

Awareness and Attitude among General Dentists Regarding Periodontal Treatments and Referrals in Ahmednagar City

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Abstract:

Background: Periodontology is a vast field of dentistry where new ideas and concepts are being added to the existing literature day by day. Various studies and research activities are being carried out, so as to improve the treatment outcomes and benefit the patients. It is essential to address periodontal diseases properly taking into consideration, their role in overall health. Hence, to evaluate the current status of treatment delivered, protocol management, and awareness of general dentists toward the periodontal treatment, a survey was done with questionnaire-based study.

Materials and Methods: In this cross-sectional study, which was conducted from October 2014 to June 2015, 100 dental practitioners were included that were practicing in the urban parts of Ahmednagar city. The pertinent literature related to the status and the quality of periodontal care which is provided by dentists and their referral relationships was reviewed, and the questionnaire consisting of 8 questions was designed.

Results: A total of 150 questionnaires were distributed, out of which, 100 were completely filled and evaluated for the study with an overall response rate of 66.67%. The study showed 97% of the dentists do Phase-I therapy by themselves, the majority of them do gingivectomy and crown lengthening surgeries, and 30% of them performed flap surgeries. It had been found that 63% dentists did not refer patients to specialist, with the lack of patient motivation considered to be as the main reason. The majority of general

practitioner (GPs) did not refer patients to periodontists for the implant treatments.

Conclusion: There is still a lack of awareness of periodontal treatments among general dental practitioners in urban areas such as Ahmednagar. There is a need for patient motivation as well as guidance to GPs about all treatments carried out by periodontists that will enhance the treatment outcome as well as help in improving the patient referrals.

Key Words: General dentists, periodontal disease, questionnaire, referrals, survey

Introduction

The main role of dentists is to increase the lifespan of dentition by means of disease prevention or thorough treatment.¹ The specialty of periodontology is growing in diverse aspects ranging from newer advancements in diagnosis, treatment interventions, the use of regenerative techniques, and growth factors in various periodontal diseases.² The evidence-based advancements have given a success predictability level to the periodontal diagnosis and treatment plan.³ Although various dental institutes provide a good quality education to the undergraduate and postgraduate students in the field of periodontology, but the level of specialty education is limited in the curriculum for undergraduates. The patients visiting periodontists in private practice or dental institutes get a quality periodontal care, but still a number of patients visiting general practitioners (GPs) lack the appropriate treatment.⁴

As general dental practitioners treat the major part of society, so their knowledge, attitude, and perception about the periodontal diseases and its management are of utmost importance. It has been found that different factors such as patient's lack of accessibility to care, poor socioeconomic status, patient anxiety, non-acceptance of referrals, and non-referral attitude by the primary caregiver are the major roadblocks to provide the appropriate treatment.⁵ If the patients are educated about the benefits of advance periodontal care, it is more likely to expect a positive experience.

A limited literature is available regarding the status and quality of periodontal care provided by general dental practitioners and their referral relationships. Various studies are being conducted in different areas of India, to analyze the relationship between the GPs and the specialist.⁶⁻⁸

With this background, the present study was conducted to evaluate the awareness among general dental practitioners regarding various periodontal treatments and referrals to periodontists in urban population and assessment through a framed questionnaire.

Materials and Methods

In this cross-sectional study, which was conducted from October 2014 to June 2015, 100 dental practitioners were included that were practicing in the urban parts of Ahmednagar city. The pertinent literature related to the status and quality of

periodontal care which is provided by dentists and their referral relationships was reviewed, and the questionnaire consisting of 8 questions was designed (Table 1).

The subjects were contacted face to face to fill the designed questionnaire within the same day by personally visiting their clinics. The duly filled and signed questionnaire were collected from them. The written informed consent was obtained from each subject at the end of the questionnaire. Clearance from the Ethical Committee of the Institute was taken.

Table 1: Questionnaire and response rate regarding awareness of periodontal treatments and referrals among general dentists in Ahmednagar city.

Questions	Percentage
1. Do you refer your patients to a periodontist for phase-i therapy?	
Yes	3
No	97
2. If no which periodontal treatment you do in your clinic?	
(A) Scaling	95
(B) Scaling and root planning	80
(C) Advise proper brushing technique	30
(D) Advise mouthwashes	25
(E) Advise stoppage of harmful habits	20
(F) Diet counseling	20
(G) Splinting	15
3. Which periodontal surgical procedures do you carry out by yourself in your clinic?	
(A) Gingivectomy	85
(B) Flap surgery	30
(C) Crown lengthening	70
(D) Frenectomy/ vestibuloplasty	12
(E) Ridge augmentation	10
(F) Free gingival autograft	5
(G) Implants	13
(H) Others (please specify)	0
4. Do you refer your patients to a periodontist for surgical procedures?	
Yes	37
No	63
4a. If no	
(I) Not satisfied with results of periodontal surgical treatment	0
(II) Have very few patients of periodontal disease who get motivated for periodontal surgery	37
(III) Others: (Please specify)	35
(IV) Carry out surgical procedures yourself	28
4b. If yes	
(A) How frequently do you call a periodontist for consultation/ refer patients to a periodontist for surgical procedures	
(I) Twice a week	62
(II) Once a week	18
(III) Once a month	13
(IV) Other	7
(B) For which signs and symptoms of the patients do you consult a periodontist (kindly rate according to frequency)	
(I) Bleeding gums	32
(II) Presence of periodontal pockets	38
(III) Mobile teeth	22
(IV) Gingival enlargement	17
(V) Periodontal abscess	17
(VI) Gingival recession	32
(VII) Other mucogingival problems	8
(C) What is the most common procedure performed by the periodontist at your clinic (kindly rate according to frequency)	
(I) Flap surgery	37
(II) Gingivectomy/gingivoplasty	18
(III) Bone grafting/GTR	27

(Contd..)

Table 1: (Continued...).

Questions			Percentage
(IV) Crown lengthening			25
(V) Frenectomy/vestibuloplasty			15
(VI) Root coverage procedures			18
(VII) Implants			15
(VIII) Other			5
	Always	Occasionally	Never
5. What is your opinion about the results of periodontal treatment			
Stoppage of bleeding	18	82	0
Elimination of pocket	25	75	0
Reduction in mobility	20	80	0
Increased life span of teeth	30	68	2
Root coverage	33	67	0
Recurrence	12	86	2
			Percentage
6. Do you recall your patients for maintenance therapy after the periodontal treatment			
Yes			60
No			40
A. if yes			
Recall after			
(A) 1 month			50
(B) 3 months			8
(C) 6 months			0
(D) In case of recurrence			2
7. What do you think are the factors responsible for the recurrence of the periodontal disease after the treatment?			
(A) Patient factors (lack of maintenance and awareness)			25
(B) Periodontist factors (lack of skill and time)			13
(C) General dentist factors (lack of skill, chair-side time, motivation, awareness)			62
8. What is your opinion about the cost-effectiveness of the periodontal treatment?			
(A) Beneficial to all concerned			30
(B) Too costly for the patients			70

GTR: Guided tissue regeneration

A panel of experts in the field of epidemiology evaluated the validity of the questionnaire. The minor changes were made to make it more clear and understandable. The questionnaire was anonymous, and participation was voluntary. The participation was based on inclusion and exclusion criteria for the study.

Inclusion criteria

General dentists practicing in urban area at least BDS qualification and a minimum of 1-year practice.

Exclusion criteria

Interns, dentists attached to a Dental College and Periodontists.

The data thus collected was tabulated, and statistical analyses were performed using SPSS software version 20.0 (Statistical Product and Service Solutions, SSPC Inc., Chicago). The results were presented as mean \pm standard deviation and frequencies.

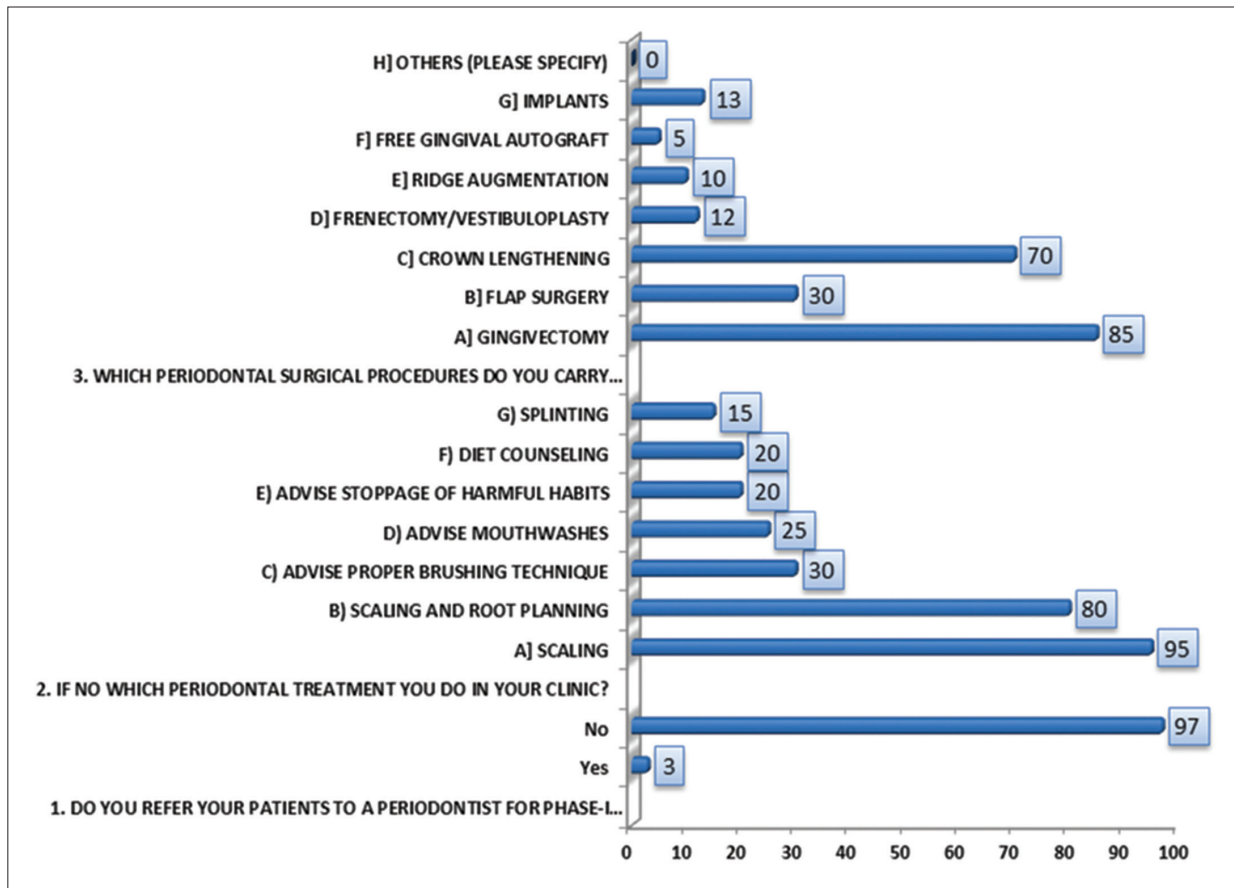
Results

A total of 150 questionnaires were distributed, out of which, 100 were completely filled and evaluated for the study, with an overall response rate of 66.67%. The study showed 97% of the dentists do Phase-I therapy by themselves, the majority of

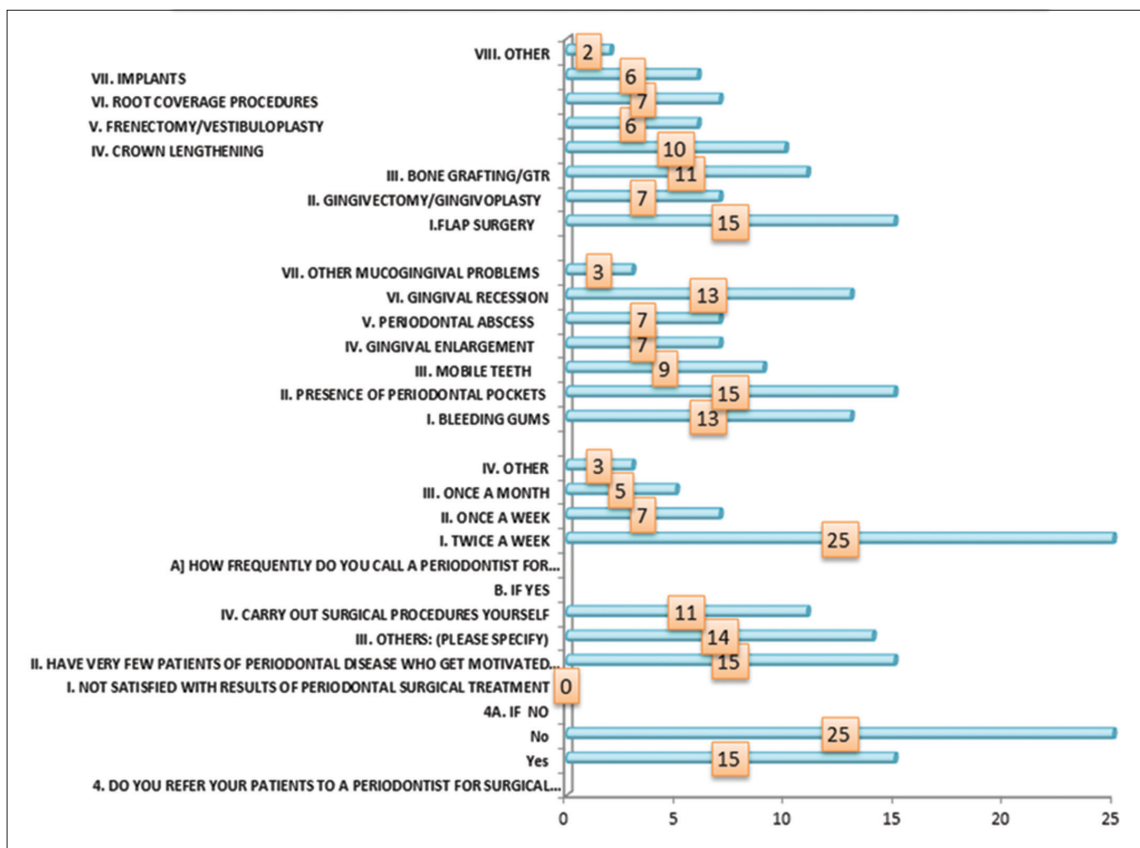
them do gingivectomy and crown lengthening surgeries, and 30% of them performed flap surgeries (Graph 1).

On evaluating referrals, it had been found that 63% dentists did not refer patients to specialist, with the lack of patient motivation considered to be as the main reason. Whereas 37% of them consulted or referred their patients to the periodontist, mainly twice (62%) or once a week (18%). Around 38% of GPs consulted periodontist because of complaint of periodontal pockets, 32% each for bleeding gums, and gingival recession. The majority of GPs did not refer patients to periodontists for the implant treatments. The common procedure performed by periodontist was flap surgeries (37%), followed by bone grafting (27%), and crown lengthening (25%) (Graph 2).

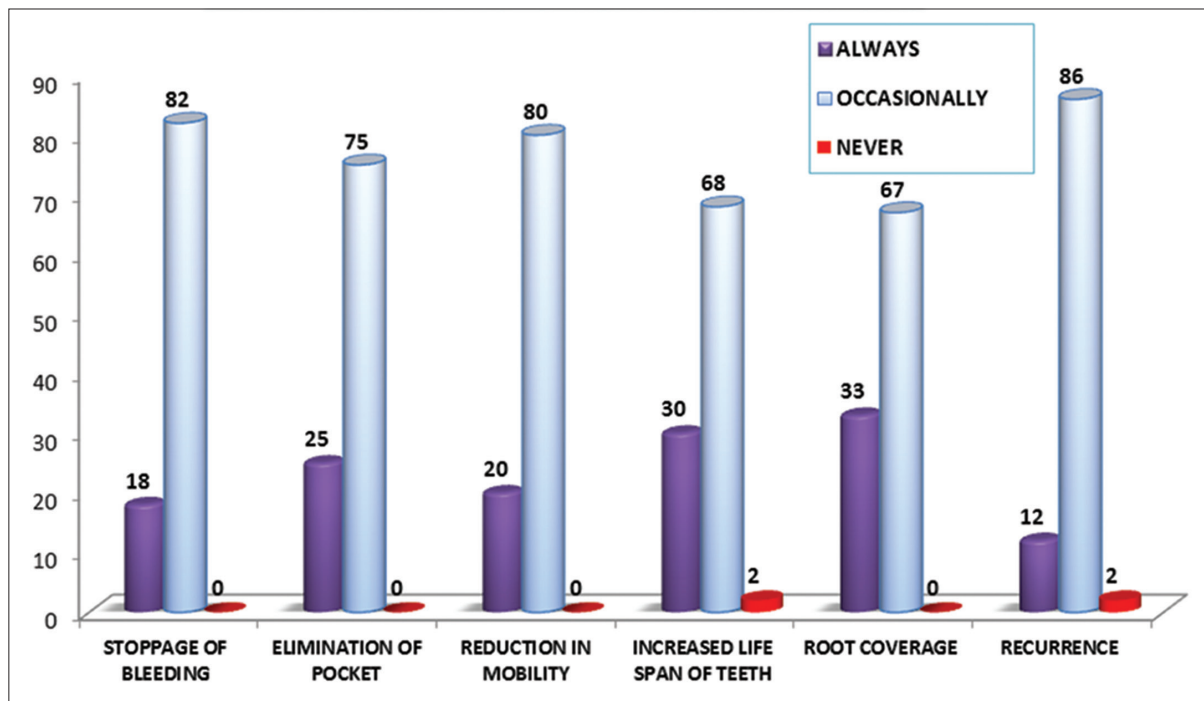
On assessing, how successful periodontal treatments are almost all of them agree that there was significant bleeding stoppage, after the treatment. Whereas more than half of dentists believed that there was recurrence after periodontal flap surgery occasionally and there success of root coverage procedure seemed questionable. Thus, a high satisfaction level was observed regarding outcomes of periodontal treatments which are more common (Graph 3). Kruskal-Wallis nonparametric test was applied to study the variations among opinions about



Graph 1: Attitude among general dentists regarding periodontal treatments.



Graph 2: Attitude among general practitioners regarding referrals and treatment done by periodontists.



Graph 3: Opinion among general practitioners regarding results of periodontal treatments.

the results of periodontal treatment, which was significantly greater than expected ($P < 0.0005$).

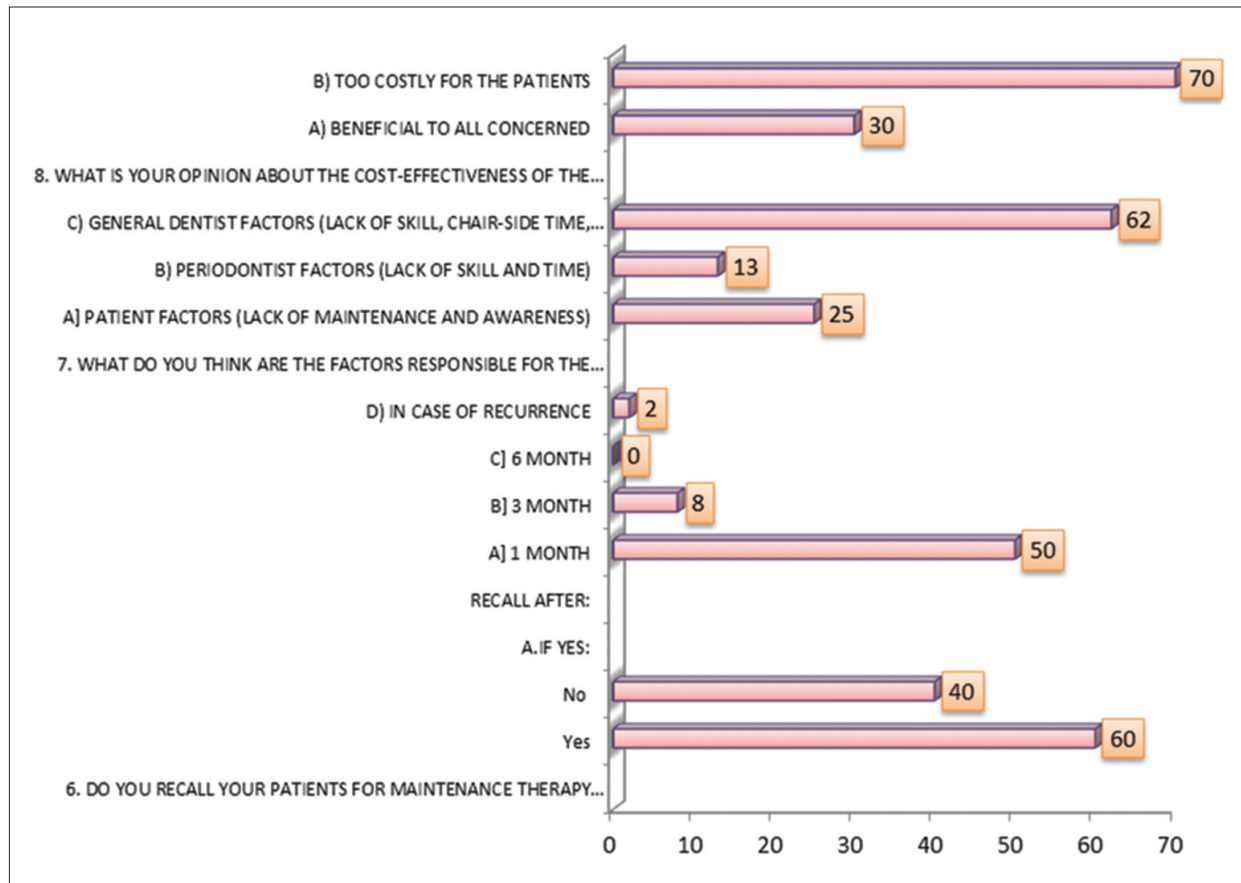
For maintenance therapy, 60% of dentists recall their patients and half of them called their patients after 1 month. The compliance of patients remains a problem even though regular recalls are made. 62% GPs believed that lack of skill and motivation were the major issues and it has been observed that the cost of the periodontal treatment was also a concern among the general dentists (70%) (Graph 4).

Discussion

The rate of response for the survey (66.7%) was and within the range of that was in similar studies.^{6,8,9} The questionnaire was limited to 8 questions, in an attempt to make it easy and to encourage a high response rate. Most of the dentists do the periodontal interventions by themselves, only 37% of them refer their patients to periodontist. The elucidation of patient's preferences will affect the selection as well as dentists own attitude about the effectiveness of various periodontal treatments. Because the experience of each dentist is distinctive, it is difficult to achieve patient's consent. Compiling the procedures most commonly referred, a clear top-six list emerged. Most GPs still refer for the treatment of periodontal pockets, 32% each for bleeding gums, and gingival recession, followed by mobile teeth, gingival enlargements, and periodontal abscess, although the diseases may be different than that which was referred in the past according to Cobb *et al.*¹⁰ Flap surgery (37%), bone grafting (27%), crown lengthening (25%), gingivectomy and root coverage procedures (18% each) complete the top five procedures and are similar to the ranking indicated by the most recent periodontal practice survey.^{11,12}

It is important, however, to understand the factors which influence clinical decisions so that guidelines for appropriate referral can be framed and variability ultimately reduced. Limited data exists regarding the demographic predictors of referral within dentistry as a whole, let alone the specialty of periodontics.⁹

This study increases the knowledge by anonymously surveying, via questionnaire, a random sample of GPs within the city of Ahmednagar. However, care was taken to include a diverse group by age and years in practice. This study gathered empirical data regarding the GP's reasons behind the referral and the reason behind their choice of periodontist. The referral relationship involves the mutual treatment with the specialist providing additional care and support to aid the GP in total patient care. This finding mirrors that of Betof *et al.*,¹³ who showed that "technical competence" was the only criteria that consistently demonstrated to be an effective one for the GP in choosing a specific periodontist for referral. Continuous knowledge about their patient's treatment status and the understanding that the referral relationship is a team effort can greatly enhance the trust and confidence of the GP in their choice of a periodontist.^{14,15} Communication through consult and treatment letters, phone calls, and e-mails by the periodontist to the GP ensures the basic tenant of the referral relationship: Shared treatment. It makes sense that if patients return to the GP with ill feelings toward the periodontist to whom they were referred, the referral frequency may diminish or stop entirely. Thus, superior patient care, communication, and satisfaction should be paramount goals of any periodontist.



Graph 4: Evaluation of recall of patients for maintenance therapy.

The general dentist should be emphasized that along with probing regular gingival examination should be done. The GP should understand their role in patient motivation and construct a proper recall protocol.^{16,17} They should also know the importance of periodontist in both multidisciplinary dentistry and phase-I treatment. Patient awareness about oral hygiene maintenance should be improved. The misunderstandings about the cost and benefit about periodontal treatment have to be addressed properly. This kind of surveys should be done at regular intervals in the same areas to get the idea about improvement and assessments in attitude and perception regarding periodontal treatments.¹⁷⁻²² The periodontal surgical procedures should be economical to the patient. A large section of GPs thinks if the treatments are affordable then there will be increase in patient referrals.

Conclusion

There is still a lack of awareness of periodontal treatments among general dental practitioners in urban areas such as Ahmednagar. There is a need for patient motivation as well as guidance to GPs about all treatments carried out by periodontists that will enhance the treatment outcome as well as help in improving the patient referrals.

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