IJBPAS, December, Special Issue, 2021, 10(12): 602-609
ISSN: 2277–4998

International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS)
'A Bridge Between Laboratory and Reader'

www.ijbpas.com

RISK FACTOR OF ORAL CANCER AND HEALTH RELATED BEHAVIOUR OF ADOLESCENTS AT SELECTED SCHOOL IN WAGHODIA TALUKA, VADODARA

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Received 9th May 2021; Revised 10th July 2021; Accepted 29th Aug. 2021; Available online 15th Dec. 2021

https://doi.org/10.31032/IJBPAS/2021/10.12.1052

ABSTRACT

Background: Oral cancer is 6th common malignancy worldwide. In the majority of cases, a well-established, preventable risk factor is involved which leading to oral cancer. In India oral cancer figuring as a leading cause of death and cancer. About 90% of oral cancer cases are squamous cell carcinoma most of them are beyond 40 years. Cultural, ethnic, geographic factors and the popularity with addictive habits, the frequency of oral cancer is high in India. Every year Estimated 657,000 new cases of cancer detected with oral cancer and more than 3, 30,000 people died with it. Main subside of oral cancer are lip, oral cavity, nasopharynx, and pharynx.

Aims: Assess the risk factors of oral cancer and health related behaviour of adolescents.

Method: A Non- Probability convenient Sampling Technique is carried out on 250 adolescent students are taken form 14 to 18 years selected school in waghodia taluka vadodara. The design used in this study is non- experimental Descriptive study. Descriptive and inferential statistics were applied to analyse the data by using SPSS-20 software.

Result : Association between risk factor and health related behaviour social demographical variables of adolescences .significant variable is family type with X2 value is 5.264 with P value 0.022 (1df = 3.84)and residency area X2 value 7.598 with P value 0.006 (1 df = 3.84) and parents occupation X2 value 10.533 with P value 0.005 (2 df = 5.99), school performance with X2 value 7.826 with P value 0.020 (2 df = 5.99)

Keywords: Oral cancer, Adolescents, Risk factor, Behaviour

INTRODUCTION

Oral cancer is 6th common malignancy worldwide. In the majority of cases, a well-established, preventable risk factor is involved which leading to oral cancer [2]. In India oral cancer figuring as a leading cause of death and cancer. About 90% of oral cancer cases are squalors cell carcinoma most of them are beyond 40 years .culture, ethnic, geographic factors and the popularity with addictive habits, the frequency of oral cancer is high in India. According to incident it's very common in male than women and there are some several factors like tobacco and tobacco related products, alcohol consumption, genetic factors, hormonal factors are the suspected causative factors.

There are approximately 21,000 new cases of oral cancer every year. Although the oral cavity is relatively accessible to examination, malignant processes tend to present late with poor prognosis. To improve tumour outcome, early detection and treatment is essential. oral cancer is rarely in patient who have age less than 40Years. Older patient having more chances to get oral cancer because of alcohol and tobacco consumption. The role of risk factors which are leads to oral cancer in the young patient is dubious. The reason is 90% of adults start smoking in the age between 10-19 years .Cancers of oral cavity is very common in latest era. Though, early detection is very important, prevention of oral cancer requires a batter lifestyle and awareness and knowledge about early sign and symptoms, and tool for early diagnosis. Etiological Factors which are leads to condition precancerous lesions are a chronic disease of oral mucosa and about 20% oral cancer happened because of causative factors, The treatment of oral cancer depends on clinical, radiological and endoscopic staging and according to the multidisciplinary tumor board decision. Indeed, tumor staging gives information about loco-regional and metastatic spread. Treatment can include surgery, radiation therapy and chemotherapy. However, the

prognostic mainly depends on tumorresect ability and patient comorbidities.

Cancers in adolescent and young adults are different from those in older adults and are more likely to relate to genetic predisposition and exposure to risk factors early in life. They also have the greatest impact on those individuals who have most of their potential years of life ahead of them. The patterns of cancer in adolescents and young adults (AYA) are unique and differ from those in children and older adults (Californian study, 2006).

MATERIALS AND METHODS

Methodology of research indicates the general pattern of organizing procedures together for empirical base for the method of obtaining the valid and reliable data for an investigation. This chapter is deal with the methodology adopted for assessing the Risk factor of oral cancer and health related behavior of adolescent selected school in Waghodiya Taluka Vadodara. It includes the research design, setting of the study, sample and sampling techniques, development of the collection tool and plan for data analysis.

STATISTICS

- Descriptive statistics is used for to assess the Mean, Frequency and Percentage
- Inferential Statistics like Chi Square test used to find the association

RESULTS

SECTION- A. Frequency Distribution & Percentage table of Socio-Demographic variables

From **Table 1**, we can observe that in Age group, 16-19 years group was the majority (82%). In our study, 96% of participants were Hindus and the rest 4% were Muslims. When the Performance in School was looked at, about 82% were in Excellent category and almost all the rest of the participants in Good category. The study included about 86% of participants who lived in Joint Family, remaining 14% lived as a Nuclear Family. Almost 75% of the participants had monthly Family Income in the range of Rs. 10,000 – 20,000 while 25% had less than Rs.10,000 as monthly Family Income. Most of the study participants were from Rural area (93%) while rest were from Urban area. Majority of the Education of Parents was till Primary (93%) while about 4% were Illiterate. The Occupation of Parents were mostly (86%) in Agriculture sector while 9% worked as Laborers.

As we can observe from **Table 2**, all the 13 questions of knowledge were mostly answered correctly by the participants. It ranged from 75% to 93%. Almost 25% of the

participants answered Q11 incorrectly, which was the maximum incorrect answered question. The most (93%) correctly answered question was Q3.

Table 3 reveals association between risk factor and health related behaviour social demographical variables of adolescences. significant variable is family type with X^2 value is 5.264 with P value 0.022 (1df = 3.84)and residency area X^2 value 7.598 with P value 0.006 (1 df = 3.84) and parents occupation X^2 value 10.533 with P value 0.005 (2 df = 5.99), school performance with X^2 value 7.826 with P value 0.020 (2 df = 5.99)

Non significant variable is Age, Religion, Income of family, Education of parents.

From the above table, we can see that all the P-values are> 0.05 and therefore, none of the associations are statistically significant at 5% level of significance.

NOTE- following demographic data, age, religion, Income of Family, Education of Parents value is constant that's why we can't do association.

Table 1 (n=250)

S. No.	Variable	Categories	Frequency	Percentage
1.	Age	12-15 years	45	18.0%
		16-19 years	205	82.0%
2.	Religion	Hindu	240	96.0%
		Muslim	10	4.0%
3.	Performance in School	Excellent	205	82.0%
		Good	44	17.6%
		Average	1	0.4%
4.	Type of Family	Joint family	214	85.6%
		Nuclear family	36	14.4%
5.	Income of Family	< 10,000 INR	63	25.2%
		10,000 – 20,000 INR	187	74.8%
6.	Area of Residence	Rural	232	92.8%
		Urban	18	7.2%
7.	Education of Parents	Illiterate	11	4.4%
		Primary	232	92.8%
		Higher Secondary	7	2.8%
8.	Occupation of Parents	Agriculture	216	86.4%
		Business	11	4.4%
		Labourer	23	9.2%

SECTION-B: Frequency Distribution & Percentage table of Knowledge regarding Oral Cancer

Table 2 (n=250)

S. No.	Variable	Categories	Frequency	Percentage
1.	Q1	Correct	201	80.4%
		Incorrect	49	19.6%
2.	Q2	Correct	198	79.2%
		Incorrect	52	20.8%
3.	Q3	Correct	233	93.2%
		Incorrect	17	6.8%
4.	Q4	Correct	219	87.6%
		Incorrect	31	12.4%

5.	Q5	Correct	222	88.8%
		Incorrect	28	11.2%
6.	Q6	Correct	228	91.2%
		Incorrect	22	8.8%
7.	Q7	Correct	209	83.6%
		Incorrect	41	16.4%
8.	Q8	Correct	214	85.6%
		Incorrect	36	14.4%
9.	Q9	Correct	215	86.0%
		Incorrect	35	14.0%
10.	Q10	Correct	224	89.6%
		Incorrect	26	10.4%
11.	Q11	Correct	188	75.2%
		Incorrect	62	24.8%
12.	Q12	Correct	213	85.2%
		Incorrect	37	14.8%
13.	Q13	Correct	214	85.6%
		Incorrect	36	14.4%

Table 3: Association between the Knowledge Questions and Socio-Demographic Variables: (Chi-Square test at 5% level of significance)

Sr. No	Demographic Variable	Categories	Correct	Incorrect	Total	Chi-Sq Value	Df	P-value	Significant or non Significant
1.	Age	12-15 years	45	0	45	3.407	2	0.182	NS (5.99)
		16-19 years	205	0	205				
		Total	250	0	250				
2.	Religion	Hindu	240	0	240	0.647	2	0.724	NS (5.99)
		Muslim	10	0	10				
		Total	250	0	250				
3.	Performance in School	Excellent	182	23	205	7.826	2	0.020	S (5.99)
		Good	37	7	44				
		Average	1	0	1				
		Total	220	30	250				
4.	Type of Family	Joint family	167	47	214	5.264	1	0.022	S (3.84)
		Nuclear family	34	2	36				
		Total	201	49	250				
5.	Income of Family	< 10,000	63	0	63	3.165	2	0.205	NS (5.99)
		10,000 – 20,000	187	0	187				
		Total	250	0	250				
6.	Area of Residence	Rural	191	41	232	7.598	1	0.006	S (3.84)
		Urban	10	8	18				
		Total	201	49	250				
7.	Education of Parents	Illiterate	11	0	11	2.224	4	0.695	NS (9.48)
		Primary	232	0	232				
		Higher Secondary	7	0	7				
		Total	250	0	250				
8.	Occupation of Parents	Agriculture	195	21	216	10.553	2	0.005	S (5.99)
		Business	8	3	11				
		Laborer	16	7	23				
		Total	219	31	250				

- Significant at 0.05 level
- S=Significant

x2 =chi square
NS=Non significant

DISCUSSION

The researcher tried to find out the risk factors of oral cancer and health related behaviour of adolescents in selected schools of waghodia. Data were collected using knowledge questionnaire from 250 teaching professionals. This study intended to risk factors of oral cancer and health related behaviour of adolescents in selected schools of waghodia. 250 samples were taken from different schools of waghodia taluka. Research design used for the study was non experimental descriptive study. Non randomize sampling technique was used and the study subjects (250 samples) after conducting the knowledge questionnaire. Data analysis was carried out using descriptive and inferential statistics by using SPSS. Thus, this research hypothesis H1 and H2 are accepted.

CONCLUSION

A Non-probability consecutive sampling technique was used to select 250 adolescents from selected schools of vadodara. The following tools were used to collect the data from the adolescents: Tool 1: Demographic Variables. Tool 2: Self-structured questionnaire regarding risk factor of oral cancer and health behaviour. The collected data was tabulated in data sheet and the analysis was done by using descriptive and inferential statistics. The obtain data was analyzed and interpreted based on objectives. The level of significant was >0.05 level. Association between risk factor and health related behaviour social demographical variables of adolescences .significant variable is family type with X2 value is 5.264 with P value 0.022 (1df = 3.84)and residency area X2 value 7.598 with P value 0.006 (1 df = 3.84) and parents occupation X2 value 10.533 with P value 0.005 (2 df = 5.99), school performance with X2 value 7.826 with P value 0.020 (2 df = 5.99)

CONFLICT OF INTEREST: The authors declare that there is no any conflict of interest.

ETHICAL CLEARANCE: As the study conducted on humans, approval from institutional ethical committee was obtained before commencement of the study. SVIEC\ON\\NURS\SRP\20056

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