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To Access Awareness, Knowledge and Attitude toward Oral Diseases among Private General Medicine Practitioners in and Around Araria District, Bihar

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Abstract

Introduction: Oral health is also considered as an integral part of the general health where it acts as a mirror to the body and general health. It was also reported that oral cavity acts as a screening aid and helps in diagnosing multiple systemic abnormalities. Oral diseases, conditions, and orofacial trauma, are widely prevalent and costly to treat; yet they are preventable. Considering the importance of oral health in maintaining good overall health, there is a need of combined efforts from dentists and clinicians to improve people's health. Indeed, the etiologic and pathologic aspects of dental diseases need to be incorporated as a part of curriculum in the medical education as well.

Method: A cross-sectional survey was conducted among general practitioners in Araria District, Bihar, who had an MBBS degree or above, with permission from the Institute's Ethical Committee. A simple random sample would be done. A sample of one thousand medical professionals would be included. The survey was conducted after obtaining informed permission.

Results: General practitioners' knowledge and awareness of oral illnesses were assessed by asking the questions stated below. 60.1% of the study group knew correct factors responsible for dental caries. About 66.4% respondents failed to tell the correct factors responsible for periodontal diseases. As much as 80.1% had misconception that scaling had adverse effects on teeth. Only 33.4% subjects correctly advised their patients regarding visit to the dentist. 33.2% subjects were not aware that pregnancy women need dental check-up. 33.1% subjects were not aware that paedriatric patients should visit dentist regularly. (Table 1). Nearly half of the participants (47%) were unaware of Ludwig's angina, and nearly half (53%) were unaware of another potentially fatal illness caused by untreated dental issues. Comparing knowledge and awareness of oral disorders among new medical graduates having less than 10 years of experience with those having over 10 years of post MBBS experience. For every parameter, the difference was found to be not statistically significant. (Tables 5)

Conclusion: These results underline how important it is to enhance medical professionals' knowledge on oral health. The current medical practitioner's examination and referral practices, along with the oral and general health consequences of postponing dental treatment, highlight the importance of primary health care providers' roles in promoting dental attendance, lowering treatment costs, and reducing mortality, morbidity, and other adverse outcomes.

Keywords: knowledge, attitudes, practices, medical practitioners, oral diseases, dental health

Introduction

Oral diseases, conditions, and orofacial trauma, are widely prevalent and costly to treat; yet they are preventable. Most of the oral conditions have an insidious onset, and are chronic and asymptomatic in nature until they have progressed to an advanced stage. This makes the routine oral examination an extremely important and a viable area for the early detection and the treatment of the variety of oral and systemic diseases.[1] General practitioners (GP) are often the first point of contact for advise and management in cases of dental related pain; reasons for presentation to the General Practitioners, rather than the dentist include non-classic presentation of dento-facial pain, lack of coordinated after hours dental care, poor patient education, patients' prescription of their GP as the primary coordinator of integrated total care and financial considerations.[2] Early recognition and diagnosis of this disease spectrum is of paramount importance in the successful treatment, and directly affects prognosis of the disease condition.[3] General practitioners (GPs) may lack the necessary skills to effectively treat dento-facial pain for a number of reasons. These include: a lack of training in dental hygiene, inconsistencies in patient exposure to dental issues, a lack of management guidelines, difficulties in accurately localizing the source of the pain, and a lack of cooperation and communication between GPs and dentists.[4] . However, early data suggest that medical professionals lack knowledge about oral diseases and the links between poor oral health and general sickness.[5] It is essential that medical schools teach their students about the etiology and pathophysiology of oral illnesses.[6] The present study is carried out to assess the awareness of the common oral diseases and to create awareness of the prevailing dental conditions among medical practitioners.

Methodology

Study Design & Setting: A cross-sectional survey was conducted among general practitioners in Araria District, Bihar, who had an MBBS degree or above, with permission from the Institute's Ethical Committee. Both

graduates & post-graduates medical practitioners were included. The survey was conducted between June 2022 and June 2023.

Sample Size Determination: After determining sample sizes using the Fisher technique, this specific number was chosen. The following is the formula: sample size = Z2P (1-P)/D2, where P is the proportion (in %), Q is equal to 1 minus P, D is the percentage of sample error that may be tolerated, and Z is the coefficient of Z statistics generated from a standard normal distribution. The minimal sample size (N) is determined to be 995 using the following formula: N = 5.38 x 5.38 x 9.5 (100-9.5)/ 5 x 5, where D is the confidence level and 5% is the prevalence rate. Consequently, our research should have been able to meet the requirements of the study with a minimal sample size (N) of about 1000 persons.

Sampling Technique: The assessment of an individual's oral health knowledge and attitude was conducted by a self-administered questionnaire consisting of 25 closed-ended inquiries. Knowledge and awareness of oral diseases among medical practitioners was assessed by eighteen questions among twenty-five questions of the questionnaire used in this study obtained from Patil A et al. (2010)[7] and Mehrotra A et al. (2021)[8]. Questions on oral illness awareness and knowledge are included in Table 4Using an online survey platform, the investigator reached out to each practitioner by means of a questionnaire. Data was collected, processed, and evaluated after receiving the completed questionnaire via online submission.

Inclusion Criteria:

- Medical Practitioners having MBBS degree or above.
- Subjects practicing in and around Araria District, Bihar

Exclusion Criteria:

- Subjects not having MBBS degree.
- Subjects not willing to participate in the study.

Procedure: A 25-question self-administered questionnaire was given to each participant. The questionnaire included multiple-choice questions, allowing for the accessment, awareness, knowledge and attitude toward oral diseases.

Ethical Considerations: Ethical approval for the study was obtained from the Institution's Ethical Committee prior to data collection. Participation was voluntary, and informed consent was obtained from all participants. Data confidentiality and anonymity were maintained throughout the study.

Statistical Analysis: Data were analyzed using IBM SPSS Statistics version 23.0. For each question, the data was organized as a percentage, and the mean percentage was then determined. Frequency and percentage were the methods used to present quantitative data. Some of the features were measured using the mean and standard deviation.

For inferential statistics:

Chi-square test: The ordinal variable was compared between groups using a Chi-square test. The chi-square test statistic often has the following form:

$$X^2 = \sum \frac{(\text{observed - expected})^2}{\text{expected}}$$

Independent t-test: When comparing two populations, the independent samples t-test is used. This is done by collecting two sets of samples, one from each group, that are independent and have identical distributions. The formula used was:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{N_1 + N_2 - 2}\right)\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

Where X1 =Mean of the first Group, X2 =Mean of the Second Group

When the p-value was less than 0.05 ($p<0.05$) and a 95% confidence interval was used, it was deemed significant

Results

Participant Demographics

In the research, the male participants' ages varied from 24 to 59 years old, with an average age of 35.6 ± 3.68 (SD) years. The women who participated in the research were between the ages of 25 and 56, with an average age of 33.7 ± 2.42 (SD) years. Participants' ages varied from 24 to 59 years old, with an average age of 34.8 ± 3.26 (SD) years.

Knowledge and awareness among medical practitioners towards oral diseases

General practitioners' knowledge and awareness of oral illnesses were assessed by asking the questions stated below. 60.1% of the study group knew correct factors responsible for dental caries. About 66.4% respondents failed to tell the correct factors responsible for periodontal diseases. As much as 80.1% had misconception that scaling had adverse effects on teeth. Only 33.4% subjects correctly advised their patients regarding visit to the dentist. 33.2% subjects were not aware that pregnancy women need dental check-up. 33.1% subjects were not aware that paediatric patients should visit dentist regularly. (Table 1)

Nearly half of the participants (47%) were unaware of Ludwig's angina, and nearly half (53%) were unaware of another potentially fatal illness caused by untreated dental issues. Out of all the participants, only 40.3% knew what Sjogren Syndrome was. Twenty-five percent of those who took the survey were aware that periodontal disease increases the likelihood of having a myocardial infarction. 59.8% did not know organs affected by Sjogren Syndrome. 46.5% do not believe there is relation of general health with oral health. 60.1% subjects were not aware that certain antihypertensive can cause gingival enlargement. (Table 1)

Comparing knowledge and awareness of oral disorders among new medical graduates having less than 10 years of experience with those having over 10 years of post MBBS experience. For every parameter, the difference was found to be not statistically significant. (Table 2).

The clinical work of doctors with more than ten years of experience is not significantly different from that of doctors with less than ten years of experience.

Medical practitioners with more than ten years of experience manage patients with dental difficulties 52.2% of the time, 51.6% of the time, and 47.7% of the time; in contrast, those with fewer than ten years of experience handle patients with dental problems regularly, sometimes, and seldom, respectively. P=>0.05 indicated that the difference was not statistically significant.

Discussion

The majority of oral diseases have a slow start, persist for a long time, and don't cause any symptoms until they're advanced. In addition, many systemic disorders include oral symptoms, and these symptoms often appear before the systemic symptoms do. As a result, routine dental examinations have great promise for the early detection and management of a variety of systemic and oral diseases.[9]

Keeping up with regular dental care is essential for preventing a host of oral problems. Most oral illnesses are preventable or curable, despite the fact that their prevalence is a global problem.[10]

Most patients' first point of contact is with their primary care physician. It should be standard practice for doctors to examine the mouth and throat as part of a complete physical examination. Routine examinations may

significantly lower the morbidity and mortality caused by oral illnesses.[11]

In over half of all instances, dental-related disease is the cause of dentofacial discomfort, making it a prevalent presentation in general practice. Most frequent forms of dental discomfort have solutions that dentists are prepared to provide. Further, dental experts in oral medicine and oral maxillofacial surgery are well-equipped to handle uncommon and unusual dentofacial pain manifestations.[12]

But not everyone who has tooth discomfort visits their dentist or a specialist. For patients seeking guidance and treatment for dental-related discomfort, primary care physicians are often the first point of contact. In the course of their work, general practitioners often interact with members of the general public.[13]

However, there are a number of reasons why primary care physicians might not be prepared to handle dento-facial pain. These include: a lack of training in dentistry in medical school, inconsistent patient exposure to dental issues, unclear treatment protocols, difficulty pinpointing the exact location of the pain, and a lack of coordination between primary care physicians, dentists, and patients.[14]

There has to be a concerted effort by physicians and dentists to enhance people's health since excellent dental health is essential to good overall health. It is essential that medical schools teach their students about the etiology and pathophysiology of oral illnesses.[15]

As a result, it is imperative that general practitioners understand the attitudes, habits, knowledge, and awareness associated with maintaining oral health. The goal of this study was to evaluate the knowledge, attitudes, and awareness of oral diseases among private medical practitioners in the Bihar district of Araria.

The present cross sectional questionnaire based study was carried out on a sample of 1000 subjects **520 (52%) males and 480 (48%) females** comprising of general medical practitioners having MBBS degree or above in Araria District, Bihar. 324 (32.4%) subjects had up to 10 years of experience after MBBS whereas remaining 676 (67.6%) subjects had above 10 years of experience after MBBS.

Knowledge and awareness of oral diseases among medical practitioners

Knowledge and awareness of oral diseases among medical practitioners was assessed by eighteen questions among twenty-five questions of the questionnaire used in this study obtained from Patil A et al. (2010)[7] and Mehrotra A et al. (2021)[8]. Questions on oral illness awareness and knowledge are included in Table 1.

While 33.6% of doctors were aware that bleeding gums are a sign of gingivitis, 66.4% of respondents were unsure about what causes periodontal disorders. Our study's findings were consistent with those of Patil A et al. (2010)[7], Baseer et al. (2012)[16] , and Khami et al. (2007)[9].

The current research found that 60.1% of participants had the right knowledge about the causes of dental caries. These findings are consistent with those of the majority of studies (e.g., Srinidhi et al.[11], Mehrotra V et al.[17], Chandra J[18], Naidu S et al.[14], Radha et al.[19], Patil et al.[7]), in which 90% of the medical experts confirmed that foods high in sugar are the primary cause of tooth decay.

The responses of the medical practitioners in our survey on the importance of routine dental checkups were comparable to those of Baseer et al.[16]. For example, Sharda and Shetty[20], Timmerman et al.[21],Doshi et al.[22], have all found that dental discomfort is the primary reason people see the dentist.

While comparing knowledge and awareness of oral disorders among new medical graduates having less than 10 years of experience with those having over 10 years of post MBBS experience. It was noted that the difference was statistically non-significant for each parameter

Practice regarding oral diseases among medical practitioners

Practice regarding oral diseases among medical practitioners was assessed by seven questions among twenty-five questions of the questionnaire used in this study obtained from Patil A et al. (2010)[7] and Mehrotra A et al. (2021)[8]. Table 3 comprises of questions pertaining to practice regarding oral disease among medical practitioners in and around Araria District, Bihar.

Medical practitioners with more than ten years of experience manage patients with dental difficulties 52.2% of the time, 51.6% of the time, and 47.7% of the time; in contrast, those with fewer than ten years of experience handle patients with dental problems regularly, sometimes, and seldom, respectively. When it comes to dental abscesses, 48.6% of doctors with less than 10 years of experience treat them with antibiotics and painkillers, while 47.3% send patients to the dentist. In comparison, the percentages for doctors with more than 10 years of experience are 51.4% and 52.7%, respectively.

The following referral rates apply to medical professionals with less than ten years of experience: 46.6%, 49.1%, and 48.7% for oral and maxillofacial surgeons, otolaryngologists, and neurosurgeons; for those with more than ten years of experience, the percentages are 53.4%, 50.9%, and 51.3%, respectively. Comparatively, medical practitioners with more than ten years of experience see 53%, 51%, and 46.5% of patients with oral symptoms each week, while those with less than ten years of experience see 48%, 49%, and 46.5% of patients with oral symptoms per week, respectively. In both groups, chlorhexidine gluconate has been prescribed to all of the participants. The results of our study were similar to results obtained in studies by Sharda AJ et al20 Baseer et a116 and Timmerman et al".21

The mindset and behaviors around oral health may be improved if medical practitioners get more understanding in this area. A number of awareness-raising initiatives, such as dentistry and medical continuing education programs, should be launched.

The present research found that medical professionals aren't particularly well-informed about the effects of oral diseases on overall health, and even fewer of them kept up with their regular dental checkups, which may indicate a negative attitude towards oral health.

Conclusion

The following conclusions were drawn from this study:

The present research found that medical professionals aren't particularly well-informed about the effects of oral diseases on overall health, and even fewer of them kept up with their regular dental checkups, which may indicate a negative attitude towards oral health.

When it comes to treating oral lesions, both seasoned doctors and those who have just completed their MBBS programs are equally competent.

These results underline how important it is to enhance medical professionals' knowledge on oral health. Among the tactics that may assist us in achieving this are;

1. Incorporate basic knowledge about dentistry in medical syllabi.
2. Various interdisciplinary symposia/ lectures/ conferences highlighting the issues.

3. Initial/ basic management of dental emergencies in medical practice.
4. Special study modules or electives in oral health and disease by involving the dental faculty in teaching should be created.

The current medical practitioner's examination and referral practices, along with the oral and general health consequences of postponing dental treatment, highlight the importance of primary health care providers' roles in promoting dental attendance, lowering treatment costs, and reducing mortality, morbidity, and other adverse outcomes.

Limitations

The small sample size and cross-sectional design are the drawbacks of this research. The findings might be skewed due to over- or underreporting as the present study's data is based only on self-reported information.

Despite all the efforts to carry out a perfect cross-sectional experiment, the findings would have been more reliable and conclusive if a larger sample had been used. Medical professionals' oral health knowledge, attitude, and awareness should be assessed both before and after educational programs are implemented, according to the proposed future studies.

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Legend Tables

Table 1: Response to Knowledge and Awareness related Questions

Question	Correct Response	Incorrect Response
What do you think are the factors for Dental Caries?	601 (60.1%)	399 (39.9%)
What do you think are the factors for periodontal and gingival diseases?	336 (33.6%)	664 (66.4%)
Do you think scaling has adverse effects on the teeth?	199 (19.9%)	801 (80.1%)
How often do you advise your patients to visit the dentist	334 (33.4%)	666 (66.6%)
Do you think pregnancy women need dental check-up?	668 (66.8%)	332 (33.2%)
Paediatric patients should visit the dentist regularly?	669 (66.9%)	331 (33.1%)
Ludwig's angina is a life threatening condition of face.	530 (53%)	470 (47%)
What is another life threatening condition that can occur due to untreated dental condition?	470 (47%)	530 (53%)
Periodontal Disease is a risk factor and is commonly associated with	256 (25.6%)	744 (74.4%)
Systemic complications arising due to dental disease	333 (33.3%)	667 (66.7%)
Certain Anti-hypertensives can cause gingival enlargements	399 (39.9%)	601 (60.1%)
what type of changes in the oral cavity would you associate with progression towards oral cancer	274 (27.4%)	726 (72.6%)
There is a connection between General and oral health. Do you agree?	535 (53.5%)	465 (46.5%)
Are you aware of Sjögren's syndrome?	403 (40.3%)	597 (59.7%)
If yes, what are the affected regions in the Sjögren's syndrome?	402 (40.2%)	598 (59.8%)
Do you think HIV has oral manifestations?	668 (66.8%)	332 (33.2%)
If yes, what is the most common type of condition that can be appreciated?	394 (39.4%)	606 (60.6%)
Systemic conditions associated with most oral manifestations	265 (26.5%)	735 (73.5%)

Table 2: Experience-wise Comparison of Knowledge and Awareness Questions

Question	Correct Response		P value
	0-10 years	Above 10 years	
What do you think are the factors for Dental Caries?	193 (40.2%)	206 (39.6%)	p≥0.05 (Non-Sig)
What do you think are the factors for periodontal and gingival diseases?	157 (32.7%)	179 (34.4%)	p≥0.05 (Non-Sig)
Do you think scaling has adverse effects on the teeth?	96 (20.0%)	103 (19.8%)	p≥0.05 (Non-Sig)

How often do you advise your patients to visit the dentist	159 (33.1%)	175 (33.7%)	p≥0.05 (Non-Sig)
Do you think pregnancy women need dental check up?	317 (66.0%)	351 (67.5%)	p≥0.05 (Non-Sig)
Pedriatic patients should visit the dentist regularly?	318 (66.2%)	351 (67.5%)	p≥0.05 (Non-Sig)
Ludwig's angina is a life threatening condition of	256 (53.3%)	274 (52.7%)	p≥0.05 (Non-Sig)
What is another life threatening condition that can occur due to untreated dental condition?	226 (47.1%)	244 (46.9%)	p≥0.05 (Non-Sig)
Periodontal Disease is a risk factor and is commonly associated with	31 (6.5%)	35 (6.7%)	p≥0.05 (Non-Sig)
Systemic complications arising due to dental disease	155 (32.3%)	178 (34.2%)	p≥0.05 (Non-Sig)
Certain Anti-hypertensives can cause gingival enlargements	184 (38.3%)	215 (41.3%)	p≥0.05 (Non-Sig)
what type of changes in the oral cavity would you associate with progression towards oral cancer	128 (26.7%)	146 (28.1%)	p≥0.05 (Non-Sig)
There is a connection between General and oral health. Do you agree?	257 (53.5%)	278 (53.5%)	p≥0.05 (Non-Sig)
Are you aware of Sjögren's syndrome?	192 (40.0%)	211 (40.6%)	p≥0.05 (Non-Sig)
If yes, what are the affected regions in the Sjögren's syndrome?	187 (39.0%)	215 (41.3%)	p≥0.05 (Non-Sig)
Do you think HIV has oral manifestations?	320 (66.7%)	348 (66.9%)	p≥0.05 (Non-Sig)
If yes, what is the most common type of condition that can be appreciated?	191 (39.9%)	203 (39.0%)	p≥0.05 (Non-Sig)
Systemic conditions associated with most oral manifestations	131 (27.3%)	134 (25.8%)	p≥0.05 (Non-Sig)

Table 3: Response to Practice related Questions

Question	Responses	N	%
In a typical week, how many patients do you see that have oral health issues?	A).Frequently (> 5 in a week)	333	33.3%
	B) Occasionally (2-5 in a week)	398	39.8%
	C) Rarely (less than 2 in a week)	269	26.9%
On a regular basis, do you deal with people that have dental issues?	A).Frequently (>5 in a week)	402	40.2%
	B) Occasionally (2-5 in a week)	399	39.9%
	C) Rarely (less than 2 in a week)	199	19.9%
	D) Never	00	00%

With a tooth abscess, what is the best course of treatment?	A).Prescribe antibiotics and painkillers	535	53.5%
	B) Refer to the dentist	435	43.5%
	C) Ignore	00	00%
Do you encounter patients with Trigeminal Neuralgia?	Yes	531	53.1%
	No	469	46.9%
Whom did you refer the patients with Trigeminal Neuralgia?	A). Oral & Maxillofacial Surgeon	401	40.1%
	B) An ENT Surgeon	336	33.6%
	C) A Neuro-Surgeon	263	26.3%
You Prescribe Oral Rinse Mouthwash to patients with Dental Infections?	Yes	663	66.3%
	No	337	33.7%
Which composition you prescribe the most?	A). ChlorhexidineGluconate	1000	100%
	B) Octenidine	00	00%
	C) Herbal composition	00	00%

Table 4: Comparison of Practice related Questions – Experience Wise

Question	Responses	0-10 Years	Above 10 years	P value
In a typical week, how many patients do you see that have oral health issues?	A) Frequently (> 5 in a week)	160 (48%)	173 (52%)	p≥0.05 (Non-Sig)
	B) Occasionally (2-5 in a week)	195 (49%)	203 (51%)	
	C) Rarely (less than 2 in a week)	125 (46.5%)	144 (53.5%)	
On a regular basis, do you deal with people that have dental issues?	A) Frequently (>5 in a week)	192 (47.8%)	210 (52.2%)	p≥0.05 (Non-Sig)
	B) Occasionally (2-5 in a week)	193 (48.4%)	206 (51.6%)	
	C) Rarely (less than 2 in a week)	95 (47.7%)	104 (52.3%)	
	D) Never	0 (0%)	0 (0%)	
With a tooth abscess, what is the best course of treatment?	A). Prescribe antibiotics and painkillers	260 (48.6%)	275 (51.4%)	p≥0.05 (Non-Sig)
	B) Refer to the dentist	220 (47.3%)	245 (52.7%)	
	C) Ignore	0 (0%)	0 (0%)	

Do you encounter patients with Trigeminal Neuralgia?	Yes	227 (48.4%)	242 (51.6%)	p≥0.05 (Non-Sig)
	No	253 (47.6%)	278 (52.4%)	
Whom did you refer the patients with Trigeminal Neuralgia?	A) Oral & Maxillofacial Surgeon	187 (46.6%)	214 (53.4%)	p≥0.05 (Non-Sig)
	B) An ENT Surgeon	165 (49.1%)	171 (50.9%)	
	C) A Neuro-Surgeon	128 (48.7%)	135 (51.3%)	
You Prescribe Oral Rinse Mouthwash to patients with Dental Infections?	Yes	164 (48.7%)	173 (51.3%)	p≥0.05 (Non-Sig)
	No	316 (47.7%)	347 (52.3%)	
Which composition you prescribe the most?	A). Chlorhexidine Gluconate	480 (48%)	520 (52%)	p≥0.05 (Non-Sig)
	B) Octenidine	0 (0%)	0 (0%)	
	C) Herbal composition	0 (0%)	0 (0%)	

Questionnaire

1. What do you think are the factors for Dental Caries?
   A) Smoking
   B) Brushing once daily or less than once daily
   C) Using tooth powder or teeth cleaning twig
   D) Frequent snacking and frequent food intake.
2. What do you think are the factors for periodontal and gingival diseases?
   A) Plaque and calculus
   B) Smoking
   C) Overhanging restorations
   D) Smoking
3. Do you think scaling has adverse effects on the teeth?
   A) Thinning of enamel
   B) Increase in interdental space
   C) Increase in tooth mobility
   D) Causes sensitivity of the teeth.
4. How often do you advise your patients to visit the dentist?
   A) Once in 6 months
   B) Once in a year
   C) Once in 2-5 years
   D) Only if any pain of discomfort is there
5. How often do you see patients with oral symptoms and conditions in a week?
   A) Frequently (> 5 in a week)
   B) Occasionally (2-5 in a week)
   C) Rarely (less than 2 in a week)
6. How often do you manage patients with dental problems or conditions?
   A) Frequently (>5 in a week)
   B) Occasionally (2-5 in a week)
   C) Rarely (less than 2 in a week)
   D) Never
7. How do you treat a patient with dental abscess?
   A) Prescribe antibiotics and painkillers
   B) Refer to the dentist
   C) Ignore
8. Do you think pregnancy women need dental checkup?
   A) Yes
   B) No
9. Pedriatic patients should visit the dentist regularly?
   A) Agree
   B) Disagree
10. Ludwig's angina is a life threatening condition of

A)Cardiovascular system
B)Dental space infection
C) Respiratory system
D) Venous Disease

11. What is another life threatening condition that can occur due to untreated dental condition?
    A) Cavernous thrombosis
    B) Hodgkin's lymphoma
    C)Myelofibrosis
    D) Brain tumours
12. Periodontal Disease is a risk factor and is commonly associated with
    A)Diabetes
    B) Peptic ulcer
    C)Asthma
    D) Myocardial infarction
13. Systemic complications arising due to dental disease
    A) Necrotising fasciitis
    B)Diabetes
    C)Leukoderma
    D) White patches
14. Certain Anti-hypertensives can cause gingival enlargements
    A) Agree
    B) Disagree
15. According to you, what type of changes in the oral cavity would you associate with progression towards oral cancer or other pre malignant conditions?
    A)Non scrappable white patches
    B) Blanching and stiffness of the oral mucosa
    C) Non healing ulcers/ erosive lesions
    D) Exophytic growth
16. There is a connection between General and oral health. Do you agree?
    A) Yes
    B) No
17. Are you aware of Sjögren's syndrome?
    A)Yes
    B) No
18. If yes, what are the affected regions in the Sjögren's syndrome?
    A) Salivary and tear glands
    B)Adrenal gland
    C)Pituitary gland
    D) Lymph nodes
19. Do you think HIV has oral manifestations?
    A) Yes
    B) No
20. If yes, what is the most common type of condition that can be appreciated?
    A) Fungal infections (candidiasis)
    B) Viral infections
    C) Bacterial infections
    D) Gingivitis/ periodontitis
21. Systemic conditions associated with most oral manifestations
    A) Cardiovascular
    B) Renal
    C) Gastrointestinal
    D) Respiratory
22. Do you encounter patients with Trigeminal Neuralgia?
    A) Yes
    B) No
23. If Yes, to whom did you refer the patients with Trigeminal Neuralgia?
    A) Oral & Maxillofacial Surgeon
    B) An ENT Surgeon
    C) A Neuro-Surgeon
24. Do You Prescribe Oral Rinse Mouthwash to patients with Dental Infections?
    A) Yes

B) No

25. If yes, which composition you prescribe the most?

A) Chlorhexidine Gluconate

B) Octenidine

C) Herbal composition