

KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING ORAL CANCER AND SCREENING PROCEDURES AMONG PRIMARY HEALTH CARE AND COMMUNITY HEALTHCARE WORKERS OF WAGHODIA, GUJARAT

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ABSTRACT

Background: India has the highest rate of oral cancer in world and there is a 60% rise in past three decades. Mortality rate for oral cancer is higher in population with poor access to oral health care. With 72% of Indians residing in rural areas they have a better access to community health care providers (CCPs) and primary health care providers (PCPs) who, could play a major role in oral cancer prevention and reduce death rate.

Objectives: The study aimed at evaluating knowledge, attitude and practice regarding oral cancer and screening practices among CCP's and PCP's by using pretested questionnaire.

Material and Methods: A cross sectional questionnaire study was conducted among all CCP's and PCP's of Waghodia, Vadodara. A self designed, modified close ended and pre-piloted questionnaire was used for recording data. Mean and percentage were used for statistical analysis.

Results: 78.24% believed that prevention and early detection was important, while 53% had actually referred cases in past one year. All believed tobacco to be a risk factor for oral cancer but only 49% answered for other factors. 91.37% were ready to be a part of continuing education (CE).

Conclusion: The participants had deficient knowledge about the risk factors for oral cancer and were ready to participate in CE.

Key-words: Oral Cancer, Health Care Workers, Gujarat

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INTRODUCTION:

The World Health Organization reports a worldwide death toll from tobacco use to be four million per year. The death toll is expected to rise to ten million per year by 2020's or early 2030's.^[1] Tobacco is thought to be one of the most important etiological factors in development of oral cancer. India has the highest rate of oral cancer in the world with a 60% increase in past three decades and no improvement in the mortality rate has been seen during this period.^[2]

Oral cancer is a disease with known high risk factors and an asymptomatic phase with identifiable

clinical features. The mortality rate for oral cancer is higher in population who traditionally experience poor access to the oral health care system.^[3] Also unfortunately, for a large segment of high-risk individuals, access to dental care is limited where dental surgeons can help to identify these individuals and provide necessary treatment. About those residing in rural areas, they have a better access to non dental CCPs and PCPs. Therefore, CCPs and PCPs could play a major role in prevention of oral cancer and reducing death toll owing to oral cancer. One way to achieve these goals is to develop a network of dental and other healthcare providers to promote the early screening

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of oral soft tissue lesions that may be pre-cancerous or cancerous.^[4]

India has a population of 1.21 billion and with 72% of the Indian population residing in rural areas,^{[5] [6]} the government has implemented various rural health strategies and national programmes through Primary and community health care centres, National Cancer Control Programme (NCCP) being one of them. Lack of such a network with regards to oral health care practices in India and unavailability of oral health professionals to provide on site basic oral health services discourages further the integration of oral health services in these centres.^[7] Thus it becomes necessary for these health care workers to play a role in oral cancer prevention and therefore the present study was proposed to assess the knowledge of oral cancer, attitude towards its prevention and screening practice of oral cancer among CCPs and PCPs Waghodia Taluka, Vadodara, Gujarat.

MATERIAL AND METHODS:

Ethical approval was obtained from the Institutional Ethics committee. Permissions were obtained from the Chief District Health Officer (CDHO) of Vadodara district and the Block Health Officer of Waghodia Taluka to conduct the survey at the primary and community health care centres of Waghodia taluka. The purpose and procedure of the study was informed to each participant and participant information sheet was provided to them. Also informed consent was obtained from each participant who was willing to participate in the study.

A pilot study was conducted in the beginning for testing of validity and reliability of the developed questionnaire among four Experts and four respondents. The medical officers were considered as experts while the other staff members were

considered as respondents and four from each were chosen randomly by lottery method as participants for pilot study. The validity of questionnaire using Concurrent Validity method was 90.3. The reliability results obtained by test – retest was 89.92% which showed a high agreement. The sampling frame included all Medical officers, staff nurses, health workers, health educator, and health assistants working at these centre's during the study period i.e. from June 2012 to August 2012 which constituted a total of 85 subjects. The individuals who were not willing to participate in the study or were absent at the centre during three consecutive visits were excluded from the study. For each health care centre the questionnaire was administered on first day of visit and recollected on the second day by the principal investigator himself. The participants who were absent on the first day of visit were contacted over the phone and a later date was fixed with them for the questionnaire fill up. All the absent individuals responded in the first call.

Data was collected with the help of a self designed, modified close ended & pre-tested questionnaire used in English and Gujarati language. The Gujarati version was validated by back translation method. The questionnaire consisted of six, four and five questions pertaining to knowledge of Oral cancer, screening practice of Oral cancer and attitude towards Oral cancer prevention respectively.

The data was analyzed using Descriptive statistical analysis i.e. percentage in Microsoft Excel 2007 spreadsheet.

RESULTS:

As seen in Table 1 participants had a good level of knowledge regarding oral cancer prevalence, its ability to metastasize and its life threatening potential.

Sr.no	Question	Yes	No	Total
1.	Occurrence of oral cancer is common in India	90.59% (N=77)	9.41% (N=8)	100% (N=85)
2.	Oral cancer can metastasize	87.05% (N=74)	12.95% (N=11)	100% (N=85)
3	Oral cancer is life threatening disease.	85.88% (N=73)	14.22 % (N=12)	100% (N=85)

Table 1: Table showing knowledge of participants regarding oral cancer

Table 2 shows that participants had good level of knowledge about different methods for detection of oral cancer but only less than half had actually referred patients for suspicious oral cancer cases in past 12 months. A larger no agreed that health care providers needed more education about oral cancer screening.

Sr.no	Question	Yes	No	Total
1.	Awareness regarding different methods for detection of oral cancer	65.88% (N=56)	34.22% (N=29)	100% (N=85)
2.	Referral of patients to dental specialist for suspicious oral cancer cases in last 12 months	41.17% (N=35)	58.83% (N=50)	100% (N=85)
3.	Ability to detect oral cancer	78.82% (N=67)	21.18% (N=18)	100% (N=85)
4.	Health care providers needed more education about oral cancer screening.	78.82% (N=67)	21.18% (N=18)	100% (N=85)

Table 2: Table representing knowledge of oral cancer screening among the participants

The participants had a positive attitude towards prevention of oral cancer development, while a larger number believed that its early detection could help in successful treatment of the patient (Table 3).

Sr.no	Question	Yes	No	Total
1.	Early detection can lead to successful treatment of oral cancers	98.82% (N=84)	1.18% (N=1)	100% (N=85)
2.	Oral cancer develops by chance and nobody can do anything to prevent it.	41.17% (N=35)	58.83% (N=50)	100% (N=85)

As seen in Fig.1 and Fig.3 participants had good knowledge about different types of oral cancer and the signs and symptoms of oral cancer but a fewer participants (Fig.2) were aware of different causative agents responsible for oral cancer development.

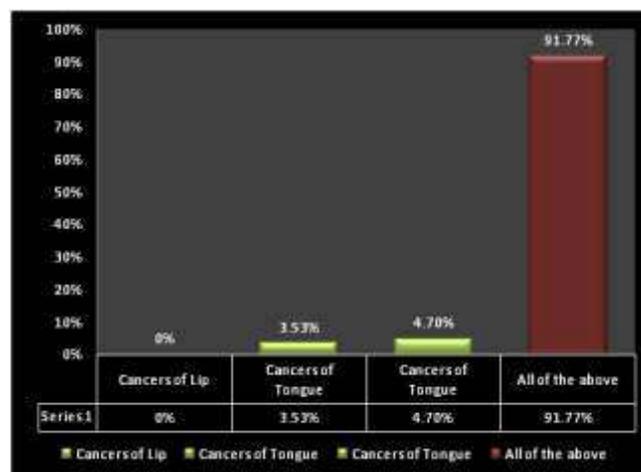


Figure 1: Distribution of subjects according to their knowledge regarding different types of oral cancer

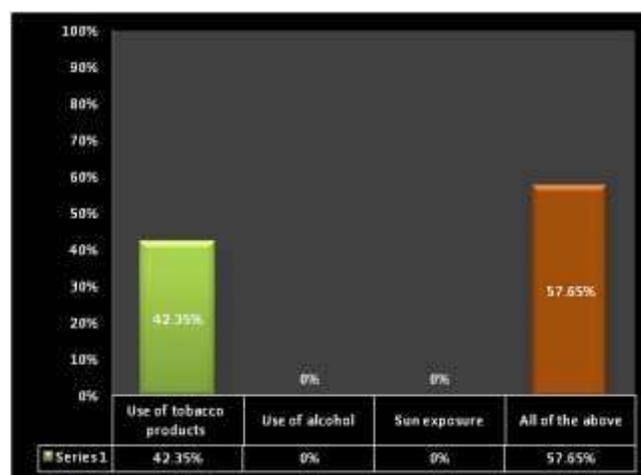


Figure 2: Distribution of subjects according to knowledge regarding different causes of oral cancer

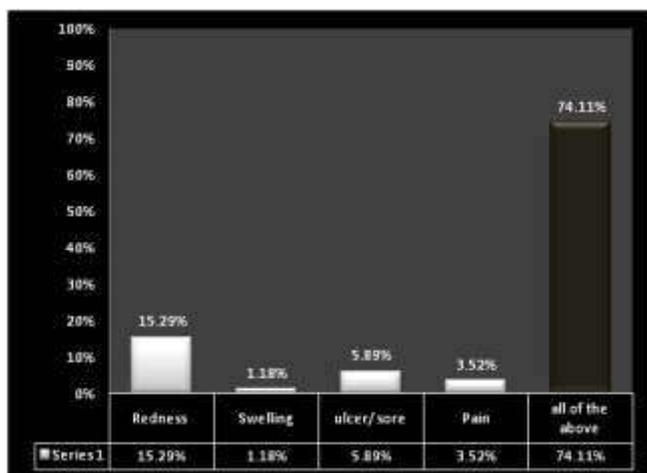


Figure 3: Distribution of subjects according to knowledge regarding sign and symptoms of oral cancer

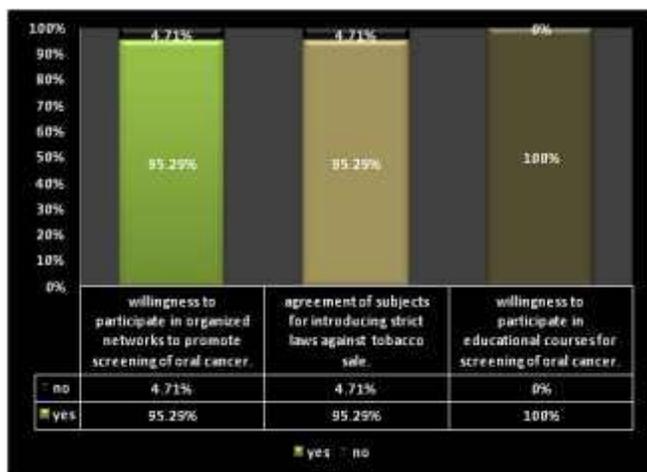


Figure 4: Attitude of participants towards prevention of oral cancer

The subjects (Fig.4) were willing to participate in educational courses related to screening of oral cancer, and become a part of organized networks promoting oral cancer screening. Also they believed that strict laws should be introduced against the sale of tobacco.

DISCUSSION:

Oral cancer is on the increase with incidence rates having doubled over the last ten to 15 years.^[7] The death toll is expected to rise to ten million per year by 2020's or early 2030's.^[1] Prevention of oral

cancer, and reducing cancer-related burden and deaths could be achieved by an integrated program that involves health care providers, health care organizations, the government at various levels, and the public.

The present study was conducted to assess the knowledge of oral cancer, attitude towards its prevention and screening practice of oral cancer among CCPs and PCPs of Waghodia, Gujarat. This study, concerning oral cancer, was the first of its kind among the health care workers of Waghodia who comprised of a total of 85 in number.

Out of 85 workers, 77 (90.59 %) answered that oral cancer was commonly occurring among the Indian population which is consistent with oral cancer prevalence data provided by IDA (Indian Dental Association),^[2] suggestive of good awareness among the PCP's and CCP's.

A high percentage of workers i.e. 73 (85.88 %), agreed to the statement that “oral cancer is a life threatening disease” and a similar number of 74 (87.05%) agreed that oral cancer could spread to other parts of the body. A total of 84(98.82 %) workers believed that early detection of oral cancer could help in successful treatment of such cases, this could be the reason that all the 85 subjects were willing to participate in educational courses related to screening of oral cancer and similar number of individuals 81(95.29%) were ready to participate in established or organized networks to promote screening of oral cancer. These findings are in agreement with those of Kumar M and Macpherson LMD et al.^{[3],[7]}

Of the 85 workers 78 (91.77 %) answered correctly that oral cancer included cancer of lips, cancer of tongue and cancer of other parts of mouth and oropharynx. While a similar no. of subjects 63 (74.11%), answered correctly that oral cancer

presented with swelling, redness and ulceration of the overlying tissue which could also be associated with pain. But the lack of clinical skills relating to oral cancer screening practices was evident from the fact that out of 85 workers, only 56 (65.88 %) agreed that they were aware of different methods for detection of oral cancer while a similar no. of subjects answered that they could identify oral cancer clinically if they would come across the same. This could also be the reason that only 35(41.17 %) subjects had referred patients to a dental specialist for suspicious oral cancer cases in past 12 months. These results are in agreement with those of Kumar M. These findings justify the agreement of high percentage 67 (78.82 %) of subjects for the provision of education about oral cancer screening to health care providers.

All of the 85 subjects believed that tobacco use was the one of the major cause for development of oral cancer while 81(95.29%) agreed that strict laws should be introduced against the sale of tobacco. This response, if reflected onto the other health workers of Gujarat state government, can justify the recent efforts of Gujarat government to bring about a ban on sale of Gutkha in September 2012 to become a "Tobacco Free State".

These findings suggest that interventions such as clinical training for oral cancer screening must be provided to these health workers. It is also recommended that they be provided with detailed information of aetiology and precipitating factors of oral cancer. These goals could be achieved by introducing professional regulations, interactive workshops and educational outreach visits.^[9]

Furthermore it is also suggested that a centralized network of health workers and Dentists should also be established at both, state and national level to reduce the burden of oral diseases, especially oral cancer and thus increase the efficiency of programmes such as NCCP undertaken by the government.

CONCLUSION:

A high percentage of participants had good knowledge related to oral cancer types, sign & symptoms of oral cancer and oral cancer prevalence but a lesser percentage was correct about oral cancer screening, highlighting the deficient clinical experience of the participants. Also the participants had good attitude towards oral cancer prevention and were ready to be a part of Continuing Education programme.

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