Original Article

International Journal of Dental and Health Sciences
Volume 05,Issue 02

KNOWLEDGE, ATTITUDE, PRACTICES OF AYURVEDA, HOMOEOPATHY AND UNANI PRACTITIONERS CONCERNING ORAL CANCER IN ALIGARH CITY

Amit[1], D.J. Bhaskar[2], Navpreet Kaur[3], Rinki Malik Hans[4], Ankita Bansal[5]

1. Post Graduate Student, Dept of Public Health Dentistry, K.D. Dental College and Hospital, Mathura.
2. Prof and Head of Department, Dept of Public Health Dentistry, K.D. Dental College and Hospital, Mathura.
3. Reader, Dept of Public Health Dentistry, K.D. Dental College and Hospital, Mathura.
4. Senior lecturer, Dept of Public Health Dentistry, K.D. Dental College and Hospital, Mathura.
5. Private Practitioner.

ABSTRACT:

Objective: Oral cancer is the sixth most common cancer worldwide. The etiology of oral cancer is well established in most instances with consumption of tobacco and alcohol being the most common etiological agents. Oral cancer mainly affects in the sixth and seventh decades of life. Hence, the aim of this study was to assess the knowledge, attitude and practices of ayurveda, homoeopathy and unani practitioners concerning oral cancer in Aligarh city.

Materials and Methods: The present cross-sectional based study was conducted among 34 Ayurveda, 31 Homeopathy and 37 Unani practitioners concerning oral cancer in Aligarh city. Data was collected using a closed ended questionnaire. Statistical Analysis was performed using SPSS software for Windows, version 16.0 and data was analyzed using the Pearson Chi-square ($\chi 2$) test.

Results: Adequate knowledge of treating oral cancer was found among 17.6% of Ayurveda, 12.9% of Homeopathy and 8.1% Unani practitioners and a large number of practitioners (Ayurveda=91.2%, Homeopathy=58.1% and Unani=70.3%) expressed their willingness to receive further information on oral cancer.

Conclusion: The study shows that these traditional medical practitioners have merge knowledge about oral cancer and hence highlights the urgent need of updating their clinical skills regarding the diagnosis and prevention of this disease.

Key words: Ayurveda practitioners, homoeopathy practitioners and unani practitioners

INTRODUCTION:

Among all cancers, oral cancer is the most common cancer worldwide. In India, oral cancer is the commonest cancer which accounts for almost 35% of all newly diagnosed cancers.[1] Individuals in the 6th and 7th decades of life are mainly affected by oral cancer.[2] The most common etiological agents of oral cancer are consumption of tobacco (in any form) and alcohol.[1] In India, 95% of oral cancers are squamous cell carcinomas.[3] Considering the gender in all age groups, it is more commonly found in men and third commonest cancer in women.[4] Early detection of oral cancer helps in achieving a good prognosis which facilitates in reducing the morbidity and mortality rates.[5]

In India, the traditional medical practitioner's population ratio is 80:1,00,000. Also, it has been observed that the population of traditional medical practitioners is more in rural areas as compared to urban areas.[3] Among all forms of complementary and alternative medicine practices in India; Ayurveda, Homeopathy and Unani are commonly practiced. Indian population

*Corresponding Author Address: Dr Ankita Bansal. E-mail: dr.anuanki@gmail.com

is more inclined towards these traditional practitioners. From the point of view of dissatisfaction with modern medicine, Ayurveda therapy has gained maximum popularity as Ayurveda practitioners believe that the medicines are natural and safe. [6]

Many European countries considered Homeopathy as most common complementary and alternative medicine modalities for cancer patients. Homeopathy was traditionally very popular in India and South America; however, very few studies have been done on the effects of homeopathy in cancer patients. [7]

According to Unani medicine, cancer is essentially a disease of black bile (*Sawdā'*). Unani medicine is a holistic approach to cancer care and it states that these medicinal plants have anticancer potential.[8] Medical and dental practitioners share common responsibilities in the prevention and detection of oral mucosal changes in the early stages.[5] Studies related to the oral cancer knowledge have been well-documented among the medical and dental professionals. [3]

Oral cancer is a major health problem and continuous efforts towards it's early detection and prevention will help in reducing the mortality and morbidity in India. Therefore, it is necessary to assess the Knowledge, Attitude and Practices of these practitioners to determine the deficiencies existing in oral cancer diagnosis and prevention. [9] Hence, the present study was undertaken to assess the Knowledge, Attitude and Practices regarding oral cancer among Ayurvedic, Homeopathy and Unani practitioners in Aligarh city.

MATERIALS AND METHODS:

A cross-sectional study was conducted among148 traditional medical practitioners who were practicing in Aligarh city. Ethical approval for the study was obtained from the Institutional Ethical Committee of K.D. Dental College and Hospital, Mathura. Finally, a total of 102 practitioners who gave their consent to participate in the study were included. Out of these 102 practitioners; 34 were Ayurveda, 31 were Homeopathy and 37 were Unani practitioners.

METHODS OF COLLECTION OF DATA

All the traditional medical practitioners were approached for the study, however the ones who gave consent to participate were included as study subjects. All subjects were assessed using a closed-ended questionnaire. The questionnaire comprised of 14 questions regarding knowledge, attitude and practices of Ayurveda, Homeopathy and Unani practitioners. Subjects who did not give their consent to participate in the study were excluded.

DESCRIPTION OF QUESTIONNAIRE

The questionnaire was chosen as an appropriate methodology since it can be used to obtain standardized information.

A structured questionnaire consisting of 14 questions regarding knowledge, attitude and practices of oral cancer. The first part of the questionnaire consisted of demographical information such as the age, gender and occupation. The second part consisted of 14 questions related to knowledge, attitude, and practices of oral cancer. The questions were designed to assess oral examination habits, knowledge of the risk factors, any additional training in cancer institute, opportunity to examine patients with early oral lesions, recognition of clinical signs, point of referral, opinion on the sufficiency of knowledge in diagnosis, treatment, prevention and it's complications and the desire for further up gradation of knowledge on oral cancer. Pretesting of the questionnaire was carried out to ensure that all the questions were clear and understandable to the participants. The questionnaire was filled by each subject in the presence of a well- trained examiner.

Statistical Analysis was done using SPSS version 16 and data was analyzed using the Pearson Chi-square ($\chi 2$) test. Significance is assessed at 5% level of significance.

RESULTS:

Out of 102 study participants, 34 (33.3%) were Ayurveda practitioners, 31 (30.4%) were Homoeopathy practitioners and 37 (36.3%) were Unani practitioners. [Table no. 1].

Out of 34 (100%) Ayurveda practitioners, 25 (73.5%) were males and 9 (26.5%) were females. Out of a total of 31 (100%) Homoeopathy practitioners, 25 (80.6%) were males and 6 (19.4%) were females. Among a total of 37 (100%) Unani practitioners, 27 (73%) were males and 10 (27%) were females. [Table no. 2].

Independently filled questionnaire were returned by all the participants. It was found that more than 17 (45.9%) Unani practitioners were practicing since less than five years. The results were found to be highly statistically significant ($p = 0.00^{*}$).

In the present study, it was seen that 30 (88.2%) Ayurveda, 25 (80.6%) Homoeopathy practitioners and 22 (59.9%) Unani practitioners studied about oral cancer during their undergraduate course. The results were found to be statistically significant ($p=0.01^{*}$).

It was noted that 20 (58.8%) Ayurveda practitioners, 8 (25.8%) Homoeopathy practitioners and 13 (35.1%) Unani practitioners thought that they had sufficient knowledge of diagnosing oral cancer. The results were found to be statistically significant ($p=0.01^{*}$).

When asked the questions from participants, whether delayed diagnosis of oral cancer leads to it's spread, 31 (91.2%) Ayurveda practitioners, 24 (77.4%) Homoeopathy practitioners and 25 (67.6%) Unani practitioners gave positive response. The results were

found to be highly statistically significant (p=0.00*).

It was found that 7 (20.6%) Ayurveda practitioners, 3 (9.7%) Homoeopathy practitioners and 8 (21.6%) Unani practitioners attended CDE / Seminar / Workshops on oral cancer regularly. The results were found to be no statistically significant. (p= 0.37).

In the present study, It was also seen that 11 (32.4%) Ayurveda practitioners, 17 (54.8%) Homoeopathy practitioners and 20 (54.1%) Unani practitioners examined oral cavity of each patient routinely. The results were found to be no statistically significant. (p = 0.1).

When asked the participants about what step you take after suspecting oral cancer case, 12 (35.3%) Ayurveda practitioners, 19 (61.3%) Homoeopathy practitioners and 17 (45.9%) Unani practitioners advised the investigation as the next step. However, 1 (2.9%) Ayurveda practitioner, 3 (9.7%) Homoeopathy practitioners and 7 (18.9%) Unani practitioners believed in starting treatment as the next treatment. Also 21 (61.8%) Ayurveda practitioners, 9 (29%) Homoeopathy practitioners and 13 (35.1%) Unani practitioners referred the case to cancer specialist after suspecting oral cancer. The results were found to be statistically significant (p=0.02*).

In the present study, it was seen that 6 (17.6%) Ayurveda practitioners, 17 (54.8%) Homoeopathy practitioners and 17 (45.9%) Unani practitioners referred the case after diagnosing oral cancer to hospital. However, 23 (67.6%) Ayurveda practitioners, 13 (41.9%) Homoeopathy practitioners and 19 (51.4%) Unani practitioners referred the case to regional cancer center, whereas 5 (14.7%) Ayurveda practitioners, 1 (3.2%) Homoeopathy practitioner and 1 (2.7%) Unani practitioner each believed in treating the case after diagnosing oral cancer. The results were found to be statistically significant (p=0.01*).

A very important finding came out when practitioners were asked about their wish to receive further information regarding oral cancer. A very high percentage i.e. 31 (91.2%) Ayurveda practitioners, 18 (58.1%) Homoeopathy practitioners and 26 (70.3%) Unani practitioners showed their interest in this field. The results were found to be highly statistically significant (p=0.00*). [Table no. 3].

DISCUSSION:

In this study, it was found that out of a total of 102 (100%) study participants, 34 (33.3%) were Ayurveda practitioners, 31 (30.4%) were Homoeopathy practitioners and 37 (36.3%) were Unani practitioners. However, in the studies conducted by Kulkarni et al.[3] it was seen that out of a total of 81 (100%) study participants, 42 (53%) were Ayurveda practitioners and 38 (47%) were Homoeopathy practitioners. Awan et al.[5] it was found that out of a total of 482 (100%) study participants, 302

(100%) were medical students and 180 (49.6%) were dental students.

In this present study, it was found that out of a total of 34 (100%) Ayurveda practitioners, 25 (73.5%) were males and 9 (26.5%) were females. Out of a total of 31 (100%) Homoeopathy practitioners, 25 (80.6%) were males and 6 (19.4%) were females. Among a total of 37 (100%) Unani practitioners, 27 (73%) were males and 10 (27%) were females. In a previous study conducted by Awan et al.,[5] it was found that out of a total 302 (100%) medical students, 118 (39.1%) were males and 184 (60.9%) were females. Among a total of 180 (100%) dental students, 48 (26.7%) were males and 132 (73.3%) were females.

In the present study, it was found that more than 17 (45.9%) Unani practitioners were practicing since less than five years. The results were found to be highly statistically significant (p = 0.00*). No earlier studies showed about practitioners practicing experience.

It was seen that 30 (88.2%) Ayurveda practitioners, 25 (80.6%) Homoeopathy practitioners and 22 (59.9%) Unani practitioners studied about oral cancer during undergraduate course. The results were found to be statistically significant (p = 0.01*). No earlier studies showed about the oral cancer during undergraduate course.

In the present study, it was found that the 20 (58.8%) Ayurveda practitioners, 8 (25.8%) Homoeopathy practitioners and 13 (35.1%) Unani practitioners agreed that they had sufficient knowledge regarding diagnosis of oral cancer. The results were found to be statistically significant, which is similar to studies done by Kulkarni et al.[3] where 19 (45.2%) Ayurveda practitioners and 10 (26.3%) Homoeopathy practitioners agreed that they had sufficient knowledge regarding early detection and prevention of oral cancer.

Bhagavathula et al.[6] showed that 23 (20.1%) fifth year participants, 13 (11.4%) final year participants and 3 (2.6%) third year participants agreed that they had sufficient knowledge regarding prevention and detection of oral cancer. The results were found to be highly statistically significant.

In our study, it was seen that 31 (91.2%) Ayurveda practitioners, 24 (77.4%) Homoeopathy practitioners and 25 (67.6%) Unani practitioners were aware regarding delayed diagnosis of oral cancer leading to it's spread. The results were found to be highly statistically significant (p = 0.00*), which is to study finding by Kulkarni et al.[3] where 10 (23.8%) Ayurveda practitioners, 9 (23.7%) Homoeopathy practitioners were aware regarding delayed diagnosis of oral cancer leading to it's spread. The results were found to be not statistically significant (p = 0.99).

In the present study, it was found that 27 (79.4%) Ayurveda practitioners, 28 (90.3%) Homoeopathy practitioners and 29 (78.4%) Unani practitioners did not

attend CDE/ Seminar/ Workshops on oral cancer regularly. In a previous study done by Kulkarni et al.[3] 40 (95.2%) Ayurveda practitioners and 37 (97.4%) Homoeopathy practitioners did not attend CDE/ Conferences on oral cancer regularly.

In the present study, it was also found that 11 (32.4%) Ayurveda practitioners, 17 (54.8%) Homoeopathy practitioners and 20 (54.1%) Unani practitioners examined oral cavity of each patient routinely. In a previous study conducted by Kulkarni et al.[3] 7 (16.7%) Ayurveda practitioners and 2 (5.3%) Homoeopathy practitioners examined oral cavity of each patient routinely.

Bhagavathula et al.[10] showed that 37 (32.4%) fifth year participants, 32 (28%) final year participants and 45 (39.4%) third year participants examined patient's oral mucosa routinely.

In the present study, when asked about what step you take after suspecting oral cancer case, 21 (61.8%) Ayurveda practitioners, 9 (29%) Homoeopathy practitioners and 13 (35.1%) Unani practitioners referred the case to cancer specialist after suspecting oral cancer. The results were found to be statistically significant ($p^* = 0.02$), which is similar to the study done by Awan et al.[5] where 158 (87.8%) dental students and 90 (29.8%) medical students referred the case to oral medicine after suspecting oral malignancy. The results were found to be highly statistically significant ($p = 0.00^*$).

In the present study, it was found that 23 (67.6%) Ayurveda practitioners, 13 (41.9%) Homoeopathy practitioners and 19 (51.4%) Unani practitioners referred the case to regional cancer center whereas Kulkarni et al.[3] 34 (81%) Ayurveda practitioners and 29 (76.3%) Homoeopathy practitioners referred the case after diagnosing oral cancer to regional cancer center.

In the present study, it was found that a very important finding came out when practitioners were asked about their wish to receive further information regarding oral cancer. A very high percentage i.e. 31 (91.2%) Ayurveda practitioners, 18 (58.1%) Homoeopathy practitioners and 26 (70.3%) Unani practitioners showed their interest in this field. The results were found to be highly statistically significant ($p = 0.00^*$). In a previous study done by Kulkarni et al.[3] 41 (97.6%) Ayurveda practitioners and 32 (84.2%) Homoeopathy practitioners were desirous of receiving further information regarding oral cancer.

Limitations: Due to small sample size, results could not be extrapolated to larger population.

Suggestion And Recommendations: The result cannot be generalized for whole population, for which further studies are recommended taking larger samples with wider geographical representation. Health education campaigns particularly emphasizing on oral cancer must be integrated with wider health messages.

CONCLUSION:

This study showed knowledge gaps about oral cancer among Ayurveda, Homeopathy and Unani practitioners. Lack of awareness and knowledge about the risk factors initiates the need based educational interventions among future Ayurveda, Homeopathy and Unani practitioners regarding early detection and prevention of oral cancer in Aligarh city. Hence, there is a strong need to strengthen the Knowledge, Attitude and Practices regarding oral cancer in all practitioners irrespective of their specialty.

REFERENCES:

1. Shah J, Gil Z. Current concepts in management of oral cancer – surgery. Oral Oncol. 2009; 45: 394–401.
2. Carter L, Harris A, Kavi V, Johnson S, Kanatas A. Oral cancer awareness amongst hospital nursing staff: a pilot study. BMC Oral Health. 2009; 9: 41 – 8.
3. 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. J Nat Sc Biol Med 2015; 6:116-9.
4. Sankeshwari R, Ankola A, Hebbal M, Muttagi S, Rawal N. Awareness regarding oral cancer and oral precancerous lesions among rural population of Belgaum district, India. Global Health Promotion. 2016;23(3): 1757-9759.
5. Awan KH, Khang TW, Yee TK, Zain RB. Assessing oral cancer knowledge and awareness among Malaysian dental and medical students. J Can Res Ther 2014;10:903-7.
6. Gawde SR, Shetty YC, Pawar DB. Knowledge, attitude, and practices toward ayurvedic medicine use among allopathic resident doctors: A cross-sectional study at a tertiary care hospital in India. Perspect Clin Res 2013;4:175-80.
7. Rostock M, Naumann J, Guethlin C, Guenther L, Bartsch H, Walach H. Classical homeopathy in the treatment of cancer patients - a prospective observational study of two independent cohorts. BMC Cancer 2011 11:19.
8. Uddin Q, Amanullah, Siddiqui K, Rahman R. Unani Medicine for Cancer Care: an evidence based review. Int Journal of Ayur and Herbal Med. 2015; 5(3):1811-1825.
9. Applebaum E, Ruhlen T, Kronenberg F, Hayes C, Peters E. Oral cancer knowledge, attitudes and practices: a survey of dentists and primary care physicians in Massachusetts. J Am Dental Assoc. 2009; 140: 461-467.
10. Bhagavathula AS, Zakaria NB, Jamshed SQ. Knowledge of future dental practitioners towards oral cancer: exploratory findings from a public university in Malaysia. Int Journal of Dent. 2015; 1-6.

TABLES:

Table 1: Distribution of study subjects according to occupation

OCCUPATION	NUMBER	PERCENTAGE (%)
Ayurveda	34	33.3%
Homoeopathy	31	30.4%
Unani	37	36.3%
Total	102	100%

Table 2: Distribution of study subjects according to gender

Gender	Ayurveda	Homoeopathy	Unani
Males	25 (73.5%)	25 (80.6%)	27 (73%)
Females	9 (26.5%)	6 (19.4%)	10 (27%)

Table 3: distribution of study subjects according to details of the responses given by the participants

QUESTIONS	RESPONSES	AYURVEDA n(%)	HOMEOPATHY n(%)	UNANI n(%)	p value
1. From how many years have you been practicing?	a. Less than 5 years b. 5- 10 years c. 10- 15 years d. More than 15 years	14(14.2%) 13(38.2%) 2(5.9%) 5(14.7%)	4(12.9%) 9(29%) 11(35.5%) 7(22.6%)	17(45.9%) 13(35.1%) 5(13.5%) 2(5.4%)	.00*
2. Are oral health and general health inter- related?	a. Yes b. No c. Don't know	28(82.4%) 3(8.8%) 3(8.8%)	27(87.1%) 4(12.9%) 0(0%)	27(73.0%) 9 (24.3%) 1(2.7%)	.14
3. Have you studied about oral cancer during your undergraduate course?	a. Yes b. No	30(88.2%) 4(11.8%)	25(80.6%) 6(19.4%)	22(59.9%) 15(40.5%)	.01*
4. Do you think that you have sufficient knowledge of diagnosing oral cancer?	a. Yes b. No	20(58.8%) 14(41.2%)	8(25.8%) 23(74.2%)	13(35.1%) 24(64.9%)	.01*
5. Do you think that you have sufficient knowledge of treating oral cancer?	a. Yes b. No	6(17.6%) 28(82.4%)	4(12.9%) 27(87.1%)	3(8.1%) 34(91.1%)	.48
6. All various forms of tobacco cause oral cancer?	a. Yes b. No c. Don't know	29(85.3%) 3(8.8%) 2(5.9%)	26(83.9%) 5(16.1%) 0(0%)	29(78.4%) 8(21.6%) 0(0%)	.2
7. Do secondary risk factors (alcohol, stress, dietary habits, decreased immunity etc) have any vital role in causing oral cancer?	a. Yes b. No c. Don't know	28(82.4%) 5(14.7%) 1(2.9%)	28(90.3%) 3(9.7%) 0(0%)	28(75.7%) 8(21.6%) 1(2.7%)	.57
8. Delayed diagnosis of oral cancer leads to it's spread?	a. Yes b. No c. Don't know	31(91.2%) 2(5.9%) 1(2.9%)	24(77.4%) 6(19.4%) 1(3.2%)	25(67.6%) 3(8.1%) 9(24.3%)	.00*
9. Do you attend CDE/ Seminar/ Workshops on oral cancer regularly?	a. Yes b. No	7(20.6%) 27(79.4%)	3(9.7%) 28(90.3%)	8(21.6%) 29(78.4%)	.37
10. Do you carry out tobacco-counseling for tobacco- user patients?	a. Yes b. No	28(82.4%) 6(17.6%)	25(80.6%) 6(19.4%)	28(75.7%) 9(24.3%)	.7
11. Do you examine oral cavity of each patient routinely?	a. Yes b. No	11(32.4%) 23(67.6%)	17(54.8%) 14(45.2%)	20(54.1%) 17(45.9%)	.1
12. What step you take after suspecting oral cancer case?	a. Advice investigation. b. Start treatment. c. Refer the case to cancer specialist.	12(35.3%) 1(2.9%) 21(61.8%)	19(61.3%) 3(9.7%) 9(29%)	17(45.9%) 7(18.9%) 13(35.1%)	.02*
13. Where do you refer a case after diagnosing oral cancer?	a. Hospital. b. Regional cancer center. c. Treat the case.	6(17.6%) 23(67.6%) 5(14.7%)	17(54.8%) 13(41.9%) 1(3.2%)	17(45.9%) 19(51.4%) 1(2.7%)	.01*
14. Do you wish to receive further information regarding on oral cancer?	a. Yes b. No	31(91.2%) 3(8.8%)	18(58.1%) 13(41.9%)	26(70.3%) 11(29.7%)	.00*