்ளுதல்

c) கொழுப்பு நிறைந்த உணவை வழக்கமாக உட்கொள்ளுதல்

d) மாவு வழக்கமாக உட்கொள்ளுதல்

24. **வாய்வழி புற்றுநோயின் முன்கணிப்பு என்ன**

a) திகால தடுப்பு

b) முதன்மை தடுப்பு

c) இரண்டாம் நிலை தடுப்பு

d) மூன்றாம் நிலை தடுப்பு

25. எந்த வகையான சமையல் வாய்வழி புற்றுநோய்க்கான வாய்ப்புகளை அதிகரிக்கிறது

a) பேக்கிங்

b) வேகவைக்கவும்

c) வறுக்கப்படுகிறது

d) கொதி

26. ஏன் மக்கள் வாய்வழி புற்றுநோயின் விழிப்புணர்வு பற்றி அறியவில்லை

a) எழுத்தறிவின்மை

b) வாறிவழி குழியில் வண்ண மாற்றங்கள் மற்றும் புண் ஆகியவற்றை புறக்கணித்தல்

c) விழிப்புணர்வு இல்லாமை

d) கவனக்குறைவு

27. வாய்வழி புற்றுநோயின் பொதுவான மேலாண்மை எது?

a) நுண்ணுயிர் கொல்லிகள்

b) கதிர்வீச்சு சிகிச்சை

c) கீமோதெரபி

d) அறுவை சிகிச்சை

28. ஒரு நல்ல வாய்வழி சுகாதாரத்தை பராமரிக்க தினசரி துலக்குதல் அதிர்வெண் என்ன?

a) தினமும் ஒரு முறை

b) தினமும் இரண்டு முறை

c) தினசரி மூன்று முறை

d) இரண்டு நாட்களுக்கு ஒரு முறை

29. எப்போது நாம் பல் மருத்துவரை சந்திக்க வேண்டும்

அ) ஒவ்வொரு ஆறு மாதங்களுக்கும் ஒரு முறை

b) ஒவ்வொரு ஆண்டும் ஒரு முறை

c) ஒவ்வொரு இரண்டு வருடங்களுக்கும் ஒரு முறை

ஒவ்வொரு மூன்று வருடங்களுக்கும் ஒரு முறை

30. ஏன் மறுவாழ்வு அவசியம்

a) மெல்லும் மற்றும் பேச்சை மேம்படுத்த

b) சுயமரியாதையை மேம்படுத்த

c) திசு வளர்ச்சியை மேம்படுத்த

d) வீக்கத்தைக் குறைக்கும்

Keys

Question number	Answer	Question number	Answer
1	c	17	b
2	b	18	c
3	a	19	b
4	a	20	b
5	a	21	d
6	b	22	c
7	b	23	c
8	d	24	a
9	c	25	b
10	c	26	a
11	b	27	a
12	b	28	b
13	a	29	b
14	d	30	a
15	b		
16	a		

APPENDIX – X

LESSON PLAN ON ORAL CANCER

Topic	:	Oral cancer
Group	:	Industrial workers
Number of participants	:	50
Duration	:	30 minutes
Method of teaching	:	Computer assisted teaching
A.V Aids	:	Power point presentation presentation

GENERAL OBJECTIVES

At the end of the class the industrial workers will be able to acquire knowledge regarding oral cancer.

SPECIFIC OBJECTIVES

1. Introduction about the oral cancer.
2. Definition of oral cancer.
3. Explain the prevalence of oral cancer.
4. Explain the types of oral cancer.
5. List out the various types of oral cancer.
6. Describe signs and symptoms of oral cancer.
7. Enumerate prevention of oral cancer.
8. Diagnostic methods to evaluate oral cancer
9. List down the treatment of oral cancer.
10. Point out the rehabilitation of oral cancer.

Time	Specific Objectives	Content	Teaching Method	AV Aids	Evalu ation
2 min.	Introduction about the oral cancer	**INTRODUCTION** One of the most commonly occurring cancers is oral cancer. The incidence of the oral cancer seems to be increasing exponentially in the world. The clinician has to undergo a higher level of dilemma every time in order to differentiate the cancerous lesions from other controversial and poorly defined lesions that are present in the oral cavity. Early stage carcinomas and its subsequent manifestations are highly misinterpreted because at the initial stage there is minimum discomfort in the patient and they simply mimic many similar benign lesions	Power point presentation	Power point presentation	What is mean by oral cancer
2 min	Definition of oral cancer.	**DEFINITION** Oral cancer is an uncontrolled proliferation of the cells in the mouth and the adjacent parts of the of the neck	Power point presentation	Power point presentation	What is the definition of oral cancer ?
2min	Explain the prevalence of oral cancer	**Prevalence of oral cancer** • In India, oral cancer is the most common cancer in men	Power point presentation	Power point presentation	What are the prevalence of oral cancer

Time	Specific Objectives	Content	Teaching Method	AV Aids	Evalu ation
		• Most men over 40 years of age have a chance of getting oral cancer • In India oral cancer is the one of the most common cancer • In Indian males oral cancer is the most common cancer			
2 min	Explain the types of oral cancer	**Types of oral cancer** • Oral cancers spreads into the head and neck as cancer. • Oral cancer can occur in the tongue, mouth, palate, sinuses and larynx and other parts of the neck	Power point presentation	Power point presentation	What are the types of oral cancer
10min	List out the various causes of oral cancer	**Causes of oral cancer** • Human papilloma and epsinbarviruses are the virus cause of oral cancer • Tobacco consumption in any form increases the chances of getting oral cancer • Intense consumption of alcohol increases the chances	Power point presentation	Power point presentation	What are the causes of oral cancer

Time	Specific Objectives	Content	Teaching Method	AV Aids	Evalu ation
		of getting oral cancer • Daily intake of fried foods increases the chances of getting oral cancer • Eating extreme hot and cold beverages continues to cause oral injury which increases the chances of getting oral cancer • Increase consumption of tomatoes in food increases the chances of getting oral cancer • Continuous exposure to UV rays increases the chances of getting oral cancer • Genetic causes increases the chances			
2min	Describe signs and symptoms of oral cancer	**Signs and symptoms of oral cancer** • Color changes in the area affected by oral cancer • Red and white color changes in the area affected by oral cancer • The symptoms of head and neck cancers may typically include a lump or a sore that does not heal,	Power point presentation	Power point presentation	What are the signs and symptoms oral cancer

Time	Specific Objectives	Content	Teaching Method	AV Aids	Evalu ation
		difficulty swallowing, a persistent sore throat or hoarseness in the voice • **Early signs :** Sensation of burning in the oral cavity • **Late signs:** Mouth ulcers do not resolve in 14 days			
2 min	Enumerate prevention of oral cancer	**Prevention of oral cancer** • Stop consuming tobacco • Stop consuming excess amount of alcohol • Stop exposing yourself to excess UV rays • Eat more plant-based foods • Avoid regular use of daily fried foods • Proper oral hygiene • Regularly check with the dentist	Power point presentation	Power point presentation	What are the prevention of oral cancer
	Diagnostic procedures to rule out oral cancer	**Diagnostic procedures** • **Endoscopy**. An endoscope is a lighted tube, which is used to examine the throat, larynx, and upper esophagus. Endoscopy is performed to obtain a biopsy, determine the local extent of the cancer, and			What are the diagnostic procedures

Time	Specific Objectives	Content	Teaching Method	AV Aids	Evalu ation
		look for additional cancers • **Biopsy** involves the removal of a small sample of the suspected cancer. The samples are then examined under a microscope to determine if cancer is present. • **Imaging Tests:** Chest x-ray, computed tomographic (CT) scans, magnetic resonance imaging (MRI) scans, ultrasound, and positron			
2min	Point out the rehabilitation of oral cancer.	**Treatment of oral cancer** • Radiation therapy is an effective method for treating oral cancer • The combination of these three in the treatment of surgery, radiation, medicine and severe cases according to the stages of cancer • It is best to prevent cancer or to detect it in the early stages • There is a possibility of recurrence of oral cancer after treatment			What are the rehabilitation of oral cancer.

Time	Specific Objectives	Content	Teaching Method	AV Aids	Evalu ation
		• Primary prevention is the best way to spell out oral cancer			
2 min.		**CONCLUSION** Primary prevention is the best way to spell out oral cancer Most oral cancers are overlooked due to color changes and neglect of ulcer in the oral cavity. Every six months once its important to visit dentist once. Even a small growth and changes should be noted to the physician			

APPENDIX – XI

ghlj;jpl;lk;

வாய் புற்றுநோய்

தலைப்பு : வாய்புற்றுநோய்

குழு : தொழிலாளர்கள்

பங்கேற்பாளர்களின் எண்ணிக்கை : 50

இடம் : ஓலப்பாளையம் கிராமம்

காலம் : 30 நமிடங்கள்

கற்பிக்கும் முறைகள் : கணினி மூலம் கற்பித்தல்

கற்பித்தல் : தமிழ்

பொது நோக்கங்கள : கற்பித்தல் முடிவில் மக்களுக்கு வாய்புற்றுநோய் பற்றிய ஆழமா அறிவு இருக்கும்

நடத்தை நோக்கங்கள் :

1. வாய் புற்றுநோய் பற்றிய அறிமுகம்.

2. வாய் புற்றுநோயின் வரையறை.

3. வாய் புற்றுநோய் பரவுவதை.

4. வாய் புற்றுநோய் வகைகளை .

5. வாய் புற்றுநோய்க்கான பல்வேறு காரணங்களை பட்டியலிடுங்கள்..

6. வாய் புற்றுநோய் அறிகுறிகளையும் அறிகுறிகளையும் விவரிக்கவும்.

7. வாய் புற்றுநோயைத் தடுப்பதைக் கணக்கிடுங்கள்.

8. வாய் புற்றுநோயை மதிப்பிடுவதற்கான கண்டறியும் முறைகள்

9. வாய் புற்றுநோய்க்கான சிகிச்சையை பட்டியலிடுங்கள்.

10. வாய் புற்றுநோய் மறுவாழ்வை சுட்டிக்காட்டவும்.

Neuk;	Fwpg;gpl;l Nehf;fq;fs;	cs;slf;fk;	fw;wy; topKiwfs;	xyp kw;Wk; fhl;rp Kiwfs;	kjpg;gPL
		முன்னுரை : பொதுவாக ஏற்படும் புற்றுநோய்களில் ஒன்று வாய் புற்றுநோய். வாய் புற்றுநோயின் தாக்கம் உலகில் அதிவேகமாக அதிகரித்து வருவதாக தெரிகிறது. வாய் குழியில் இருக்கும் பிற சர்ச்சைக்குரிய மற்றும் மோசமாக வரையறுக்கப்பட்ட புண்களிலிருந்து புற்றுநோய் புண்களை வேறுபடுத்துவதற்காக மருத்துவர் ஒவ்வொரு முறையும் அதிக அளவு குழப்பத்திற்கு ஆளாக வேண்டும். ஆரம்ப கட்ட புற்றுநோய்கள் மற்றும் அதன் அடுத்தடுத்த வெளிப்பாடுகள் மிகவும் தவறாகப் புரிந்து கொள்ளப்படுகின்றன, ஏனெனில் ஆரம்ப கட்டத்தில் நோயாளிக்கு குறைந்தபட்ச அச om கரியம் உள்ளது மற்றும் அவை பல ஒத்த தீங்கற்ற புண்களைப்			வாய் புற்றுநோய் பற்றி உங்களுக்குத் தெரியுமா??
2 நிமிடம்	2. வாய் புற்றுநோயின் வரையறை.	வாய் புற்றுநோய் என்பது வாயில் உள்ள செல்கள் மற்றும் கழுத்தின் அருகிலுள்ள பகுதிகளின் கட்டுப்பாடற்ற பெருக்கம் ஆகும்	கலந்துரை யாடல்	கணினி மூலம் கற்பித்தல்	வாய் புற்றுநோய் பற்றி உங்களுக்கு என்ன தெரியும்?
		வாய் புற்றுநோயின் பரவல் • இந்தியாவில், வாய் புற்றுநோய் என்பது ஆண்களில் மிகவும் பொதுவான			

Neuk;	Fwpg;gpl;l Nehf;fq;fs;	cs;slf;fk;	fw;wy; topKiwfs;	xyp kw;Wk; fhl;rp Kiwfs;	kjpg;gPL
		புற்றுநோயாகும் • 40 40 வயதுக்கு மேற்பட்ட பெரும்பாலான ஆண்களுக்கு வாய் புற்றுநோய் வருவதற்கான வாய்ப்பு உள்ளது • இந்தியாவில் வாய் புற்றுநோய் மிகவும் பொதுவான புற்றுநோயாகும் இந்திய ஆண்களில் வாய் புற்றுநோய் மிகவும் பொதுவான புற்றுநோயாகும்			
2 நிமிடம்	4. வாய் புற்றுநோய் வகைகளை	<u>வாய் புற்றுநோய் வகைகள்</u> • வாய் புற்றுநோய்கள் தலை மற்றும் கழுத்தில் புற்றுநோயாக பரவுகின்றன. நாக்கு, வாய், அண்ணம், சைனஸ்கள் மற்றும் குரல்வளை மற்றும் கழுத்தின் பிற பகுதிகளில் வாய் புற்றுநோய் ஏற்படலாம்	கேட்பது	கணினி மூலம் கற்பித்தல்	வாய் புற்றுநோயின் வகைகள் யாவை
1o நிமிடம்	வாய் புற்றுநோய்க்கான பல்வேறு காரணங்களை	<u>வாய் புற்றுநோய்க்கான காரணங்கள்</u> • மனித பாப்பிலோமா மற்றும் எப்சின்பார் வைரஸ்கள் வாய் புற்றுநோய்க்கான வைரஸ் காரணமாகும் • எந்த வடிவத்திலும் புகையிலை உட்கொள்வது வாய் புற்றுநோயைப்	கேட்பது	கணினி மூலம் கற்பித்தல்	வாய் புற்றுநோய்க்கான காரணங்கள் யாவை

Neuk;	Fwpg;gpl;l Nehf;fq;fs;	cs;slf;fk;	fw;wy; topKiwfs;	xyp kw;Wk; fhl;rp Kiwfs;	kjpg;gPL
	பட்டியலிடுங்கள்.	பெறுவதற்கான வாய்ப்புகளை அதிகரிக்கிறது • ஆல்கஹால் அதிகமாக உட்கொள்வது வாய் புற்றுநோயைப் பெறுவதற்கான வாய்ப்புகளை அதிகரிக்கிறது • வறுத்த உணவுகளை தினமும் உட்கொள்வது வாய் புற்றுநோயைப் பெறுவதற்கான வாய்ப்புகளை அதிகரிக்கிறது • தீவிர சூடான மற்றும் குளிர் பானங்களை சாப்பிடுவது வாய் காயத்தை ஏற்படுத்துகிறது, இது வாய் புற்றுநோயைப் பெறுவதற்கான வாய்ப்புகளை அதிகரிக்கிறது • உணவில் தக்காளி நுகர்வு அதிகரிப்பது வாய் புற்றுநோயைப் பெறுவதற்கான வாய்ப்புகளை அதிகரிக்கிறது • புற ஊதா கதிர்களை தொடர்ந்து வெளிப்படுத்துவது வாய் புற்றுநோயைப் பெறுவதற்கான வாய்ப்புகளை அதிகரிக்கிறது			

Neuk;	Fwpg;gpl;l Nehf;fq;fs;	cs;slf;fk;	fw;wy; topKiwfs;	xyp kw;Wk; fhl;rp Kiwfs;	kjpg;gPL
		மரபணு காரணங்கள் வாய்ப்புகளை அதிகரிக்கின்றன			
2 நிமிடம்	6. வாய் புற்றுநோய் அறிகுறிகளையும் அறிகுறிகளையும் விவரிக்கவும்.	**<u>வாய் புற்றுநோயின் அறிகுறிகள் மற்றும் அறிகுறிகள்</u>** வாய் புற்றுநோயால் பாதிக்கப்பட்ட பகுதியில் வண்ண மாற்றங்கள் Oral வாய் புற்றுநோயால் பாதிக்கப்பட்ட பகுதியில் சிவப்பு மற்றும் வெள்ளை நிற மாற்றங்கள் Head தலை மற்றும் கழுத்து புற்றுநோய்களின் அறிகுறிகளில் பொதுவாக ஒரு கட்டை அல்லது குணமடையாத புண், விழுங்குவதில் சிரமம், தொடர்ச்சியான தொண்டை வலி அல்லது குரலில் கூச்சம் ஆகியவை இருக்கலாம். **ஆரம்ப அறிகுறிகள்** வாய் குழியில் எரியும் உணர்வு **தாமத அறிகுறிகள்** · வாய் புண்கள் 14 நாட்களில் தீர்க்கப்படாது	கலந்துரையாடல்	கணினி மூலம் கற்பித்தல்	வாய் புற்றுநோயின் அறிகுறிகள் மற்றும் அறிகுறிகள் என்ன
2 நிமிடம்	7. வாய் புற்றுநோயைத்	வாய் புற்றுநோயைத் தடுக்கும் • புகையிலை உட்கொள்வதை	கேட்பது	கணினி மூலம் கற்பித்தல்	வாய் புற்றுநோயைத் தடுப்பது என்ன

Neuk;	Fwpg;gpl;l Nehf;fq;fs;	cs;slf;fk;	fw;wy; topKiwfs;	xyp kw;Wk; fhl;rp Kiwfs;	kjpg;gPL
	தடுப்பதைக் கணக்கிடுங்கள்.	நிறுத்துங்கள் • அதிகப்படியான ஆல்கஹால் உட்கொள்வதை நிறுத்துங்கள் • அதிகப்படியான புற ஊதா கதிர்களுக்கு உங்களை வெளிப்படுத்துவதை நிறுத்துங்கள் • அதிக தாவர அடிப்படையிலான உணவுகளை உண்ணுங்கள் • தினசரி வறுத்த உணவுகளை தவறாமல் பயன்படுத்துவதைத் தவிர்க்கவும் • சரியான வாய் சுகாதாரம் பல் மருத்துவரிடம் தவறாமல் சரிபார்க்கவும்			
2 நிமிடம்	9. வாய் புற்றுநோய்க்கான சிகிச்சையை பட்டியலிடுங்கள். .	**<u>வாய் புற்றுநோய்க்கான சிகிச்சை</u>** • வாய் புற்றுநோய்க்கு சிகிச்சையளிக்க கதிர்வீச்சு சிகிச்சை ஒரு சிறந்த முறையாகும் • புற்றுநோயின் நிலைகளுக்கு ஏற்ப அறுவை சிகிச்சை, கதிர்வீச்சு, மருத்துவம் மற்றும் கடுமையான நிகழ்வுகளின் சிகிச்சையில் இந்த மூன்றின் சேர்க்கை • புற்றுநோயைத் தடுப்பது அல்லது ஆரம்ப	கலந்துரை யாடல்	கணினி மூலம் கற்பித்தல்	வாய் புற்றுநோய்க்கான சிகிச்சை என்ன?

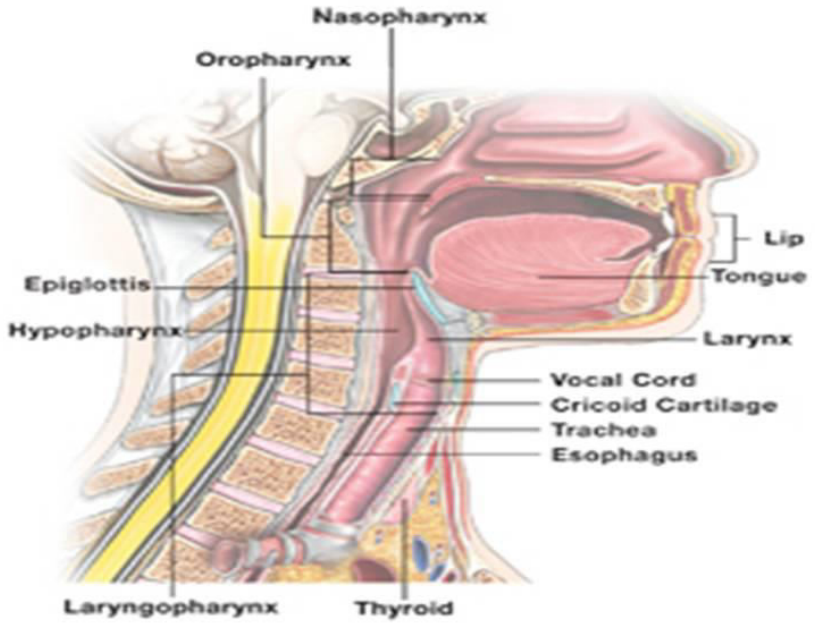
Neuk;	Fwpg;gpl;l Nehf;fq;fs;	cs;slf;fk;	fw;wy; topKiwfs;	xyp kw;Wk; fhl;rp Kiwfs;	kjpg;gPL
		கட்டத்தில் அதைக் கண்டறிவது சிறந்தது • சிகிச்சையின் பின்னர் வாய் புற்றுநோய் மீண்டும் வருவதற்கான வாய்ப்பு உள்ளது • முதன்மை தடுப்பு வாய் புற்றுநோயை உச்சரிக்க சிறந்த வழியாகும்			
2 நிமிடம்	10. வாய் புற்றுநோய் மறுவாழ்வை சுட்டிக்காட்டவும்	**<u>வாய் புற்றுநோய் மறுவாழ்வு</u>** • மெல்லுதல் மற்றும் பேச்சை மேம்படுத்துவதற்கு முதன்மையாக மறுவாழ்வு தேவை, இரண்டாவதாக சுயமரியாதையை மேம்படுத்துதல், வளர்ச்சியை ஊக்குவித்தல், வீக்கத்தைக் குறைத்தல்	கலந்துரை யாடல்	கணினி மூலம் கற்பித்தல்	என்ன வாய் புற்றுநோயின் மறுவாழ்வு.
		<u>தீர்மானம்</u> • முதன்மை தடுப்பு வாய் புற்றுநோயை உச்சரிக்க சிறந்த வழியாகும் • வாய் குழியில் புண்ணை புறக்கணிப்பதால் பெரும்பாலான வாய் புற்றுநோய்கள் கவனிக்கப்படுவதில்லை. • ஆறு மாதங்களுக்கும் ஒரு முறை பல் மருத்துவரை சந்திப்பது முக்கியம். • ஒரு சிறிய வளர்ச்சி மற்றும் மாற்றங்கள்			

Neuk;	Fwpg;gpl;l Nehf;fq;fs;	cs;slf;fk;	fw;wy; topKiwfs;	xyp kw;Wk; fhl;rp Kiwfs;	kjpg;gPL
		கூட மருத்துவரிடம் கவனிக்கப்பட வேண்டும்			

APPENDIX – XII

POWERPOINT PRESENTATION ON ORAL CANCER IN TAMIL

- இந்தியாவில் வாய்வழி புற்றுநோய் என்பது ஆண்களில் அதிகம் பாதிக்கப்படும் புற்றுநோயாகும்
- வாய்வழி புற்றுநோய்கள் தலை மற்றும் கழுத்து புற்றுநோய்க்குள் வருகின்றன
- வாய்வழி புற்றுநோயில் ஏற்படும் புண்கள் நாக்கு, வாய், அண்ணம், சைனஸ்கள் மற்றும் குரல்வளை ஆகியவற்றில் ஏற்படுகின்றன

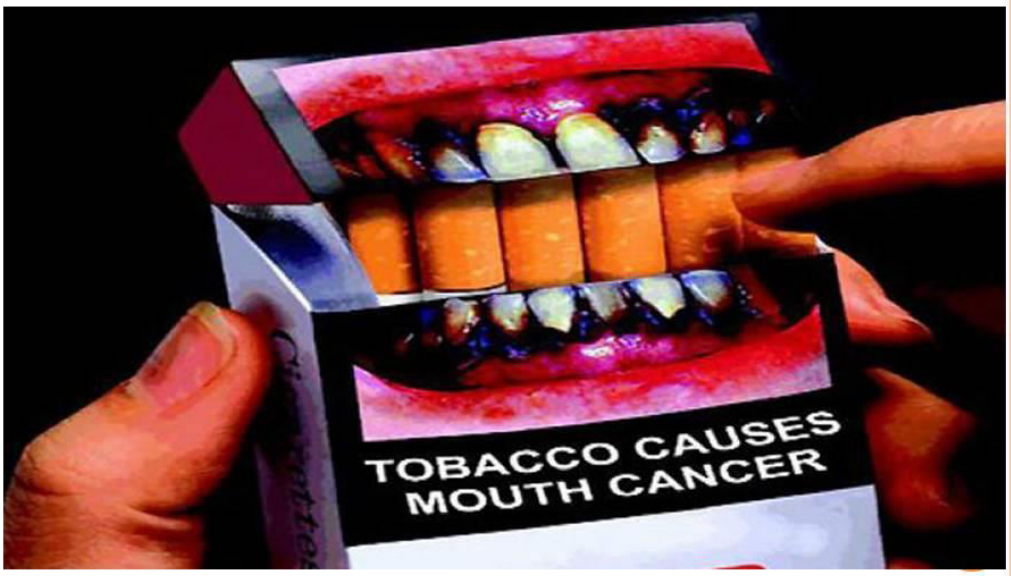


- பெரும்பாலும் 40 வயதுக்கு மேற்பட்ட ஆண்கள் வாய் புற்றுநோயால் பாதிக்கப்படுகிறார்கள்

வாய் புற்றுநோயைப் பெறுவதற்கான காரணங்கள்

- மனித பாப்பிலோமா மற்றும் எப்சின்பார் வைரஸ் தொற்று
- புகையிலை நுகர்வு
- தீவிர ஆல்கஹால் நுகர்வு
- தீவிர சூடான மற்றும் குளிர் பானங்களை சாப்பிடுவதால் வாய்வழி காயம் ஏற்படுகின்றன
- உணவில் தக்காளியை அதிகம் பயன்படுத்துதல்
- புற ஊதா கதிர்களுக்கு தொடர்ந்து வெளிப்பாடு
- மரபணு காரணங்கள்

புகையிலை நுகர்வு



வாய்வழி புற்றுநோயால் பாதிக்கப்பட்ட பகுதியில் வண்ண மாற்றங்கள்

- வாய்வழி புற்றுநோயால் பாதிக்கப்பட்ட பகுதியில் சிவப்பு மற்றும் வெள்ளை வண்ண மாற்றங்கள் இருக்கும்

வாய்வழி புற்றுநோயின் அறிகுறிகள்

ஆரம்ப அறிகுறிகள்

- வாய்வழி குழியில் எரியும் உணர்வு

பின்னர் வாய்வழி புற்றுநோயின்

அறிகுறிகள்

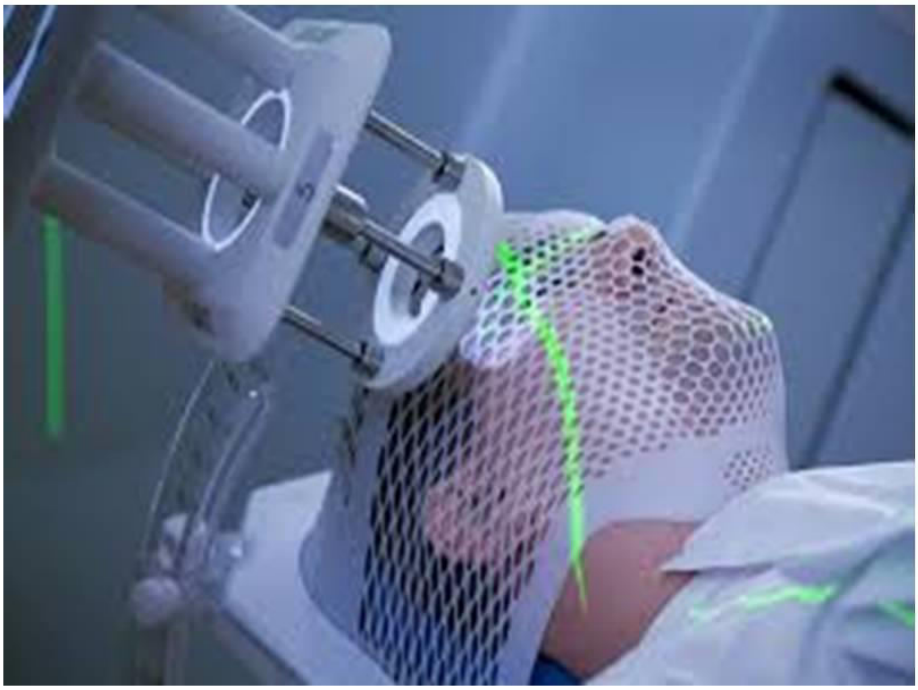
- வாய் புண்கள் 14 நாட்களில் தீர்க்காது

வாய்வழி புற்றுநோய்களின் தடுப்பு முறைகள்

- ஆல்கஹால் மற்றும் புகையிலை உட்கொள்வதை நிறுத்துங்கள்
- அதிகப்படியான புற ஊதா கதிர்களுக்கு உங்களை வெளிப்படுத்துவதை நிறுத்துங்கள்
- தாவர அடிப்படையிலான உணவுகளை அதிகம் உட்கொள்ளுங்கள்
- சரியான வாய்வழி சுகாதாரம்
- பல் மருத்துவரிடம் தவறாமல் பரிசோதிக்கவும்

வாய்வழி புற்றுநோயின் சிகிச்சை மற்றும் மேலாண்மை

- கதிர்வீச்சு சிகிச்சை வாய்வழி புற்றுநோய்க்கு சிகிச்சையளிப்பதற்கான சிறந்த முறையாகும்
- புற்றுநோயின் கட்டங்களின்படி சிகிச்சை அறுவை சிகிச்சை, கதிர்வீச்சு, மருத்துவம் மற்றும் கடுமையான சந்தர்ப்பங்களில் இந்த மூன்றின் கலவையாகும்
- புற்றுநோயைத் தடுப்பது அல்லது ஆரம்ப கட்டங்களில் அதைக் கண்டறிவது சிறந்தது
- சிகிச்சையின் பின்னர் வாய்வழி புற்றுநோயை மீண்டும் உருவாக்கும் வாய்ப்பு உள்ளது



புற்றுநோயின் முன்கணிப்பு

- வாய்வழி புற்றுநோயின் உச்சரிப்புக்கு முதன்மையான தடுப்பு சிறந்த வழியாகும்
- வண்ண மாற்றங்கள் மற்றும் வாய்வழி குழியில் புண் இருப்பதைப் புறக்கணிப்பதால் வாய்வழி புற்றுநோய்களில் பெரும்பாலானவை கவனிக்கப்படவில்லை

புனர்வாழ்வு

- மெல்லுதல் மற்றும் பேச்சை மேம்படுத்துவதற்கு முதன்மையாக மற்றும் மிக முக்கியமாக மறுவாழ்வு தேவை,
- இரண்டாவதாக சுயமரியாதையை மேம்படுத்துதல், வளர்ச்சியை மேம்படுத்துதல், வீக்கத்தைக் குறைத்தல்

APPENDIX – XII

PHOTOGRAPHS

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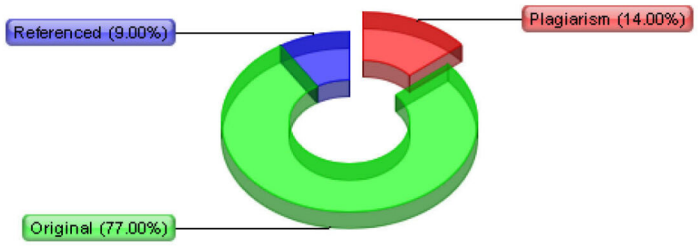

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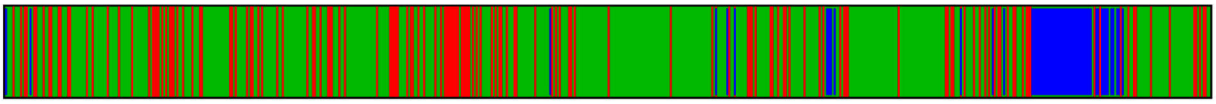

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INTRODUCTION

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"Courage is not the absence of fear, but rather the judgment that something else is more important than fear."

- Ambrose Redmond

BACKGROUND OF THE STUDY

The word cancer comes from Latin word 'Carcinoma' which means a 'crab'. Cancer is the most dreaded