Research Article

A STUDY TO ASSES THE KNOWLEDGE REGARDING ORAL CANCER AMONG HIGH SCHOOL STUDENTS (13-18YRS) IN KOLLAM WITH A VIEW TO DEVELOP A SELF INSTRUCTIONAL MODULE

Swetha Thomas, Mary Daphne David, Josna Joseph, Anushma J. and *Sindhu Ambika

BSc. Nursing Students, Bishop Benziger College of Nursing, Kollam, Kerala, India.
Nursing Tutor Bishop Benziger College of Nursing, Kollam, Kerala, India.

*Corresponding Author: Sindhu Ambika

Nursing Tutor Bishop Benziger College of Nursing, Kollam, Kerala, India.

ABSTRACT

The research project undertook was "A study to assess the knowledge regarding oral cancer among high school students (13-18yrs) in Kollam with a view to develop an instruction module'' The objectives of the study were

- To assess the knowledge regarding oral cancer among high school students.
- To find out the association between knowledge regarding oral cancer among high school students and selected socio demographic variables.
- To develop an instruction module regarding oral cancer.

A quantitative research design was adopted for the study. The study was conducted among 200 high school students selected in SNSM Higher Secondary School Kollam. In order to assess the knowledge regarding oral cancer among high school students in selected schools at Kollam, the study sample were selected by purposive sampling technique

The tool used for data collection consists of demographic proforma and structured questionnaire. The analysis of the data was based on the objectives of the study using descriptive and inferential statistics.

The major findings of the study were as follows.

The findings of the present study showed that there is no significant association between knowledge and demographic variables like sex, family, occupation of parents, income of parents and lifestyle of students.

There is a significant association between knowledge and selected demographic variables like age, religion, living area, education of parents, previous knowledge regarding oral cancer.

The findings of the present study showed that instructional module was effective to increase the knowledge regarding oral cancer among high school students. Based on the findings the investigator have drawn implications which were of vital concerns in the field of nursing practice, nursing administration, nursing pattern, nursing education and for future development.

KEYWORDS: Assess, knowledge, oral cancer, instructional module.

INTRODUCTION

Oral cancer is a major public health problem world wide. Oral and pharyngeal cancers grouped together are the sixth most common cancers in the world. Oral cancer is the malignancy of the oral mucosa which may develop on the lips, tongue, floor of mouth and other oral tissues. Oral cancer occurs due to tobacco use, unhealthy diet, alcohol consumption, inactive lifestyle, human papilloma virus infection and excessive sun exposure. Tobacco and alcohol are regarded as the major risk factors for oral cancer. The most recent estimated world incidence of oral cancer is around 263,861 new cases for the year of 2008. The population attribute risk of smoking and alcohol consumption has been estimated to 80% for males, 61% for females and 74% for both. The incidence of oral cancer is high in developing countries. In Portugal in the same year of 2008, oral cancer was 6th most frequent cancer in males, with 777 new cases and 248 new cases among females.[1]

Oral cancer is the most common cancer in Indian males. In India, 20 per 100000 population are affected by oral cancer which accounts for about 30% of all types of cancer. Over 5 people in India die everyday because of oral cancer and the same number of people die from cancer in oropharynx and hypo pharynx. It accounts for 5% to 70% of total cancer mortality. The incidence is nearly 11% in males and 5% in females. 95% of oral cancer occurs in people above 40 years of age but the incidence in increasing in men less than 30 years because

of the use of tobacco especially snuff. It is two times more common in men than in women. The 5 year survival rate is 83% for localized cancer and 61% for all stages of cancer of oral cavity. Almost 90% of oral cancers are squamous cell carcinoma. Presently more than 10 million people globally are dignosed with oral cancer every year.[2]

Cancer is the most common cause of morbidity and mortality. In worldwide, 25% of oral cancer attributable to tobacco use, 7-14% to alcohol drinking and 10-15% to micro nutrient deficiency. The evidence that smokeless tobacco causes oral cancer was confirmed recently by the International Agency for Research on Cancer. Studies have shown that heavy intake of alcoholic beverages is associated with nutrient deficiency, which appears to contribute independently to oral carcinogen.[5]

India has the highest incidence of oral cancer in the world. Oral cancer ranks number one among men and number three among women in India. Annual incidence rate is estimated to be 64.46 per 100,000 population (National cancer institute surveillance research programme). Early detection of oral cancer offers the chance for long term survival and has the potential to improve treatment outcome and make health care affordable.[6]

STATEMENT OF THE PROBLEM
A study to assess the knowledge regarding oral cancer among high school students (13-18yrs) in Kollam with a view to develop an instruction module.

OBJECTIVES OF THE STUDY
- To assess the knowledge regarding oral cancer among high school students.
- To find out the association between knowledge regarding oral cancer among high school students and selected socio-demographic variables.
- To develop an instruction module regarding oral cancer.

HYPOTHESIS
Hypothesis was tested at 0.05 level of significance
- **H1:** There will be significant association between the knowledge score with selected socio demographic variables.

Research approach	Quantitative Research
Research design	Non Experimental (Descriptive) Design.
	Research Variables: knowledge of high school students regarding primary prevention of oral cancer.
Variables	**Socio - demographic variables** Socio demographic variables include age, gender, family, living area, education of parents, occupation of parents, income of parents, habits, religion, previous knowledge regarding primary prevention of oral cancer.
Setting of the study	The study was conducted at SNSM Higher Secondary School, Kollam.
Population	High school students (13-18yrs) studying in SNSM Higher Secondary School, Kollam.
Sample	High school students (13-18yrs) studying in SNSM Higher Secondary School, Kollam.
Sample size	200 High School Students in SNSM Higher Secondary School, Kollam,
Sampling technique	Purposive sampling technique

RESULT AND DISCUSSION
Section A: Description of level of knowledge regarding oral cancer among high school students (13-18yrs) in kollam.

The scores were interpreted as.
Very good : 25-30
Good : 20-24
Average : 15-19
Poor: 11-14
Very poor: (<10)

Demographic data of high school students in SNSM Higher Secondary School, Kollam.
- In the case of age, the chi square value was 30.66 which is greater than table value as 9.49 at 0.05 level of significance. So there was significant association between age and knowledge of high school students regarding oral cancer.
- In the case of sex, the chi square value was 1.00 which is less than table value as 9.49 at 0.05 level of

significance. So there was no significant association between sex and knowledge of high school students regarding oral cancer.
- Regarding religion, the chisquare value was 16.23 which is greater than table value as 15.51 at 0.05 level of significance. So there was significant association between religion and knowledge of high school students regarding oral cancer.
- Regarding family, the chi square value was 2.26 which is less than table value as 9.49 at 0.05 level of significance. So there was no significant association between family and knowledge of high school students regarding oral cancer.
- Regarding living area, the chi square value was 17.56 which is greater than table value 15.51 at 0.05 level of significance. So there was significant association between living area and knowledge of high school students regarding oral cancer.
- Regarding education of parents, the chi-square value was 32.8 which is greater than table value as 15.51 at 0.05 level of significance. So there was

- significant association between education of parents and knowledge of high school students regarding oral cancer.
- Regarding occupation of parents the chi square value was 8.20 which is less than the table value as 15.51 at 0.05 level of significance.so there was no association between occupation of parents and knowledge of high school students regarding oral cancer.
- Regarding income of parents, the chi square value was 10.99 which is less than table value as 21.03 at 0.05 level of significance. So there was no significant association between income of parents and knowledge of high school students regarding oral cancer.

- Regarding lifestyle of students,the chi square value was 8.4 which is less than table value as 21.03 at 0.05 level of significance. So there was no significant association between lifestyle of students and knowledge of high school students regarding oral cancer.
- Regarding previous knowledge regarding prevention of oral cancer, the chi square value was 13.44 which is greater than table value as 9.49 at 0.05 level of significance. So there was significant association between previous knowledge regarding oral cancer and knowledge of high school students regarding oral cancer.

Section B: Association between knowledge regarding oral cancer and selected demographic variables.
Association between knowledge and selected demographic variables
N-200

Sociodemogr aphic variables	Very good	Good	Average	Poor	Very poor	Degree of freedom	Calcu lated value	Table value	Level of significance
Age 13-15years 16-18years	3 3	16 10	36 7	52 1	67 5	4	30.66	9.49	S
Sex Male Female	4 2	14 13	19 21	29 25	36 37	4	1.008	9.49	NS
Religion Hindu Christian Muslim	2 1 0	10 8 10	22 2 10	42 5 10	52 19 14	8	16.23	15.51	S
Family Nuclear family Joint family	1 0	6 3	29 8	52 12	65 24	4	2.261 8	9.49	S
Living Area Urban Semiurban Rural	2 1 1	12 5 4	8 9 18	36 8 12	48 10 25	8	17.56 4	15.51	NS
Education of parents									
Illitrate 10 th 12 Graduate	0 0 5 0	3 9 6 3	13 19 12 0	12 27 20 0	36 24 8 3	8	32.8	15.51	S
Occupation Of parents									
Private Entrepreneur Government	2 0 1	14 3 5	21 2 12	34 12 9	40 20 10	8	8.205 0	15.51	S
Income of parents									
Below 10000 10000-30000 30000-50000	5 1 0 2	14 11 2 1	32 15 5 2	21 17 3 4	31 22 8 4	12	10.99	21.03	NS
Lifestyle of students									
Healthy Poor hygiene Tobacco Alcohol	6 0 0 0	20 0 0 0	43 2 0 0	56 1 3 0	63 3 1 2	12	8.4	21.03	NS
Previous Knowledge Regarding									

Prevention of oralcancer									
Yes	2	12	29	29	32	4	13.44	9.49	S
No	0	11	27	24	34				

0.05- level of significance
NS- non significantly
S- significant

The association was computed by chi square test. It was inferred that the present study showed that there was no significant association between knowledge and selected demographic variables like sex, family, occupation of parents, income of parents, and lifestyle of students and there existed significant association between knowledge and selected demographic variables like age, religion, living area, education of parents and previous knowledge of students on oral cancer.

DISCUSSION
The present study was conducted to evaluate the knowledge regarding oral cancer among high school students (13-18yrs) in selected schools at Kollam The data was collected from 200 sample of high school students who met the enteria for the study. The data was interpreted from statistical analysis which was discussed in relation to objectives and the need for the study.

Discussion of findings with other studies based on objectives
Assess the knowledge regarding oral cancer among High School Students
The present study shows that out of 200 sample, 10% have good knowledge, 41% have average Knowledge, 32% have poor knowledge and 17% have very poor knowledge.

The above study findings are supported by another study that was conducted to assess the knowledge regarding oral cancer in selected colleges at Hyderabad A quasi experimental one group pre-test post-test design was adopted. 50 adolescents from Vignan Jr & Degree College Bandlaguda, Hyderabad,[28], were selected by using non probability purposive sampling Structured questionnaire with 31 items were prepared and validated. Data was collected by administering tool. The pre-test score indicates 91 66% students had poor and 8.33 % had moderate knowledge, whereas post-test score indicates 33 33 % students had adequate, 56.66% had moderate and 10% had inadequate knowledge levels.[33]

Association between knowledge regarding oral cancer and selected demographic variables
There is no significant association between knowledge and selected demographic variables like sex, family, occupation of parents, income of parents, and lifestyle of students. And there was significant association between knowledge and selected demographic variables like age, religion, living area, education of parents and previous knowledge on oral cancer.

The above study findings are supported by another descriptive study that conducted to assess the knowledge regarding oral cancer among adolescent boys in selected school at Mangalore. The sample consisted of 100 adolescent boys selected by convenient sampling method. data collection for the study was done by demographic profoma, questionnaire and rating scales. The study reveals that out of 100 sample, 18% of them were in the age group of 12-14yrs, 25% of them were in the age group of 14-16yrs, 57% of them were in the age group of 16-19yrs. The majority of the subjects (70%) were Hindus, 21% were Muslims and 9% were Christians The majority of the subjects (39%) were educated above 10 standard, 28% were in 10% standard, 20% in 9th standard and 13% were in 8th standard The majority of the subjects (52%) were coolie workers, 25% were doing business, 8% were farmers and 7% were professionals and 3%, 5% were government employers, other works respectively.[35] The majority of the subjects (45%) were having income below Rs 5000, 33% were having income between Rs 5,001- 10,000, 11% were having income between Rs 10, 001 15,000, and 11% were having income above Rs. 15,000. The majority of the subjects (85%) were not doing part time work, 15% were doing part time work. Majority of the family members of the subjects (54%) were not consuming tobacco products and (46%) of the family members of the subject were consuming tobacco products. The majority of the subjects (64%) belong to nuclear family and (28%) belong to joint family, and (8%) belong to extended family The analysis of the data was based on the objectives and hypothesis. The results showed that majority of the consumers (57%) were between the age group of 16-19 years of age, 39% were having secondary education, atittude of adolescent boys towards tobacco consumption is negative (32%) There was no association between knowledge and demographic variable like age, education and economic status etc.[36]

CONCLUSION
The present study was conducted to assess the knowledge regarding oral cancer amnong high school students (13-18yrs) in kollam. Nursing implication of the study included in the area of nursing practice, nursing education, nursing administration and nursing research.

REFERENCE
1　LeMone, Burke Textbook of Medical Surgical Nursing Person Edition Publication, 660.
2　Lewis Textbook of Medical Surgical Nursing Elserver publication, 969K.
3　Saraswathi Gopal, P Duraiselvi Awareness and knowledge of oral cancer among dental patients

International journal of advanced health sciences 1(1) Avaliablefrom http://www.oralheath, org.

4 Jayalekshmi padmavathyamma, Paul sebastain Burden of cancer Registry based data from Kerala. Journal of health system. Equityser publication, 2(1) Avaliable from jhs Health equity. Com.

5 Susan Stokes Structured Teaching Programme Strategies for supporting students with Autism Available from https://www.cesa7org.

6 Suginraj Oral cancer awareness among security guards International journal for research 2005,4(5) Available from http://aimsrishikesh.edu.m.