

Awareness of Periodontal Treatment Modalities among Interns

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Abstract:-

➤ *Aim:*

The aim of this study was to assess the awareness of oral hygiene, periodontal disease and availability of treatment techniques among dental interns.

➤ *Materials And Methods:*

One hundred interns from Thai Moogambigai Dental College and Hospital, Maduravoyl, Chennai were interviewed through a questionnaire. The questionnaire covered different areas such as understanding of various terminologies, knowledge about the cause and association with periodontal disease, availability of treatment and awareness about different techniques used. A total of 100 questionnaires containing 25 questions in English were prepared for data collection and distributed to interns through google forms.

The questionnaire consist of 25 questions which are divided under headings such as 1) knowledge about periodontal disease, 2) knowledge about its association and etiology, 3) awareness about treatment availability.

➤ *Results:*

Positive attitude towards periodontal disease was observed. The level of awareness was marginally higher.

➤ *Conclusion:*

This study clearly demonstrates dental practitioners had fair knowledge about various aspect about periodontal disease. The awareness about periodontal therapy and treatment modalities were good among the interns.

Keywords:- Awareness, Patient Attitude, Dental Interns, Periodontal Health, Treatment Modalities.

I. INTRODUCTION

Periodontology is one of the fast growing dental specialities. It covers preventive and curative aspects of oral health. Periodontal disease is thought to have systemic ramification and has been implicated in a wide range of conditions such as hypertension, stroke, atherosclerosis, poor pregnancy outcome and few. Many studies are carried out to know the knowledge and behavior of patients attending the general and dental clinics. Periodontal disease is a chronic, inflammatory, multifactorial disease. Persual of literature gives a clear picture of how treatment could control and contain this inflammatory disease which could inturn disease its impact as various systemic diseases. If left untreated, can lead to advanced destruction causing serious damages to systemic well being. The study was planned to explore the awareness of periodontal treatment modalities among interns.

II. AIMS AND OBJECTIVES

1. The aim of the study is to assess the awareness of oral hygiene, periodontal disease and availability of treatment modalities among interns.
2. To know their attitude towards dental health.

III. MATERIALS AND METHODS:

One hundred interns from Thai Moogambigai Dental College and Hospital, Maduravoyl, Chennai, were interviewed through a questionnaire. The questionnaire covered different areas such as understanding of various terminologies, knowledge about the cause and association with periodontal disease, availability of treatment and awareness about different techniques used. A total of 100 questionnaires containing 25 questions in English were prepared for data collection and distributed to interns through google forms. [15]

Ethical clearance was obtained from Institutional review board and informs consent was obtained from the study participants. Collected data were tabulated and subjected for statistical analysis using statistical package for social sciences (SPSS) version 13.0. Frequency distribution which includes number and percentage were calculated. [1]

IV. RESULTS

➤ *QUESTION 1 :Since how many years you are practicing Dentistry?*

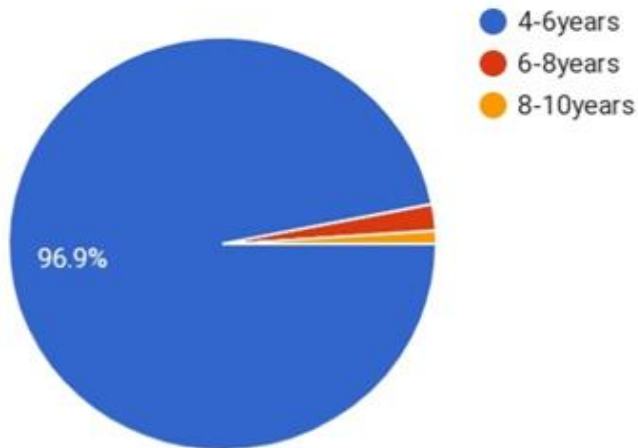


Fig 1

Mostly 96.9% people are practicing Dentistry for about 4-6years.

➤ *QUESTION 2:Which sign do you check for while accessing the status of periodontium in your patient?*

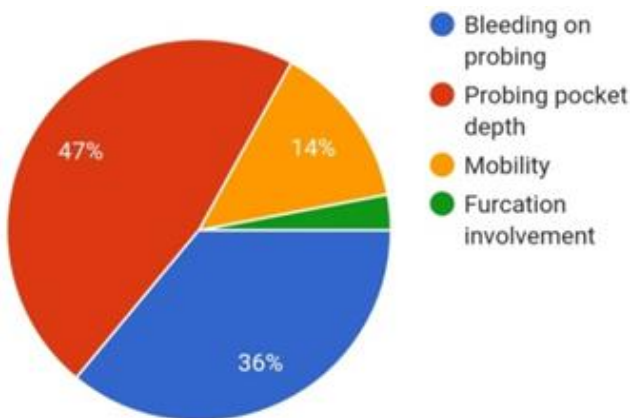


Fig 2

About 47% of students have knowledge that the pocket depth has to be checked while accessing the status of the periodontium for the patients.

➤ *QUESTION 3:Do you do full mouth scaling for patient showing signs of gingival or periodontal disease*

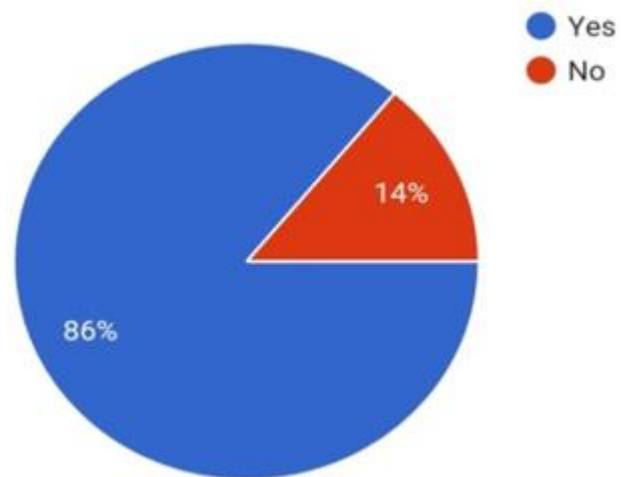


Fig 3

About 86% of students do full mouth scaling for patient showing gingival or periodontal disease.

➤ *QUESTION 4:Do you refer patient to a Periodontist with periodontal disease.*

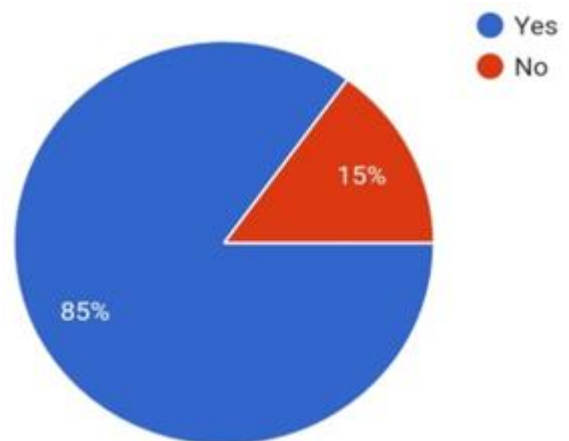


Fig 4

About 85% of interns stated that they refer patient to a Periodontist with periodontal disease. Only 15% has stated that they won't refer patient to a Periodontist with periodontal disease.

➤ *QUESTION (i) If yes, how frequently do you refer patient to your Periodontist for surgical procedure*

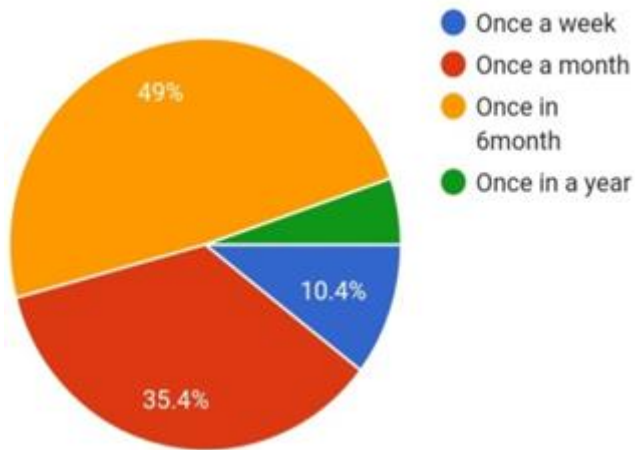


Fig 4a

About 49% refer the patient to Periodontist once in 6 months for surgical procedure, 35.4% refer patient to Periodontist once in a month.

➤ *QUESTION 5: What is your line of treatment for bleeding gums*

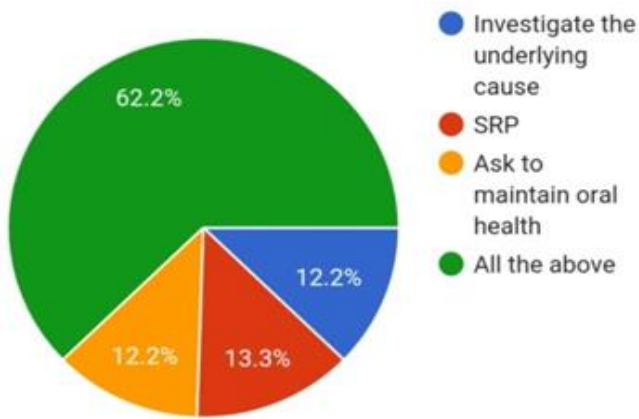


Fig 5

Mostly 62.2% has stated that investing the underlying cause, SRP and asking to maintain the oral health as the line of treatment to bleeding gums.

➤ *QUESTION 6: Mobility of teeth is measured using*

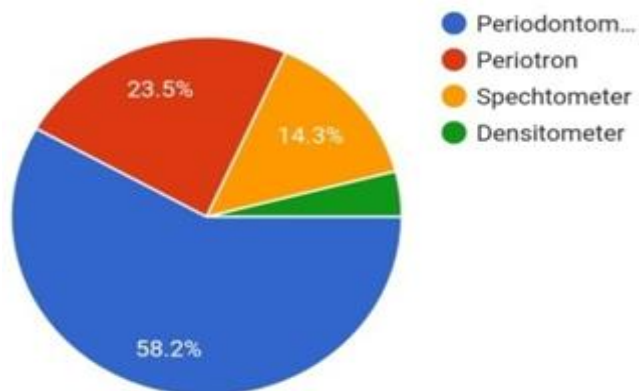


Fig 6

About 58.2% stated that periodontometer is used to measure mobility of teeth, 23.5% stated that periotron is used to measure mobility of teeth.

➤ *QUESTION 7: What are common cause of mobility that you have come across in your practice*

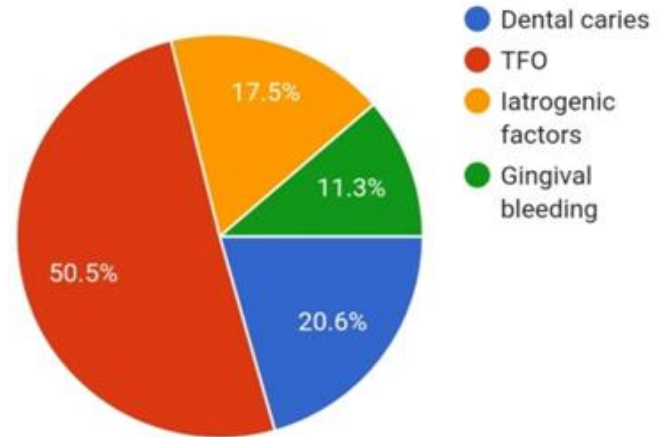


Fig 7

About 50.5% has stated that TFO as a reason for the mobility of the teeth whereas 20.6% stated that dental caries as a reason for the mobility of teeth.

➤ *QUESTION (i) What is your line of treatment for grade I mobility of teeth*

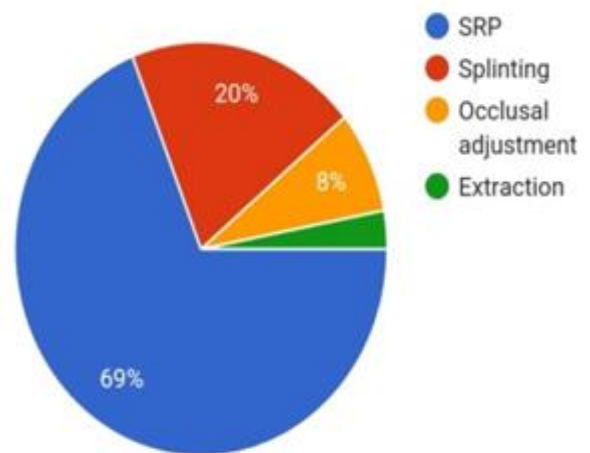


Fig 7a

About 69% has stated that SRP as the line of treatment for grade I mobility of teeth.

➤ *QUESTION (ii) What is your line of treatment for grade II mobility of teeth*

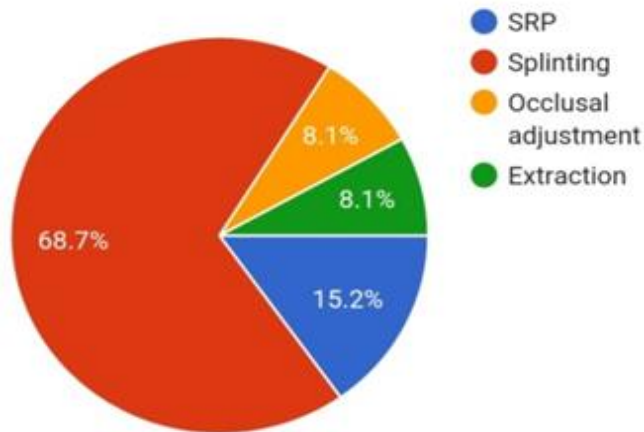


Fig 7b

About 68.7% has stated that splinting as the line of treatment for grade II mobility of teeth, 15.2% has stated SRP as the line of treatment for grade II mobility of teeth.

➤ *QUESTION (iii):What is your line of treatment for grade III mobility of teeth*

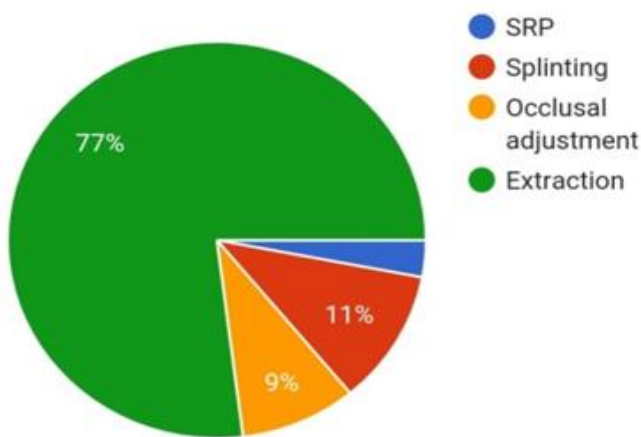


Fig 7c

About 77% has stated extraction as the line of treatment for grade III mobility of teeth.

➤ *QUESTION (iv):In which phase do you treat for mobility*

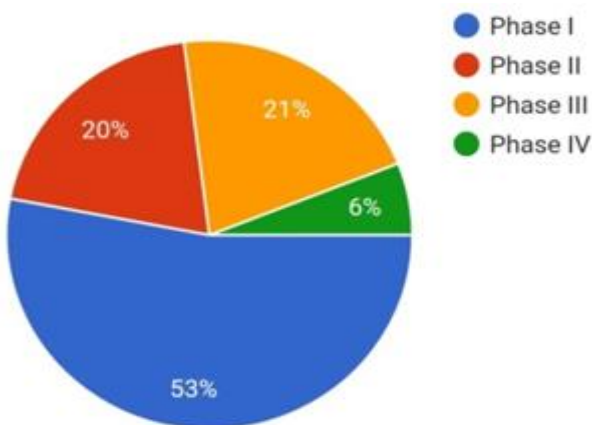


Fig 7d

About 53% has stated that phase I is the right phase to treat mobility.

➤ *QUESTION 8:What do you use for accessing periodontal pocket*

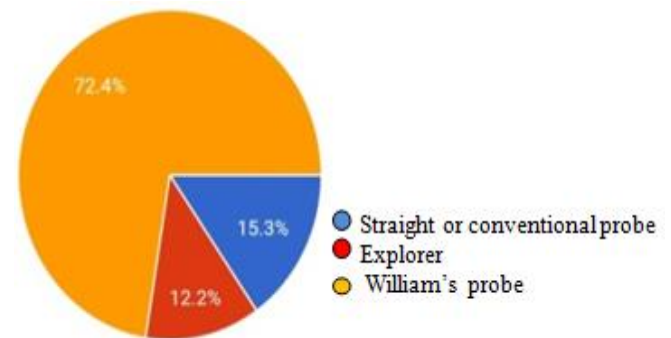


Fig 8

72.4% students were aware that william's probe is used for assessing periodontal pocket whereas 12.2% and 15.3% stated that straight or conventional probe and explorer is used for accessing periodontal pocket.

➤ *QUESTION 9:What is your line of treatment for pocket 5-8mm*

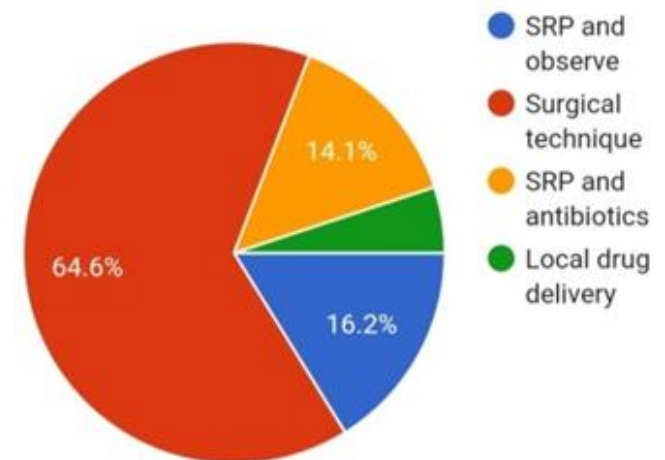


Fig 9

64.6% stated that surgical technique as their line of treatment for pocket 5-8mm.

➤ *QUESTION 10:How do you check for furcation involvement for molars*

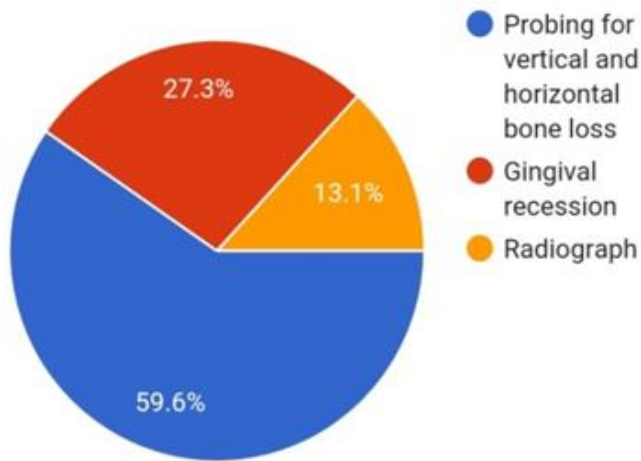


Fig 10

However 59.6% were aware that probing vertical and horizontal bone loss were used to check furcation involvement for molars.

➤ *QUESTION 11: If you don't consult a Periodontist what will be your line of treatment for cases with furcation involvement*

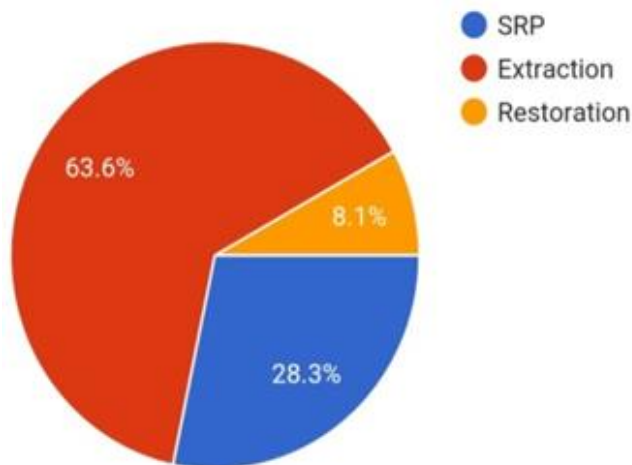


Fig 11

About 63.6% has said that extraction would be their line of treatment for cases with furcation involvement if they don't consult a Periodontist, 28.3% has said that SRP was their line of treatment for cases with furcation involvement and 8.1% said that restoration will be their line of treatment for cases with furcation involvement if they don't consult a Periodontist.

➤ *QUESTION 12: Do you check for mucogingival defect*

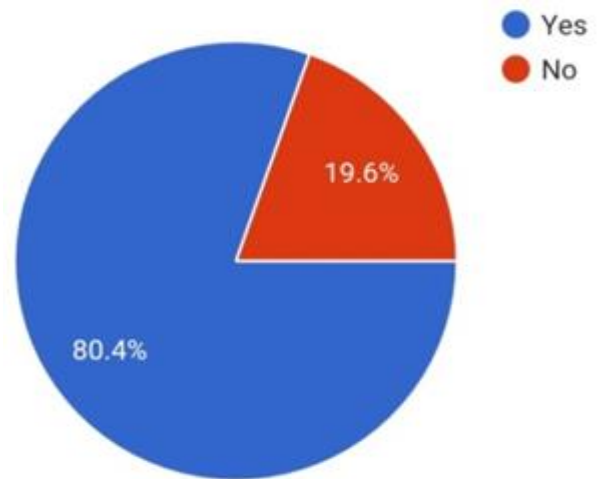


Fig 12

About 80.4% were aware of mucogingival defect whereas 19.6% were unaware of mucogingival defect.

➤ *QUESTION (i) If yes, which mucogingival defect do you check for.*

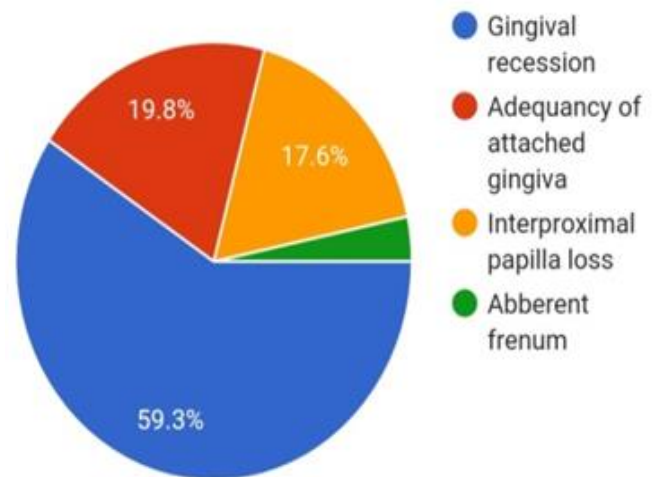


Fig 12a

59.3% reported that they would check for gingival recession, 19.8% reported that they would check for the adequacy of attached gingiva, 17.6% said that they would check for interproximal papilla loss and 3.3% said that they would check for abberent frenum.

➤ *QUESTION(ii) If yes, do you call in for a Periodontist for any of the above mentioned defects*

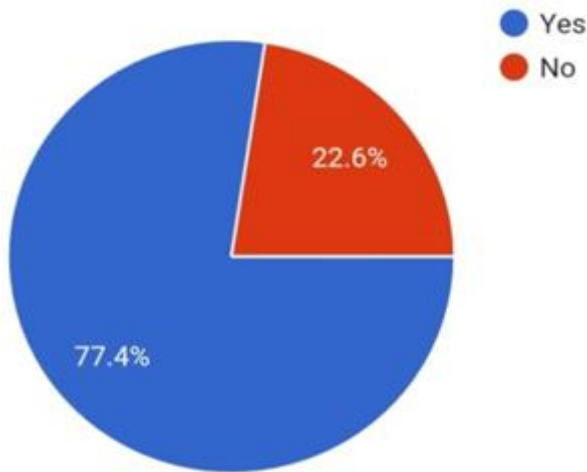


Fig 12b

Here only 77.4% said that they would call in for a Periodontist for the above mentioned defects whereas 22.6% has said that they themselves would treat for the above mentioned defects.

➤ QUESTION(iii) If no, what is your line of treatment

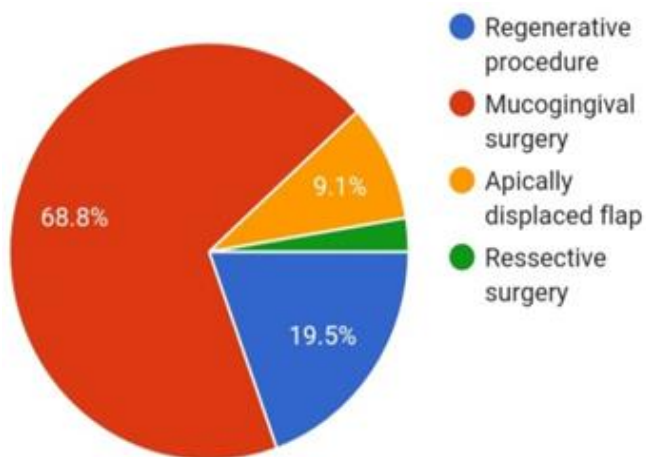


Fig 12c

68.8% has said that mucogingival surgery as their line of treatment whereas 19.5%, 9.1% and 2.6% said that regenerative procedure, apically displaced flap and resective surgery as their line of treatment.

➤ QUESTION 13: Did the need for periodontal retreatment arise in your practice

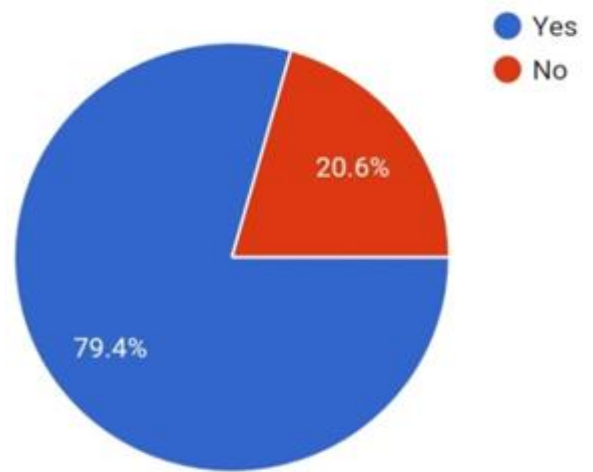


Fig 13

Only 20.6% has said that retreatment has not arisen in their practice.

➤ QUESTION(i) If yes, how often have you retreated patient with periodontal disease after therapy

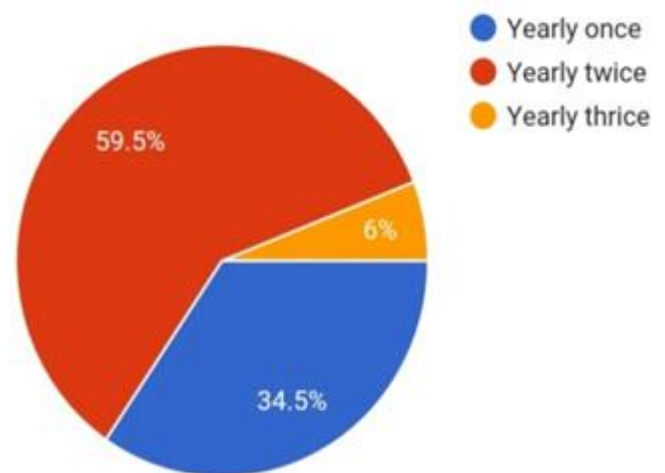


Fig 13a

59.5% has retreated the patient yearly twice whereas 34.5% has retreated the patient yearly once only 6% has retreated the patient yearly thrice.

➤ QUESTION 14: What do you think are the factors responsible for the recurrence of periodontal disease after the treatment

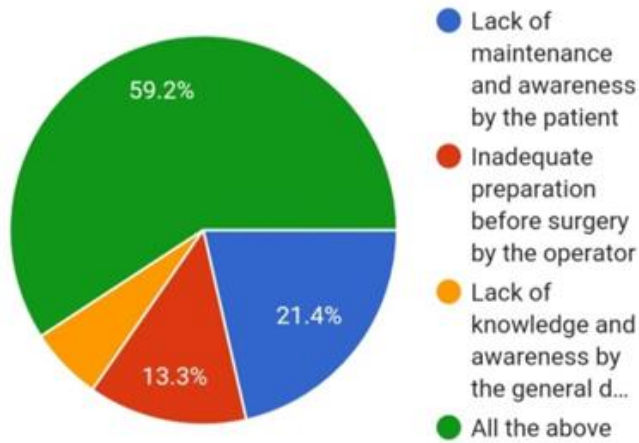


Fig 14

59.2% were aware that lack of maintenance by patient, inadequate preparation before surgery by operator and lack of knowledge and awareness by the General Dentist were responsible for the recurrence of periodontal disease after treatment.

➤ *QUESTION 15: What is your opinion about the cost of effectiveness of periodontal treatment*

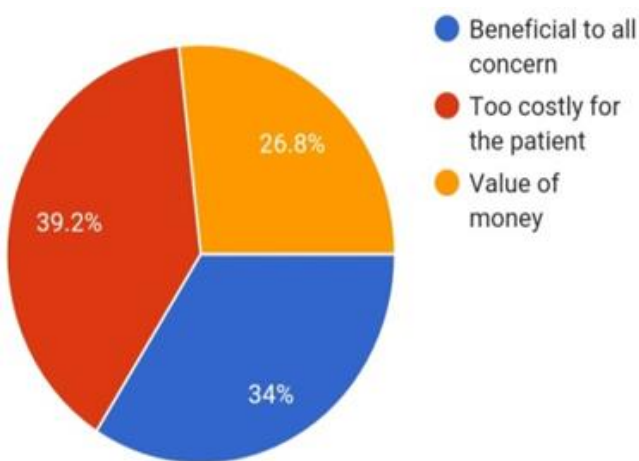


Fig 15

39.2% said that the cost is too costly for the patient whereas 34% and 26.8% said that the cost is beneficial to all consent and value of money.

➤ *QUESTION 16: Treatment line for pericoronal abscess*

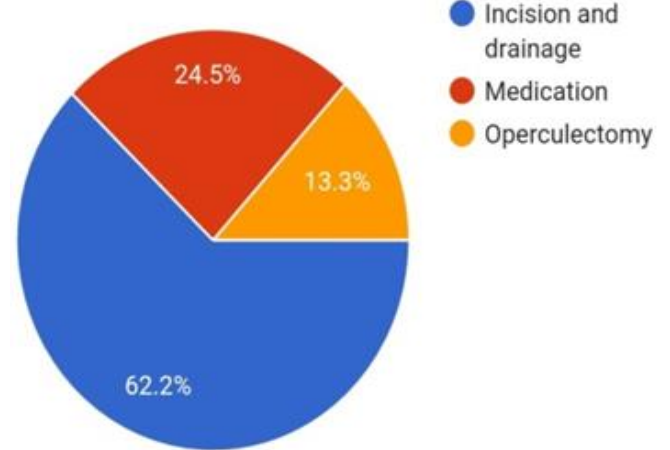


Fig 16

62.2% were aware that incision and drainage is the treatment line for pericoronal abscess whereas 24.5% and 13.3% says that medication and operculectomy as their line of treatment for pericoronal abscess.

➤ *QUESTION 17: Treatment line for acute periodontal abscess*

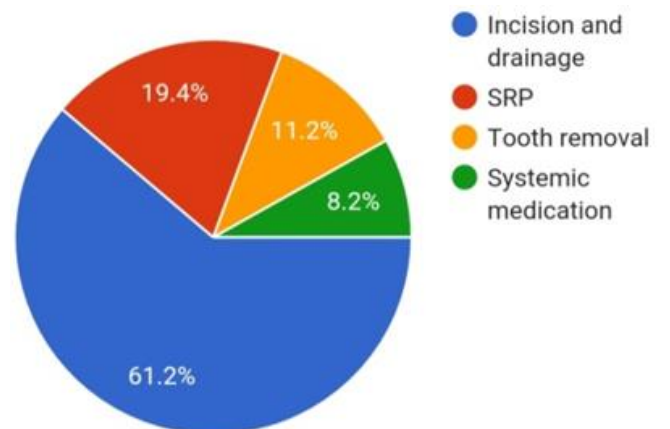


Fig 17

About 61.2% are aware that incision and drainage is the treatment line for acute periodontal abscess whereas 19.4% said that SRP as the treatment line for acute periodontal abscess remaining 11.2% and 8.2% said that tooth removal and systemic medication as the treatment line for acute periodontal abscess.

➤ *QUESTION 18: Treatment plan for gingival enlargement*

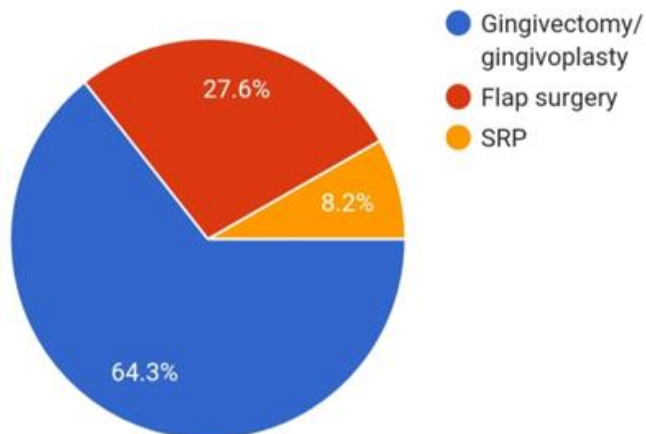


Fig 18

64.3% are aware that gingivectomy or gingivoplasty as the treatment line for gingival enlargement remaining 27.6% and 8.2% said that flap surgery and SRP(Scaling and root planning) as the treatment plan for gingival enlargement.

➤ *QUESTION 19: Treatment plan for gingival recession*

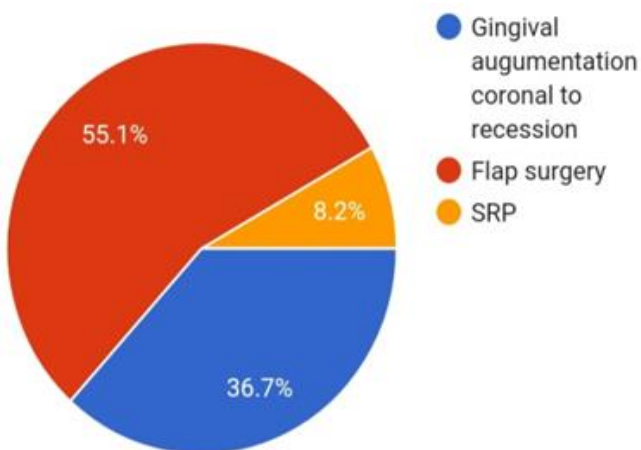


Fig 19

About 55.1% had the knowledge that flap surgery is the treatment plan for gingival recession remaining 44.9% had poor knowledge about the treatment plan for gingival recession.

➤ *QUESTION 20: Which of the following affects the prognosis of periodontal treatment*

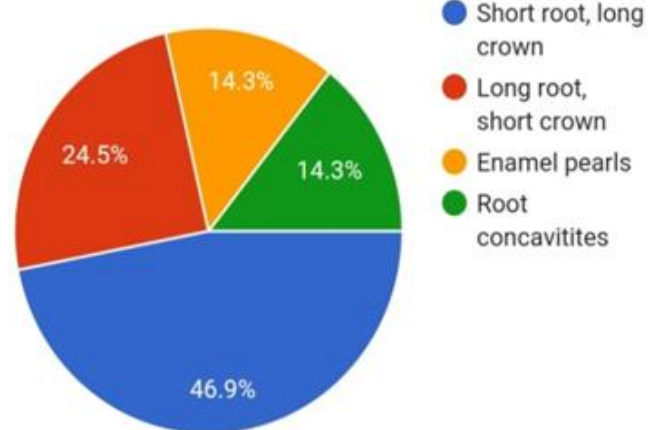


Fig 20

46.9% said that short root, long crown affects the prognosis of periodontal treatment whereas 24.5%, 14.3% and 14.3% said that long root, short crown, enamel pearls and root concavities affects the prognosis of periodontal treatment.

➤ *QUESTION 21: Electronic devices like ultrasonic scaler is contraindicated in*

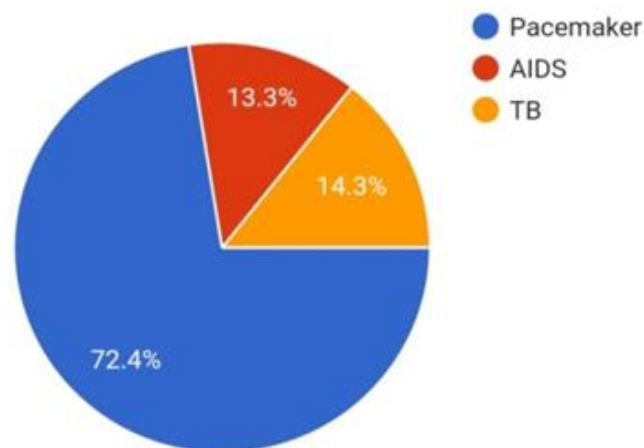


Fig 21

72.4% were aware that pacemaker is contraindicated in ultrasonic scaler.

➤ *QUESTION 22: Which of the following drugs is most frequently used in treating chronic periodontitis*

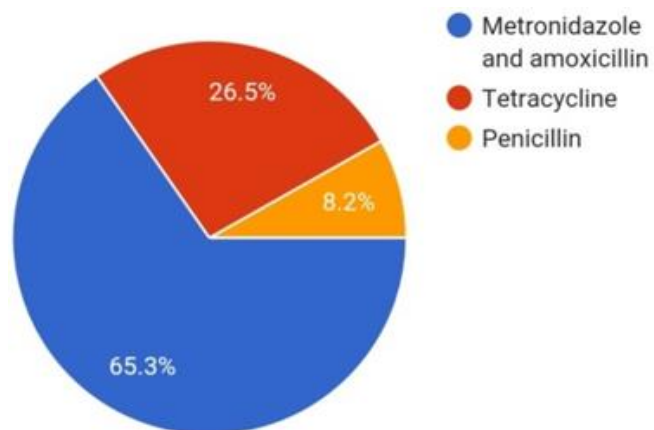


Fig 22

65.3% are aware that metronidazole and amoxicillin is the most commonly used drugs for treating chronic periodontitis.

➤ QUESTION 23: Treatment for chronic periodontal abscess

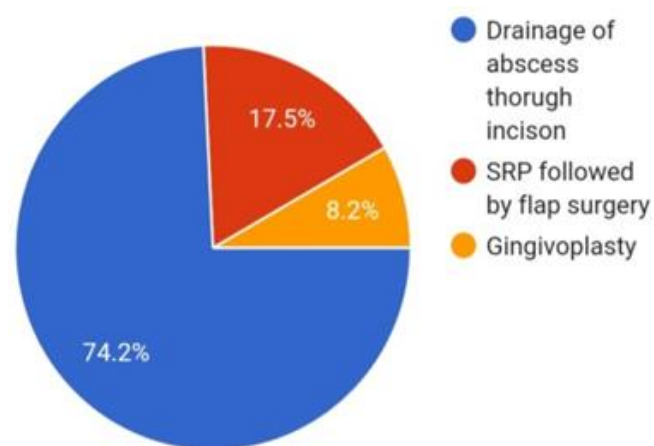


Fig 23

74.2% were aware that drainage of abscess through incision as the treatment for chronic periodontal abscess whereas 17.5% and 8.2% said that SRP followed by flap surgery and gingivoplasty as the treatment for chronic periodontal abscess.

➤ QUESTION 24: Which cell is the first line of defence

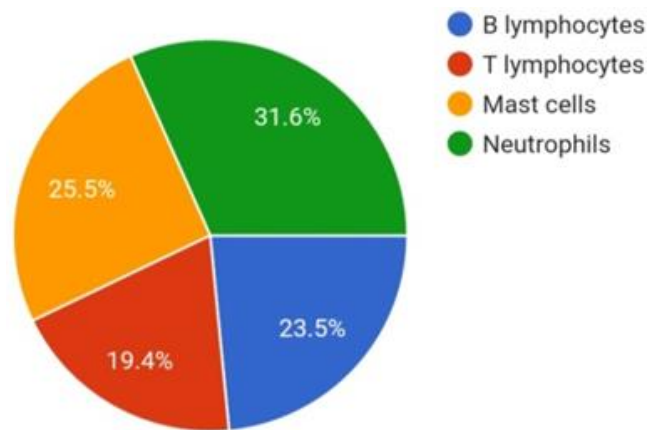


Fig 24

31.6% were aware that neutrophils is first line of defence whereas 68.4% has poor knowledge regarding the first line of defence.

➤ QUESTION 25: Drug of choice given in ANUG (Acute necrotizing ulcerative gingivitis)

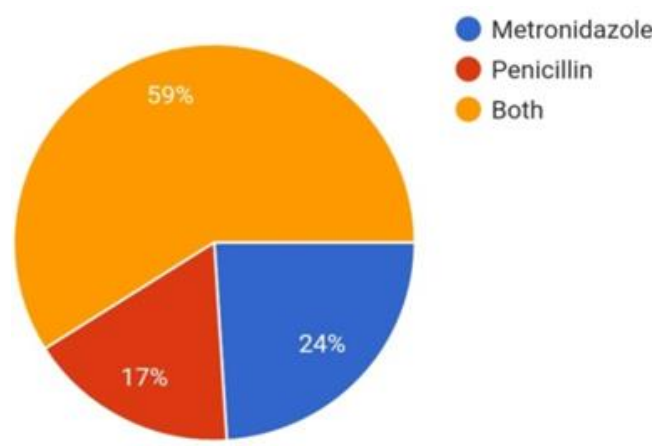


Fig 25

59% were aware that both metronidazole and penicillin as the drug of choice for ANUG whereas 24% and 17% said that metronidazole and penicillin as the drug of choice for ANUG.

V. DISCUSSION

In the present study, majority of participants were practicing dentistry for about 4-6 years. It was good to know that majority of participants check for probing of pocket depth while assessing status of periodontium in their patient. Most of the interns had knowledge that they would do full mouth scaling for patient showing signs of gingival or periodontal disease. 85% of interns refer the patient to the Periodontist with periodontal disease, the rest also should be made aware of the speciality practice. They also mentioned that they would send the patient once in 6 months to their Periodontist for surgical procedure. About 62% said that SRP, maintaining oral health and investigating the underlying cause as their line of treatment for bleeding gums. But 38% did not have sufficient knowledge, syllabus

should now focus on internship the awareness of day to day practice [1,2,5].

Most of them had the knowledge that Periodontometer is used to measure the mobility of the tooth whereas Periotron is used to measure the gingival crevicular fluid. The common cause of mobility they have come across in their practice was TFO (Trauma from occlusion), about 69% stated that SRP as their line of treatment for the grade I mobility of teeth, 68.7% stated that splinting as their line of treatment for the grade II mobility of teeth, 77% stated that extraction as their line of treatment for grade III mobility of teeth, 53% said that they would treat the mobility in phase I. Even though they had knowledge on mobility of teeth, they should be taught that mobility is a sign of the disease and they should treat not only the mobility but also the underlying pathology as well. [3,4,7,8]

Most of the interns had well knowledge about the instrument used for assessing periodontal pocket. William's periodontal probe is for pocket. There are generations of probe. The present generation is a 3D probe, which gives predictable results. Study protocol should cover an advanced technique for diagnosis and treatment. If the pocket depth is 5-8mm then surgical technique is the line of treatment. Probing for vertical and horizontal bone loss determines the furcation involvement. Extraction would be the line of treatment for furcation involvement if they don't consult the Periodontist. [6,10]

About 80% of interns would check for mucogingival defect, mostly they would check for gingival recession, most of them would call for their Periodontist while others do mucogingival surgery. In most of the cases periodontal retreatment had acquired twice early. The factors responsible for recurrence of periodontal disease after treatment are lack of maintenance and awareness by the patient, inadequate preparation before surgery by the operator, lack of knowledge and awareness by General Dentist. The cost for periodontal treatment is too costly for the patient. [9,12,14]. These factors should be addressed while planning out the treatment.

About 62% were aware that incision and drainage as the treatment line for pericoronal, acute periodontal abscess and for chronic periodontal abscess whereas gingivectomy as the treatment plan for gingival enlargement and gingival augmentation coronal to recession as the treatment plan for gingival recession. This awareness should be increased and the rest of the participate as well. More interactive sessions and discussions are the need of the hour which could improve their awareness on various treatments. Their knowledge as antibiotics also should be increased. More sessions as antibiotic protocols and local drug delivery systems should be included, which would have an impact as controlling antibiotic resistance[11,13].

Most of them were aware that metronidazole and amoxicillin is the most frequently used drug in treating chronic periodontitis whereas metronidazole and penicillin is the drug of choice for ANUG.[3,15]

VI. CONCLUSION

This study clearly demonstrates dental practitioners had fair knowledge about various aspects about periodontal disease. A positive attitude towards periodontal disease, its etiology was observed. The awareness about periodontal therapy and treatment modalities were good among the interns, however it could be improved. Periodontal health program can be planned in future. This should be utilized in counseling, educating and motivating the patient to maintain good oral health. Specialized dental facilities should be provided for further treatment when required. [15]

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