

Rural Health Practitioners responsibility and their Knowledge, Attitude towards Oral Cancer in Vikarabad District, Telangana, India

Yadav Rao.K¹, Parthasarathi Reddy .P², Md.Shakeel Anjum³, Monica.M⁴, Irram Abbas⁵, Pakanati Srikanth⁶

1,4,5-Reader, Department of Public Health Dentistry, Sri Sai College of Dental Surgery, Vikarabad, Telangana, India. 2-Professor and Head, Department of Public Health Dentistry, Sri Sai College of Dental Surgery, Vikarabad, Telangana, India. 3-Professor, Department of Public Health Dentistry, Sri Sai College of Dental Surgery, Vikarabad, Telangana, India. 6-Post graduate student, Department of Public Health Dentistry, Sri Sai College of Dental Surgery, Vikarabad, Telangana, India.

Correspondence to:
Dr. Pakanati Srikanth, Post graduate student,
Department of Public Health Dentistry, Sri Sai
College of Dental Surgery, Telangana, India.
Contact Us: www.ijohmr.com

ABSTRACT

Introduction: Oral cancer accounts for one-third of all cancers which is usually identified at advanced stages resulting in significant mortality and morbidity. In rural areas, registered medical practitioners (RMPs), Ayurveda and Homeopathy professionals, constitute the first line of health care and they play an important role in early identification of oral cancer. **Aims and objectives:** The present study was carried out to assess the knowledge, attitude and practices about oral cancer among RMPs, Ayurveda and Homeopathy practitioners. **Methodology:** A survey was conducted in Vikarabad district on a sample of 180 RMPs, Ayurveda and homeopathy practitioners. Data was collected using a 16 item pretested questionnaire. Statistical analysis was done by using SPSS 20.00. **Results:** Only 18% of the participants routinely examined the oral cavity and 50% of them referred an oral cancer suspected patient to a dentist. Mean knowledge and attitude scores were 6.26 ± 2.18 and 8.42 ± 2.09 respectively. About 40% of them advised to quit the tobacco habit and only 20% of them checked for reduced mouth opening in chronic tobacco chewers. **Conclusion:** About 50% of the rural practitioners had poor knowledge and practices regarding oral cancer and most of them showed positive attitudes towards training programs regarding oral cancer.

KEYWORDS: Oral health, Oral Cancer, Rural Practitioners

INTRODUCTION

Oral health is a condition where there is no long term pain in the facial region, malignancy in the mouth or throat, presence of ulcers, or any defects by birth, diseases affecting the supporting structures of the teeth, tooth decay and tooth loss, or any other ailment affecting the oral cavity. Oral cancer or mouth cancer is a type of head and neck cancer. It is a cancerous tissue growth located in the oral cavity. Oral cancer is one of the ten leading cancers in the world.¹ Oral cancer stands sixth among various malignancies worldwide.² There is a marked increase in the incidence of oral cancer in recent years especially in females and younger persons. In addition, it is reported in developed countries that approximately half of all oral cancers are diagnosed in individuals 65 years of age or older.^{3,4} Evidence also indicates that early recognition and referral is essential for higher cure rates and better quality of life.⁵ In patients undergoing treatment for oral cancer, there is remarkable decline in quality of speech, chewing and swallowing, dental health, and even the ability to communicate with the society. It must be considered among the most debilitating and disfiguring of all cancers. The reasons for oral cancer include various smoking and smokeless forms of tobacco, heavy alcohol use, excessive sun exposure to your lips, a sexually transmitted virus called human

papillomavirus (HPV), and improperly fitting dentures. Other reasons being low intake of antioxidant rich food older age group, people of lower class, and bad oral hygiene has also been involved in oral carcinogenesis.⁶ India has a large number of RMPs and Private medical practitioners (PMPs) spread all over the country. They are easily accessible as most of them live in the same village where they do practice. The Majority of the RMPs, homeopathy and Ayurveda practitioners practice allopathy, though they are not well trained in the modern system of medicine. They are the most preferred and considered to be the first contact person for medical care for the local community. Preference for the RMPs is observed even in the treatment of specific diseases like tuberculosis, acute respiratory tract infections, and diarrheal diseases.

Registered Medical Practitioners (RMPs) and Private Medical Practitioners (PMPs) together are known as "community paramedics". These RMPs and PMPs undergo mandatory training and examination under the supervision of a qualified doctor in a hospital or a nursing home. The process of training, examination, and certification is done by the Para Medical Board. They can manage acute minor ailments and take up follow-up treatment as prescribed by the qualified medical

How to cite this article:

Yadav Rao.K, Parthasarathi Reddy .P, Anjum MS, Monica.M, Abbas I, Srikanth P. Rural Health Practitioners responsibility and their Knowledge, Attitude towards Oral Cancer in Vikarabad District, Telangana, India. *Int J Oral Health Med Res* 2017;4(2):15-18.

practitioner. They also go through 360 hours of clinical training, 100 hours of field training and distant learning in public health.

Registered medical practitioners are found in increasing numbers in rural areas due to severe shortage of medical and dental practitioners. These RMPs play an important role in maintaining the health of the population. They form an important group of professionals who come across various diseases. A Study conducted by Ravikumar S et al. on awareness and practices concerning oral cancer among Ayurveda and homeopathy practitioners showed that there is an overall insufficiency of knowledge of oral cancer among practitioners. Oral cancer is one among the many diseases affecting the oral cavity. Therefore they must be well trained with sufficient knowledge to detect oral cancer lesions. As per our understanding, there are no studies assessing the knowledge of oral cancer among rural health practitioners. This study is the foremost of its kind assessing basic oral cancer knowledge, attitudes, and practices. In a developing country like India, where more number of rural practitioners are available, it would be worthwhile to undertake such a study.

MATERIALS AND METHODS

A survey was conducted to assess the knowledge, attitude and practices towards oral cancer among registered medical practitioners, Ayurveda and Homeopathy practitioners in Vikarabad district, Telangana. A pilot study was conducted on 30 rural practitioners of different areas to check the feasibility of the study and reliability of the questionnaire. Data were collected by using self-administered, structured and reliable (Cronbach's $\alpha=0.85$) 16 item questionnaire. It included demographic details, oral examination habits, knowledge of the risk factors and its delivery to patients, any additional training programs, chance to investigate the patients with premature oral lesions, identification of clinical signs, referral to health care provider, their viewpoint on adequacy of knowledge regarding diagnosis, treatment, prevention and its consequences, and the wish for further improving their knowledge on oral cancer. The questionnaire took 10 min to complete. Ethical clearance was obtained from an institutional review board of Sri Sai College of Dental Surgery. Based on the pilot study sample size was estimated to be 180.

The study area was Vikarabad district. In this 7 mandals were randomly selected from different directions which included vikarabad, Tandur, Parigi, Dharoor, Mominpet, Nawabpet, Pudur. List of the practitioners with their address was obtained from the association of rural health practitioners in those selected mandals. Collected list consisted of 250 practitioners. From this list, 180 practitioners were selected randomly using lottery method. All the rural practitioners were individually approached at their work places. Practitioners who were present on the day of the study were included. **Statistical analysis:** Analysis was done using statistical package

for social sciences version 20.0. Descriptive statistics were performed, and Chi square test was done to assess categorical variables.

RESULTS

A total of 180 rural practitioners participated in the study which includes 135 RMPs, 24 Ayurveda, and 21 Homeopathy practitioners. A Total number of male practitioners were 167, and female practitioners were 13.

Table 4. Shows Mean knowledge score of 6.26 ± 2.15 . Table 1 Shows knowledge of the practitioners. About 85% of the practitioners identified that smoking and alcohol were the risk factors for oral cancer. About 55% of the practitioners recognized that nonhealing ulcer is an indication of oral cancer. Only 48% practitioners identified eating spicy food as one of the etiological factors for oral cancer. Less than half (32%) identified that long standing red and white lesion is indication of early cancer stage. Only 42% of the practitioners identified that reduced mouth opening in tobacco chewing patient is an indication of future oral cancer. About 85% of the practitioners knew that early detection could reduce the mortality and morbidity rates of oral cancer.

SL. no.	Knowledge towards oral cancer	Agree	Dis-agree	Don't know
1	Tobacco and alcohol are the most common causative agents of oral cancer.	85%	13%	2%
2	Reduced mouth opening in a tobacco chewing patient is indicative of future oral cancer.	42%	49%	9%
3	A long standing non healing ulcer in a patients mouth is indicative of oral cancer	55%	31%	14%
4	A red and white lesion in oral cavity is indication of early cancer stage.	32%	50%	18%
5	Eating spicy foods does not causes cancer	48%	51%	1%
6	Recognized cases of oral cancer at early stages have good prognosis	85%	14%	1%

Table 1. Knowledge of the practitioners towards oral cancer

Table 4 shows mean attitude scores was 8.42 ± 1.09 . Table 2. Shows the attitude of the practitioners towards oral cancer. About 81% of the practitioners showed a positive attitude towards attending training programs on oral cancer. About 73% of the practitioners agreed that quitting the habit of tobacco could reduce the risk of oral cancer. About 54% of the practitioners agreed that they spend time for checking oral cavity. About 62% of the participants agreed that checking oral cavity is their responsibility and 68% of the practitioners agreed that counseling on tobacco cessation for patients reduces the risk of oral cancer. Only 26% of the practitioners knew that oral cancer is treatable.

Table 4. Shows mean practices score of 5.49 ± 1.53 . Table 3. The Practice of the practitioners. Only 19% (table3) of the practitioners routinely examined the oral cavity. It was found that 63% of the practitioners refer the suspected cases to nearby institutions and hospitals.

Table 2: Attitude towards oral cancer

7	Oral cavity examination in a tobacco chewer is my responsibility	62%	23%	15%
8	Training health workers is important for them to identify an oral cancer lesion	81%	16%	3%
9	Counseling on tobacco cessation for patients reduces the risk of oral cancer	68%	23%	9%
10	It is waste of time for me to check oral cavity for cancers	46%	50%	4%
11	Oral cancer is not treatable	78%	20%	2%

Table 3. Practices of the practitioners towards oral cancer

Practices towards oral cancer				
12	I want to attend an awareness programme on oral cancer in my village.	44%	47%	9%
13	I usually examine mouth opening in chronic gutkha chewers	33%	56%	11%
14	I routinely examine the oral cavity of patients whenever they came for health checkups	19%	77%	4%
15	Whenever I suspect a case of oral cancer I immediately refer the subjects to nearby institutions for further evaluation	63%	26%	1%
16	I advise to quit the habit of tobacco to my patients	40%	58%	2%

		Mean	std. deviation	High score	Low score
1.	Knowledge	6.26	2.15	12	4
2.	Attitude	8.42	1.09	10	6
3.	Practices	5.49	1.53	8	4

Table 4. Mean scores of the practitioners

Only 40% of the practitioners advised their patients to quit tobacco habit, and very few practitioners examine mouth opening in chronic gutkha chewers. 44% (Table 3) of the practitioners want to attend an awareness program on oral cancer in their village.

DISCUSSION

Oral cancer is a disease which occurs in elderly people. However, most of the oral cancer cases occur between the ages of 50 to 70 years, but it could also occur in children as early as 10 years. It is reported that most of the cases are diagnosed at late stages, which increases mortality and morbidity rates. Nearly 70% of the population in India lives in rural areas. Use of tobacco, excessive alcohol, and betel quid have been reported to be major individual etiological factors resulting in 90% of oral cancers with the oral cancer risk increasing further if these risk factors are used together.⁷ Most of the people in rural areas are habituated to take different forms of tobacco such as beedi, cigarette, chewable tobacco, betel nut, etc. due to their field work, illiteracy and culture, etc., and some of them have a myth that these forms of tobacco can reduce the dental diseases.

The majority (85%) of the respondents in this study were able to identify the major risk factors for oral cancer namely cigarette smoking and intake of alcohol, which is similar to the study conducted by Mittal S et al.⁸ and Gbotolorun OM et al.⁹ where 88% and 96% of the participants respectively agreed with the statement. Oral cancer has four cardinal signs which warrant further investigation. These are erythroplakia, leukoplakia, mixed (erythro-leukoplakia), and ulceration.^{10,11} Among these the common presenting sign is ulceration. Less than half (32% & 42%) of the participants knew that long

standing red and white lesion and reduced mouth opening respectively are indications of future oral cancer, which is in contrast to the other studies conducted by Gbotolorun OM & Teresa M et al.¹² About 55% of the participants recognized a nonhealing ulcer as a sign of oral cancer which is consistent with 49% of the participants in the study conducted by Mittal S et al. It is important for rural health practitioners to be aware of this information because they play a significant role in prevention and early diagnosis of oral cancers. Since rural people commonly visit these rural practitioners than a specialist doctor.

Early diagnosis of oral potentially malignant disorders (OPMDs) and oral cancers is very important in achieving a good prognosis and as a result reducing the morbidity and mortality rates. Efforts to recognize the disease at an early stage has the possibility not only for decreasing the frequency of disease, but also for increasing the life expectancy of patients. 85% of the participants agreed that early detection of cancer could reduce the mortality and morbidity rates which are in contrast with the study conducted by Gbotolorun OM et al. where only 29.1% of participants identified correctly. About 46% of the participants identified that oral cancer is treatable. An oral cancer examination could take as little as 90 seconds to perform.^{13,14} Only 26% of the participants felt that checking oral cavity is a waste of their time. This shows their positive attitude towards oral cancer.

Understanding of clinical appearances or mucosa changes associated with oral cancer, opportunity to examine oral mucosa of patients, preferred path way of referral for suspected lesions and desire to have further information regarding oral cancer. Continuing dental education, continuing medical education and training programs will help in improving and updating the knowledge of the health care professionals 81% were willing to participate in training programs, to improve their knowledge, which is similar to a study done by Mittal S et al. Examination of oral cavity plays an important role in identifying oral cancer lesions as most of them are seen in buccal mucosa, lateral border of the tongue and ventral surface of tongue and gingiva, etc. Only 19% of the participants routinely examined oral cavity, which is similar to the study conducted by Ravikumar S et al.¹⁵ This emphasizes that they do not feel competent enough to do oral cavity examination. Hence oral cavity examination should be made a mandatory part of patient examination irrespective of the course what they have taken.

Referral of the patients with suspected lesions to a nearby specialist will help in early detection and diagnosis of the lesion which improves the quality of life of the patient. 63% of the participants in the present study referred the suspected subjects to nearby hospitals, which is in contrast to the study conducted by Gbotolorun OM et al. where only 48% of the participants referred. The vast majority of oral cancer is attributed to the use of tobacco products that are smoked or chewed with the cigarette being the major culprit. Health professionals should be adequately trained to conduct tobacco cessation

programs. Only 40% of the participants of the present study advised their patients to quit tobacco as they felt they are not adequately trained to provide tobacco cessation.

The overall insufficiency of oral cancer knowledge and practices was evident in the current study, as they are not well trained and confident enough to suspect an oral cancer lesion, but the participants have positive attitude towards oral cancer by showing interest to attend awareness or training programs on oral cancer to update their knowledge which in turn will help rural people.

There is no way to tell how truthful practitioners are being. Practitioners may be forgetful within the full context of the situation. People may read differently into each question and therefore reply in different ways. There is a level of researcher imposition, upon developing the questionnaire, which might influence the results.

CONCLUSION

The study results indicate that most of the practitioners showed the good attitude towards the oral cancer but their knowledge and practices need to be improved. Rural health practitioners can be utilized as an important channel in identifying oral cancers. Regular meetings and training programs need to be conducted to enhance and update knowledge and awareness for early detection of oral cancer.

REFERENCES

1. Parkin DM, Bray F, Ferlay J, Pisani P. Global cancer statistics, 2002. *CA Cancer J Clin* 2005;55(2):74-108.
2. Shah A. Drug Treatment in Old Age Psychiatry. Cornelius Katona and Gill Livingston (Eds.). London: Martin Dunitz, 2003; 3-32.
3. Greenlee RT, Hill-Harmon MB, Murray T, Thun M. Cancer statistics, 2001. *CA cancer J Clin* 2001; 51 (1):15-36.
4. BLOT WJ. Cancers of the oral cavity and pharynx. *Cancer epidemiology and prevention*. 1996.
5. Awojobi O, Scott SE, Newton T. Patients' perceptions of oral cancer screening in dental practice: a cross-sectional study. *BMC oral health*. 2012 Dec 18;12(1):55.
6. La Vecchia C, Tavani A, Franceschi S, Levi F, Corrao G, Negri E. Epidemiology and prevention of oral cancer. *Oral oncology*. 1997 Sep 1;33(5):302-12
7. Ord RA. Surgical management of oral cancer. En: *Oral Cancer. The dentists role in diagnosis, management, rehabilitation and prevention*. Ord RA, Blanchaert RH. Chicago: Quintessence Publishing Co; 2000..
8. Mittal S, Mahuli A, Hiregoudar M, Ramanarayanan S, Mohandas U, Manjunath PG, Natraj CG. Knowledge of oral cancer and screening practice of B. Sc. nursing students in Davangere City, India. *Journal of Education and Ethics in Dentistry*. 2013 Jan 1;3(1):40.
9. Gbotolorun OM, Eweka O, Lawal A, Fadeyibi O, Emeka CI. Knowledge, opinions, and practices about oral cancer among general medical practitioners in Lagos, Nigeria. *Journal of Oral Research and Review*. 2015 Jan 1;7(1):6.
10. Scully C, Malamos D, Levers BG, Porter SR, Prime SS. Sources and patterns of referrals of oral cancer: role of general practitioners. *Br Med J (Clin Res Ed)*. 1986 Sep 6;293(6547):599-601.
11. Schnetler JF. Oral cancer diagnosis and delays in referral. *British Journal of Oral and Maxillofacial Surgery*. 1992 Aug 1;30(4):210-3.
12. Canto MT, Horowitz AM, Drury TF, Goodman HS. Maryland family physicians' knowledge, opinions and practices about oral cancer. *Oral oncology*. 2002 Jul 31;38(5):416-24.
13. Horowitz AM. Perform a death-defying act: the 90-second oral cancer examination. *J Am Dent Assoc* 2001;132:36S-40S.
14. Kerr AR. Lifesaving oral cancer screening. *The New York state dental journal*. 1999 Dec;66(7):26-30.
15. Kulkarni RS, Arun PD, Rai R, Kanth VS, Sargaiyan V, Kandasamy S. Awareness and practice concerning oral cancer among Ayurveda and Homeopathy practitioners in Davangere District: A speciality-wise analysis. *Journal of natural science, biology, and medicine*. 2015 Jan;6(1):116.

Source of Support: Nil
Conflict of Interest: Nil