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Knowledge Related to the Use of Traditional Oral Health Practices Among Dental Students in Khammam

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***Abstract*: *Aim:* The aim of this study was to assess the oral health knowledge related to the use of traditional oral health practices among dental students in Khammam.**

***Subjects and Methods:* Of the 200 participants 179 were female and 21 were male. The questionnaire having 19 questions were used to assess the knowledge related to traditional oral health practices including frequency, reason and contents of Miswak.**

***Statistical Analysis Used:* The Survey data were collected and organised into Microsoft Excel spread sheets and were statistically analyzed utilizing the Statistical package for the social sciences. The statistical test used here was the chi-square test, and $P < 0.05$ was considered to be statistically significant($P<0.05$)**

***Results:* Students responded regarding the oral health practices, 51%are aware of Neem stick, 24.5% are aware of charcoal powder, 15% are aware of Miswak, 6% are aware of Oil Pulling, and 3.5% are aware of tooth picks as the traditional oral health practices. 31.5%students cleaned their teeth at least once in a day, 13% twice, 36.5% whenever required, and 19% students had never used. Nearly, 29.5% students responded positively about the fluoride content in Miswak.**

***Conclusions:* In our study, most common type of oral health practices the students are aware of, are Neem stick, Miswak, oil pulling, charcoal powder. Miswak contains many medicinal properties and doesn't need any extra resources to manufacture it. Thus it is strongly recommended as important and effective tool for oral health practices.**

***Keywords*: traditional oral health practices**

1. Introduction

Mouth is considered as the mirror of the general health of human body [3]. Oral health is an integral part of an individual's general health and overall wellbeing [2]. As oral health and general health are interrelated, it is very important to maintain oral health [3].

The most common and modern mechanical method of tooth cleaning is the use of toothbrush and dentifrice. Despite the widespread use of toothbrush in combination with a dentifrice, the traditional oral health practices such as usage if chewing sticks, traditional medicines, oil pulling are being practiced in some parts of the world (Also in developing countries) because of its availability, low cost, simplicity and doesn't require any extra resources to manufacture it [5].

'Traditional Medicines' is a comprehensive term used to refer systems such as traditional Chinese medicine, Indian Ayurveda and Arabic Unani medicine as well as various forms of indigenous medicines. In countries where traditional medicine has not been integrated into national health care schema, it is termed complementary, alternative or non-conventional medicine [4]. Oral hygiene is not described as a separate chapter in Ayurveda, but it comes under the different chapters of Ayurvedic literature.

Ayurveda recommends and insists on the use of herbal brushes [2]. The use of wood sticks for cleaning the teeth is deeply rooted in traditional Arabian medicine. Chewing sticks are usually taken from plants, shrubs or trees with high anti-microbial activity. Usage of chewing sticks are spread though. But in Asia, Africa, South America and the middle east including Saudi Arabia and throughout the Islamic countries. Chewing sticks are known by different names in different cultures. Such as 'Miswak' in Arabic, 'Koyoji' in Japanese, 'qesam' in Hebrew, 'qisa' in Aramaic and 'Mastic' in Latin. In 1987, WHO encouraged to use Miswak as Oral hygiene practice because of the tradition, low cost and availability [5].

Miswak was used by the ancient Arabs to get their teeth white and shiny. It is also considered as per Islamic custom. Islam has given an elevated status to the Miswak [5]. The Prophet Mohammed strongly recommended the use of Miswak and was himself a fervent supporter of its use. At present, Miswak is being used among Muslim because of its traditional, religious and customary values. Chewing stick had antibacterial, antifungal, antioxidant, pharmacological therapeutic properties and also effective in controlling dental plaque which is important factor for development of caries and periodontal disease [6]. It is also practiced by many people in developing countries. Traditional medicines which are derived from

traditional plants are also used to treat the oral diseases such as usage of lavanga (Turmeric) exerts anti-bacterial, antifungal and antiviral activity etc. Oil pulling or Oil swishing, in alternative medicine is a traditional Indian folk remedy claimed to improve oral health [4]. It came into limelight and popularity by Dr F.Karach. It is mentioned in the Ayurveda tent Charak Samhita and Sushruta Samhita as kavalagraha or Kavala gandoosha. Since the research was focused only on general population, and no study was conducted on dental students, thus the need for the present study is conducted with the aim to determine and assess the knowledge related to use of traditional oral health practices among dental students in Khammam. The objectives of this study are, to determine the knowledge related to use of traditional oral health practices among boys and girls and to evaluate the usage of traditional oral health practices based on the year of study.

2. Methodology

A. Permission

Permission was taken from the Head of the Department, Department of Public health dentistry.

Questionnaire is explained and informed. Consent was taken prior to study from study subjects.

B. Study design

A cross sectional Questionnaire based study was conducted among students of Mamata Dental College, Khammam

C. Pilot study

Questionnaires framed based on related articles are distributed among 30 students to know reliability of the questionnaires.

D. Inclusion criteria

All Interns, final year students and 3rd year students who are present during the day of survey are included in the study. The duration of the study was from 31-05-2019 to 6-6-2019.

E. Exclusion criteria

Students who are absent during the day of survey were excluded.

F. Study procedure

The study was conducted among 200 dental students. Questionnaire were distributed to 3rd,4th year students and Interns during the working hours that is from 9:00 AM to 4:00 PM. Questionnaire included personal data and questions.

G. Statistical analysis

After the data is collected through questionnaire, they are entered in excel sheet and sent for analysis.

3. Results

The number of students included in the study were 200. Mean age of study group was 21.75. Standard deviation was 1.325. Majority of them were females (89.5%) and majority of them were 4th bds.

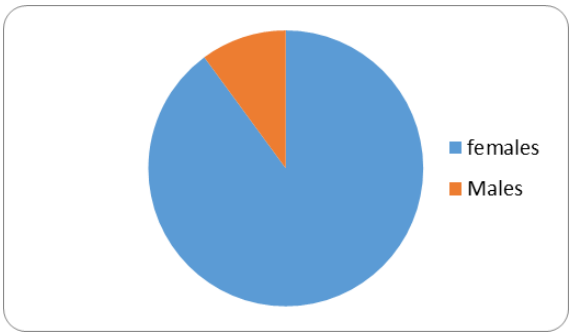

Fig. 1. Gender

Table 1
Socio demographic characteristics of study population in Mamata dental college 2019

	Frequency	Percent
III BDS	56	28.0
IV BDS	78	39.0
Interns	66	33.0
Total	200	100.0

Students were asked about the other names of traditional oral hygiene practices and majority of them answered all the names i.e., indigenous oral hygiene practices, organic oral hygiene practices, complimentary oral hygiene practices (54.5%) and very few answered only complimentary oral hygiene practices (5.0%).

Of the female students,100 students (55. 86%)answered all the names i.e., indigenous oral hygiene practices, organic oral hygiene practices, complimentary oral hygiene practices and very few 6 students (3.35%)answered as complimentary oral hygiene practices.

Of the male students, 9 students (42.85%) answered as all the names i.e., indigenous oral hygiene practices, organic oral hygiene practices, complimentary oral hygiene practices and very few 3 students (14.28%)answered as indigenous oral hygiene practices. Statistically, a significant difference was observed i.e., P<0.05. Explained in fig. 2.

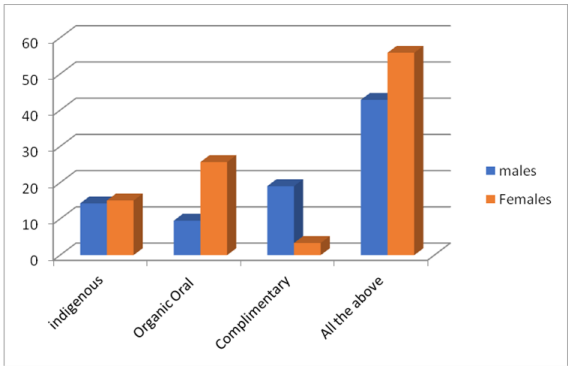

Fig. 2.

Students were asked about usage of traditional medicine in

conjugation with modern medicine and majority of them (32.5%) answered yes and few (10.5%) answered as not aware of.

Of the 56 students of 3rdBDS (25%) answered yes and the other (17.85%) answered as not aware of.

Of the 78 students of 4thBDS (34.61%) answered not sure and other (11.53%) answered as not aware of.

Of the 66 students of Interns (36.36%) answered no and other (3.3%) answered as not aware of. Statistically, a significant difference was observed i.e., P<0.05. Explained in fig. 3.

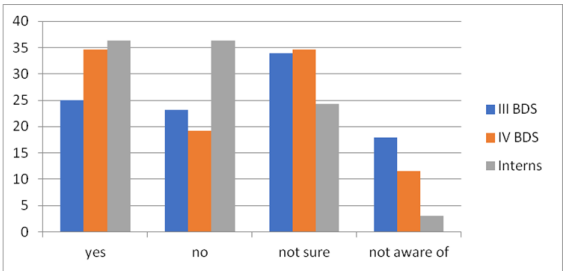

Fig. 3.

Students were asked whether which type of Miswak is high in active constituents and majority of them answered both i.e., freshly cut and dry (28.5%)and few answered as dry (20%).

Of the 56 students of 3rdBDS (37.5%) answered freshly cut and a few (19.6%) answered as dry.

Of the 78 students of 4thBDS (32.05%) answered not aware and a few (15.38%) answered as freshly cut.

Of the 66 students of Interns (31.81%) answered freshly cut and a few (15.15%) answered not aware of. Statistically, a significant difference was observed, i.e., P<0.05 Explained in fig. 4.

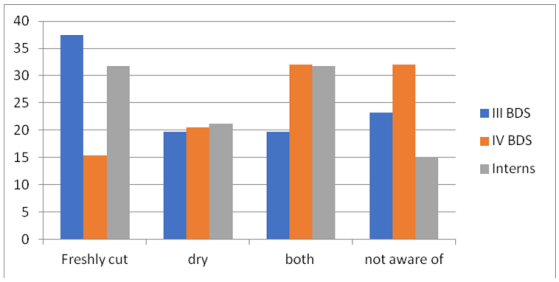

Fig. 4.

Students were asked about frequency of using miswak.

Table 2

	Frequency	Percent
Once a day	63	31.5
Twice a day	26	13
Some times	73	36.5
Never	38	19
Total	200	100

Majority of the students (36.5%)use some times and (31.5%) use once a day and (19%) use never and few (13%) use twice a day.

4. Discussion

Oral health is not limited to oral and dental hygiene only but integral to general well-being and relates to quality of life.

In present study, the type of oral hygiene aids that are aware of or used by participants are Miswak (15%), charcoal powder (24.5%), toothpicks (5.5%), oil pulling (6%), neemstick (51%).

A similar study conducted in 2008 among 1115 male students by Al Hasa Saudi Arab reported that 45% were using Miswak as a brushing tool [10]. This might be attributed to do either difference in either venues or demographic origin or religious faith in the studies. This shows that the proportion in other countries vary according to level of development cultures and traditions.

In present study, the number of times using Miswak alone by the participants were 31.5% once daily, 13.0% twice daily, 36.5% sometimes, 19.0 % never.

A similar study conducted in Saudi Arabia among 2023 participants reports that the frequency of using oral hygiene method either tooth brushing or Miswak were 28.2% once daily,37.6% twice daily, 28.4% whenever required, 5.9% infrequently [1].

A national health survey in Pakistan showed that about 36% of Pakistani population cleaned their teeth daily irrespective of whether chewing sticks or tooth brush employed while 54% did so either on alternative days, weekly or monthly [11]. This shows a positive correlation with these two studies.

Tooth brushing with tooth paste is arguably the most common form of tooth cleaning practice by individuals in industrialized countries where as the chewing sticks often used as solo cleaning agent by individuals in developing countries.

Finally, the present study showed that many of the students had a moderate knowledge about the type of Miswak to be used and the content of the Miswak and many of them are aware of traditional oral hygiene practices such as oil pulling and the oils used in oil pulling but majority of students are un aware of the method of oil pulling.

5. Conclusion

In present study, the type of oral health practices are aware of by students apart from tooth brush are Neem stick and Miswak by the many of students. Miswak can be a good alternative to tooth brush since it is inexpensive and readily available. Miswak contains many medicinal property and also available in many rural areas of poor countries. Dentists who practice in areas where chewing sticks are commonly used should realize that their patients might need specific instructions on proper ways to use the chewing sticks.

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