AWARENESS AND KNOWLEDGE ABOUT ORAL CANCER IN ADULT PATIENTS VISITING ISLAMIC INTERNATIONAL DENTAL HOSPITAL, ISLAMABAD, PAKISTAN

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ABSTRACT

The aim of this study was to assess the level of awareness about oral cancer among patients who visited Islamic International Dental Hospital, Islamabad, Pakistan. It was quantitative study that employed descriptive cross-sectional design. The Quantitative study design was selected because it was less time consuming and cost effective. This study included a pre-existing questionnaire. The pre-existing questionnaire was in English and Urdu language (national language of Pakistan). It included 15 questions regarding patient knowledge about the spread of disease, etiology, prognosis, sign and symptoms, risk factors and treatment of the disease. All patients aged 18 years and above visiting (random sampling) Islamic International Dental Hospital, Islamabad during the specified period of time. (Between 20thJune - July 2011) were approached and invited to participate in the study. Maximum sampling of 100 patients including 60 male patients and 40 female patients were done. The respondents were then selected on the basis of filling the inclusion criteria. Pearson chi-square test and descriptive statistics such as frequency distribution and cross-tabulation were used to analyze the data through SPSS. Level of significance was set at 0.05 or smaller than this value. The final results show that 54% of the participants were only aware of the knowledge and awareness regarding oral cancer. A significant number of patients (29%) were found after going through all the data that were collected to be totally unaware or ignorant of the actual price that had to be payed for tobacco smoking. Lastly, only about 17% of the respondents had intermediate knowledge about mouth cancer. Regarding risk factors 95% expressed awareness that smoking and smokeless tobacco (including betel nut, pan and chalia) were cause of oral cancer and the P-value was also found to be significant (0.053).It was concluded that information regarding oral cancer knowledge was good.

Key Words: *Awareness, Knowledge, Oral cancer, Risk factors.*

INTRODUCTION

Cancer occurs anywhere in the oral cavity i.e. lips, tongue, mouth and throat. Commonest clinical features of oral cancer are bleeding and non-healing ulcers in oral cavity, pain in the mouth which does not subsides with routine painkillers. A lump on the cheek, white or red patch on the gingiva, tongue, tonsil, or mucosa of oral cavity and sore throat. Many other conditions comparatively less serious could appear with similar clinical features. So consulting a doctor particularly a Maxillofacial Surgeon is important upon appearance of any of the above features.[1]

Oral cancer results in 130,000 deaths per year throughout the world and is 5th commonest cancer.[2,3] In recent times, increase in level of incidence have been observed.[4,5] The greatest chance of treatment success depends on the early detection of oral cancer. Late diagnosis due to delay in presentation or referral considerably increase the associated morbidity and mortality of oral cancer. It has been reported that

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the most significant factor in delaying referral and treatment of oral cancer is lack of public awareness.[6,7] If oral cancer is diagnosed in early stages, there are more chances of survival rate and curability and less chance of deformity and impairment.[2,8]

Alcohol and tobacco usage are main factors in lifestyle in at least two-third of cases and if prevention programs are undertaken, these behaviours can be changed.[9,10,11] Less awareness among study population is the leading cause of oral cancer. Cancer programs are held in number of countries but there is more emphasis on other cancers like cervical, breast and prostrate cancer.[2,6,7] According to Parkin et al, the incidence rate of oral cancer is higher in undeveloped countries than in developing countries and epidemiological studies show that region like South Asia has third common oral cancer after breast and cervical cancer. Other geographic areas like Eastern, Western and Southern Europe, Australia and New Zealand, and Melanesia are reported to have high incidence as well.[9]

The aim of this study was to assess the level of awareness about oral cancer among patients visiting Islamic International Dental Hospital, Islamabad, Pakistan and to find out the association of patient's age, gender and occupation with their awareness regarding oral cancer. Further to assess awareness among the masses (patients) regarding the risk factors such as smoking, Pan, Chalia, Gutka (type of betel- nut) responsible for oral cancer.

METHODOLOGY

This study was carried out in Islamabad, Pakistan. Islamabad is the Capital of Pakistan. It is the tenth largest city in Pakistan, located in north Pothohar Plateau of the country. Population of city is 1.74 million. Islamabad is one of the most well designed and a greenest city of South Asia. Urdu is predominantly spoken in the city and English is the official language and commonly understood. People living in Islamabad earn their living mainly by working in Government or private sectors. There are 20 hospitals in Islamabad which include both private and Government. Islamic International Dental Hospital is a private hospital in Islamabad.

One hundred patients (60 males & 40 females) aged 18 years and above visiting (random sampling) Islamic International Dental Hospital, Islamabad from 20th June to 31 July 2011 were included in the study.

Inclusion Criteria: Males and females patients falling in the age group of 18 years and above were included in the study.

Exclusion Criteria: Disabled patients and patients with major illness or systemically seriously affected patients were excluded.

A specially designed easy to understand questionnaire was given to each patient to fill.[12] The questionnaire was in English and in Urdu languages (national language of Pakistan) and it was entirely up to participants to decide which ever language they would select to fill in the questionnaire. For illiterate patients, data collector explained questions to the patients and transferred the answers to the questionnaire.

The first section of the questionnaire dealt with general information which included occupation, sex, age and education. Other section comprised of 15 items for the patient awareness about oral cancer. It included patient knowledge about the spread of disease, etiology, prognosis, sign and symptoms, risk factors and treatment of the disease. Questions like management and causes were open-ended, which was with the intention to avoid giving patients clues what to answer (eliminating the bias).

In order to obtain more reliable results, patients who gave correct answers were categorized as "High" awareness regarding oral cancer, participants giving 50 percent right answer were included in "Intermediate" knowledge and respondents who replied "No idea" were considered as having low awareness.

The data obtained was then entered and analyzed using Statistical Package for Social Sciences (SPSS 17) software used to perform statistical analysis to determine the significance of the quantitative data obtained. Descriptive statistics such as frequency distribution and cross-tabulation were used to analyze the data. Statistical significance for association between variables was assessed using Chi-square statistical test. Level of significance in this study was set at 0.05 or smaller than this value.

RESULTS

After conducting the research it was found out that generally most of the populations of people living in Islamabad in Pakistan do have a good knowledge about oral cancer, its causes and the predisposing factors. The findings of this study revealed that only 54% were well enlightened about oral cancer whereas 17% had reasonable information regarding oral cancer. 29% had deficient knowledge about cancer and the factors involved with oral cancer. Regarding risk factors 95%

TABLE 1: ASSOCIATION OF RISK FACTORS WITH THEIR AWARENESS

Questions/Variables	Options	Male	Female	P-Value
1. In your opinion what causes mouth cancer?	a) Smoking	17	4	0.039
	b) Smokeless tobacco	5	7	
	c) Smoking and Smokeless tobacco	27	20	
	d) No idea	5	8	
	e) Poor oral hygiene	6	1	
2. Are you Smoking or eating betel nut, pan and chalia?	a) Yes	17	3	0.011
	b) No	43	37	
3. Do you know that smoking or eating betel nut, pan or chalia causes mouth cancer?	a) Yes	58	37	0.053
	b) No	2	0	
	c) No idea	0	3	

TABLE 2: DISTRIBUTION OF RISK FACTORS WITH RESPECT TO AWARENESS OF TOBACCO HABITS OF ORAL CANCER

Awareness of Tobacco	Frequency	Percent (%)
Yes	95	95.0%
No	2	2.0%
No idea	3	3.0%
Total	100	100.0

expressed awareness that smoking and smokeless tobacco (including betel nut, pan and chalia) were cause of oral cancer, while 3% had little awareness, whereas only 2% did not have any idea about risk factors. Details of the results are available in Table 1, 2 and in figure 1, 2.

DISCUSSION

Oral cancer is one of most deadly disease and dental specialist can play important role in detection and treatment. Tumors diagnosed in early stages contribute to 80% success rates and 30% in which the disease is metabolized.[2] Unfortunately, studies showed that only
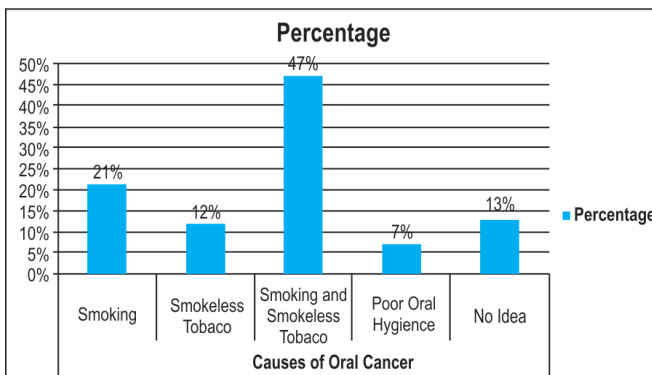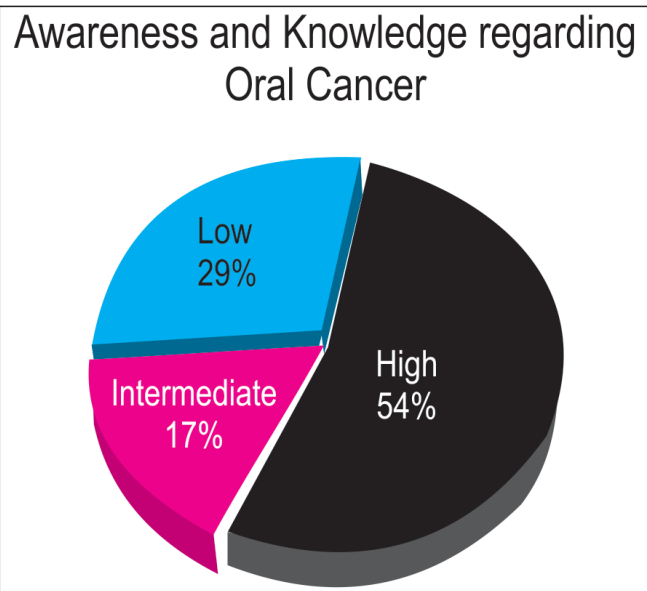

Fig 1: Risk factors with respect to causes of oral cancer

Fig 2:   Overall distribution of awareness

37% of oral and pharyngeal cancers were detected in early stages with no metastasis in America.[15] Thus, in order to achieve better prognosis and long-term survival, cancers and precancerous lesions should be diagnosed in the earliest possible stage.[16] Main reason for the spread of this disease is lack of public awareness which causes delay in diagnosis of oral cancer.[14,15]

On account of abundant tobacco use in this country, facts about the use of tobacco in progress of oral cancer which shows important role in approach and compliance to alter the habits of high risks such as smoking. This survey showed that awareness about risk factors was much more than the results shown in other studies.[17,18,19,20]

The conclusion of the current study showed that 48% of the patients knew about the sign and symptoms

of oral cancer only 29% of patients were aware of most common sites of oral cancer. West et al 2011 tells us that red (1 in 4 patients) and white (1 in 3 patients) patches were referred as signs of oral cancer.[21] Whereas 50% of patients according to Tomar did not know about the presence of red and white lesions in their mouth as cancerous bodies[22] and 44.9% of total population in Sri Lanka were aware about precancerous red and white lesions in mouth.[18,20]

A total of 85% of our patients believed that early detection of oral cancer is effective in better prognosis. This probably relates to public knowledge about other cancers. 66% were unaware of cancer treatment modalities, 6% referred to radiotherapy, 13% to surgery, and 12% said medicine as cancer treatment modalities. A study by Waranakulasuriya in London showed that 94% of population knew about the importance of early detection and treatment of oral carcinoma.[23] With regards to attitudes about oral cancer, most subjects in this study did not believe in the necessity of an oral mucosa examination by dentists. Only 26% percent of the respondents preferred to visit doctors in case of any change in the oral cavity other than their teeth and gingiva. This concept unfortunately could lead to a late referral and is one of the most important reasons for delayed diagnosis of oral cancers.[22]

Considering overall knowledge and awareness about oral cancer, results of this study showed that patients had generally good knowledge showing 54% as compared to the study conducted in Iran showing awareness only 2.5%.[12]

Implications of the findings to Public health practice

Research on the awareness regarding oral cancer was an interesting, inspiring, indulging and a personal enlightment experience. To improve the quality, standard and awareness regarding the oral health, this study was a beneficial step in making people take a moment and think and evaluate themselves regarding their knowledge about oral cancer and its prevention. First of all an awareness campaign through the media whether, print or electronic media should be carried out to make sure that each and every individual learned or illiterate should be knowing the predisposing factors that have tendency to cause oral cancer.[2] Similarly how they may be cautious so as to prevent themselves from this life threatening disease. Newspapers, radio, television, internet all are the sources through which people can be made aware of the disease and its effects.

Similarly seminars should be conducted to make people improve their knowledge regarding oral cancer and its effects.[2]

People should be provided with such facilities as regular medical checkups including oral examination to make sure that the chances of oral cancer spread are dealt with or the disease diagnosed at an early stage to ensure timely recovery. Health sector should ensure annual oral examination and screening checkups and it should be properly functional and updated and this should be encouraged by the health sector of the government. The National Strategic Planning Conference for the Prevention and Control of Oral and Pharyngeal Cancer held in 1996 suggested that patients should be educated and asked for the oral checkups. Contract was signed on the importance of educational programs about oral carcinoma.[24]

Also the health care professionals specially the dentist, dental nurses, dental hygienists should be evaluated and assessed if they have sound knowledge and capability to effectively run a campaign to make their patients aware regarding the injurious effects of predisposing factors of mouth cancer. Social counseling centres should be established where people should come and share and get convinced to quit smoking. Similarly regular pan, chalia and betel-net and alcohol addicts should be psychologically persuaded and gradually convinced to get rid of their social habits as smoking, alcoholism and pan, chalia consumption which are the main predisposing factors of oral cancer. Most importantly the manufacturers that are manufacturing, advertising and selling these products that are the risk factors for oral cancer should be strictly checked. They should not be provided license to manufacture such harmful items that may cause oral cancer. The publicity and advertisements of such products should be banned and totally discouraged. Also the restriction of such items by modifying price control should be practiced cigarettes and alcohol should be made expensive to make it inaccessible to the layman and the youngsters.[10,12]

A well-conceived cancer program should be established by the government, Health care providers or volunteers, medical practitioners, celebrities, singers, all in collaboration on the principle of partnership working to create awareness regarding all sorts of cancer including oral cancers which may leave a strong impact regarding the harmful effects of the predisposing factors on all sorts of tumors. Similarly in other words, local partnerships should be encouraged to bring local

agencies, professionals, wide range of approaches, professionalisms, perspective and resources to bear on local problems. NGO's, and volunteers should be encouraged to run awareness campaign and medical monitoring centers to make sure that people who belong to even far flung or rural areas may also get aware.[15]

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