Research Article

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Perception of A City Based General Dental Practitioners Toward Periodontal Treatment: A Survey

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ABSTRACT

Background: This study aims to identify perception of general dental practitioners toward periodontal treatment in Jamnagar city and to evaluate current status of periodontal treatment in dental clinics, the protocol of maintenance therapy and awareness of the general dental practitioners toward periodontal care.

Materials and Method: In this survey 100 general dentists from Jamnagar city were included with a Bachelor of Dental Surgery degree. A self-administered close-ended questionnaire were prepared based on the current status of periodontal treatment in dental clinics, the protocol of maintenance therapy and the general awareness of the dental profession toward periodontal care.

Result: 97% of the GPs performed phase-I therapy on their own, all of them carried out scaling, advised use of mouthwashes and proper brushing techniques. Thirty-two percent of the dentists carried out some periodontal surgical procedures on their own. Most of the general dentists believed that surgical periodontal treatment remains unaffordable to a large section of population.

Conclusion: The perception on periodontal disease among general dental practitioners gives us some sight about trends and pattern of dental treatment performed by them.

Keywords: General dental practitioner, periodontal disease, survey, Jamnagar city.

INTRODUCTION

Epidemiological research indicates that periodontal diseases are a global pandemic and evidence shows a prevalence of 50%–100% in the geographically diverse Indian subcontinent. [1,2] The WHO reports that 15%–30% tooth loss is found in adults and that an early diagnosis with immediate implementation of treatment can accomplish prevention and management of periodontal diseases.[3] Today, the specialty of periodontology has evolved shifting paradigms, thus enabling a higher level of predictability of success in saving periodontally compromised teeth previously deemed with poor or questionable prognosis.[4]Quality dental institutes, which incorporate all these advances in their setup and curriculum have evolved all over the country. Thus, today we see periodontology as a specialty reaching newer heights, and with a very bright future in front of us.

In spite of the development of quality dental institutes, a majority of the population visits private dental clinics for their dental needs, especially in the urban areas. The liability to first examine and evaluate the need for referral rests solely in the

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hands of the general dentist.[6] Thorough knowledge in diagnosing and formulating a sound treatment plan is an essential skill that every clinician should master.[7] As there are no set rules, each dentist must be accountable for the decision to treat or refer.[8] Well-timed specialist intervention may preserve a patient's confidence, oral health, and overall quality of life while a delay could jeopardize a salvageable situation into a hopeless one.[9]

The development of internet as a reliable source of knowledge, and the publication of quality journals, CDE programs have made knowledge of periodontal treatment freely accessible to all practicing dentists. However, the knowledge of periodontal diagnosis and treatment in the minds of a general dentist requires up-gradation from time to time.[4]

There is a need to evaluate the attitude and perception of the general dental practitioners toward periodontal treatment, as they form the cornerstone of dental practice. Hence, this study aims to identify the various aspects of periodontal treatment provided at a general dental clinic, along with referrals to periodontists.[10]

This study, by the means of a questionnaire, aims to identify the current status of periodontal treatment in clinics, the protocol of maintenance therapy, and the general awareness of the dental profession toward periodontal care. Within dentistry, limited literature exists about the status of periodontal care and referral relationships.

MATERIALS AND METHODS

The study was carried out in the form of a survey among 100 general dental practitioners having their dental clinics in the Jamnagar city. A self-administered, close-ended questionnaire comprising 7 questions was given to the dentist. The questions varied from the chief periodontal complaints of the patients to the level of satisfaction of private dentists after periodontal therapy. Time frame of 10 mins was given to each participants. The questionnaires used by previous studies [8,11,12] were used as a starting point for discussion. The study protocol was approved by the Institutional Ethical Committee, AMC Dental College, Khokhara, Ahmedabad.

A) Inclusion criteria:

• Dental practitioners with a dental clinic with minimum qualification of BDS

• At least one year of experience in the private clinical setup.

B) Exclusion criteria:

• Interns, dental students, MDS, dentists exclusively working in a dental institute

Statistical analysis

For each question, the independent percentage was calculated to determine the frequency of the responses. To identify the variable factor affecting the responses, a multivariate logistic regression analysis test was used.

RESULTS AND DISCUSSION

In the present study the participant's average years of experience were 6.6 years ranging from 1.1–18 years. The results revealed that 97% of the GPs performed phase-I therapy on their own and all of them carried out scaling, advised use of mouthwashes, and proper brushing techniques. More than 70% of the dentists did not carry out splinting at all. Thus, temporary or permanent splinting does not have a high degree of acceptability in private dental clinics.

Nonsurgical periodontal therapy is gaining an equal amount of importance across the world as surgical therapy. However, our survey indicates that the role of a periodontist in private dental clinics in Jamnagar is chiefly limited to surgical therapy.

Root planing as a procedure was not carried out by the majority of dentists. Less than 25% of the dentist carried out root planing procedure. However, a positive finding from this question was that there is high awareness among dentists regarding the demonstration of proper oral hygiene maintenance methods. 94 %-95% of dentists gave oral hygiene maintenance instruction after phase I therapy. [chart-1]

Thirty-six percent of the dentists carried out some or the other periodontal surgical procedures on their own. Gingivectomy was the most common procedure carried out by general dentists followed

by crown lengthening, frenectomy, and periodontal flap surgery. No one performed mucogingival surgeries, bone grafting/GTR procedures and laser assisted management of periodontal disease. [chart-2]

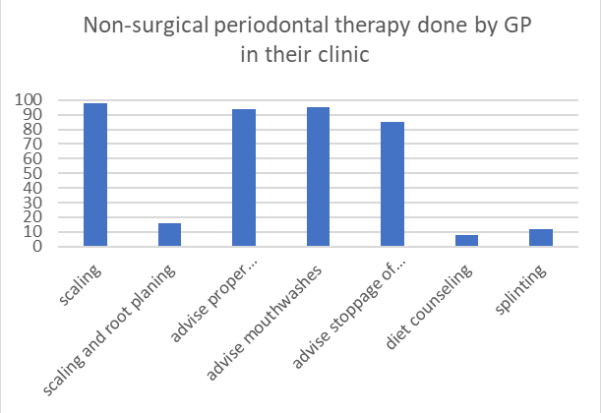

Chart 1: Non-surgical periodontal therapy done by GP in their clinic

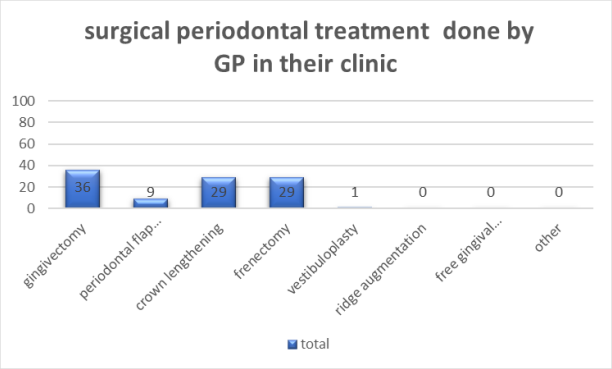

Chart 2: Surgical periodontal therapy done by GP in their clinic

Eighty-four percent of the dentists referred their patients to a periodontist for surgical treatment and 33% referred them once a month while 34% of them referred patients once a week. Very few of them referred patients twice a week. The cardinal sign of periodontal disease is considered to be the periodontal pocket in our study we found that 50% of the dentists referred patients to a periodontist based upon the presence of pockets.

Another interesting response to be noted is that almost 25% of dentists referred patients to a periodontist for the chief complaint of mobile teeth. Also, similar percentage, that is, 27% of the dentists believe that there is only an occasional reduction in mobility following periodontal treatment. This finding gives us an indication that increasing research should be focused on the satisfactory management of mobile teeth. [chart-3]

Flap surgery, along with bone grafting/GTR is the cornerstone of periodontal practice in general dental clinics. Surprisingly, the fewer number of dentists referred their patients to a periodontist for root coverage procedures. A lot of General practitioners doing implants by themselves only.

Asked about the success of periodontal treatment, almost all of them believed that there was a stoppage of bleeding and pocket-depth reduction after the treatment, while 62% of dentists believed that there is occasional recurrence after flap surgery and there is no success with root coverage procedure.

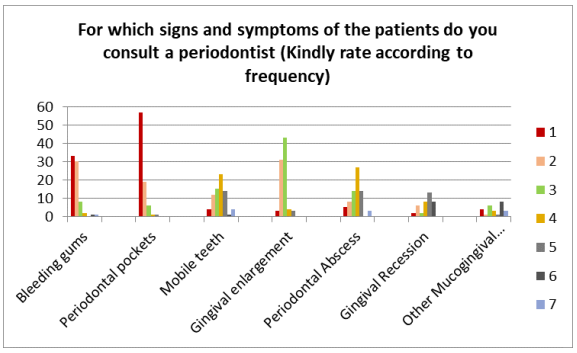

Chart 3: GP consult Periodontist (according to frequency)

Thus, there is a high level of satisfaction with the treatment of the most common periodontal complaints.

Lack of maintenance and awareness toward oral hygiene measures were identified by the survey as the chief factor for the recurrence of periodontal disease which is patient related factors. [chart-4]

About 61% of the dentists recalled patients after three months of surgical treatment. Though recall was made after three months many dentists commented that patient compliance was a problem. General dentists believed that surgical periodontal treatment remains unaffordable to a large section of our population. Cost structure and methods of payment may differ in different cities and even in different areas of the same city.

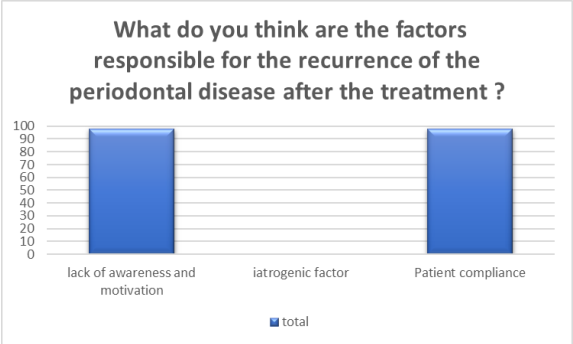

Chart 4: Factors responsible for the recurrence of the periodontal disease

CONCLUSION

The perception of periodontal disease among general dental practitioners gives us some sight about trends and pattern of dental treatment performed by them.

Scope for the general dentist

The general dentist should be convinced about the important role he/she plays in motivating the patients and devising a customized treatment protocol including referral and recall. He should emphasize on building a professional partnership with the periodontist to harness their aptitude and competence for the treatment of periodontal diseases. Seminars, courses, and CDE programs should be attended to imbibe knowledge regarding the newer periodontal treatment procedures.

Scope for patient

Patients should be made aware of timely periodontal treatment to enhance the longevity of their dentition as compared to its cost-benefit ratio. Various national schemes such as health insurance and early intervention centres should include periodontal procedures to support patients who cannot afford treatment otherwise. Mass media should be beneficially used for educating people on dental and specifically periodontal problems and their consequences.

Future directions

Such studies should be performed in the future to get an overall perception of the general dentists toward periodontal treatment in Jamnagar city. Such studies performed at different intervals of time in the same city can also provide an idea about the changing trends and patterns of dental treatment performed by the general dental practitioners. Such studies can also flash a warning light, and force the general dentist and the periodontist to introspect for the betterment of the specialty.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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Questionaire

The questionnaire employed in the study is described below

Personal information questions

Name : _____ Total no. of years of practice : _____

Degree: _____ Address : _____

1. Do you refer your patients to a periodontist for phase-I therapy of periodontal procedures?

Yes [ ] No [ ]

A. If NO

Which periodontal therapy do you carry out in your clinic?

a) Scaling [ ]
b) Scaling and root planing [ ]
c) Advise proper brushing technique [ ]
d) Advise mouthwashes [ ]
e) Advise stoppage of harmful habits [ ]
f) Diet counseling [ ]
g) Splinting [ ]

2. Which surgical periodontal treatment do you carry out yourself in your clinic?

a) Gingivectomy [ ]
b) Flap Surgery [ ]
c) Crown Lengthening [ ]
d) Frenectomy [ ]
e) Vestibuloplasty [ ]
f) Ridge Augmentation [ ]
g) Free Gingival Autograft [ ]
h) Laser assisted periodontal surgery [ ]

i) Others (Please Specify) [ ]

3 Do you refer patients to a periodontist for surgical procedures?

Yes [ ] No [ ]

I. If YES

A. How frequently do you call a periodontist for consultation/refer patients to a periodontist for surgical procedures

a) Once a week [ ]

b) Twice a week [ ]

c) Once a month [ ]

d) As per requirement [ ]

B. For which signs and symptoms of the patients do you consult a periodontist (Kindly rate according to frequency)

a) Bleeding gums [ ]

b) Presence of Periodontal pockets [ ]

c) Mobile teeth [ ]

d) Gingival enlargement [ ]

e) Periodontal Abscess [ ]

f) Gingival Recession [ ]

g) Gingival depigmentation [ ]

h) Other Mucogingival problems [ ]

C. What is the most common procedure performed by the Periodontist at your clinic (Kindly rate according to frequency)

a) Flap Surgery [ ]

b) Gingivectomy/Gingivoplasty [ ]

c) Bone grafting/GTR [ ]

d) Crown lengthening [ ]

e) Frenectomy/Vestibuloplasty [ ]

f) Root coverage procedures [ ]

g) Implants [ ]

h) Laser assisted surgery [ ]

II. If NO

Please tick any of the following reasons:

a) Carry out surgical procedures yourself [ ]

b) Not satisfied with results of periodontal surgical treatment [ ]

c) Have very few patients of periodontal disease who get motivated for periodontal surgery [ ]

d) Others: (Please Specify)

4 What you think about the results of periodontal treatment

	Always	Occasionally	Never
a) Control of bleeding	[ ]	[ ]	[ ]
b) Elimination of pocket	[ ]	[ ]	[ ]
c) Reduction in mobility	[ ]	[ ]	[ ]
d) Root coverage	[ ]	[ ]	[ ]
e) Recurrence	[ ]	[ ]	[ ]

5 Do you follow the protocol of maintenance therapy ?

Yes [ ] No [ ]

A. If YES:

Recall after:

a) 1-2 Month [ ]

b) 3 Months [ ]

c) 6 Months to 1 year [ ]

d) In case of recurrence [ ]

6 What is your opinion regarding the factors responsible for the recurrence of the periodontal disease after the treatment?

a) Patient compliance [ ]

b) Iatrogenic factors [ ]

c) Lack of awareness and motivation [ ]

7 What is your opinion about the cost-effectiveness of the periodontal treatment?

a) Beneficial to the patient [ ]

b) Costly for the patients [ ]