

Knowledge Assessment of Diagnosis and Treatment Strategies of Periodontal Disease of Riyadh Dental Students

Ebtehal Ali Alsadah¹, Anwar Saeed Alhabib¹, Duaa Yousef Nunu¹, Lama Adil Raqban¹ and Shahzeb H Ansari^{2*}

¹Dental Interns in Riyadh Elm University, Saudi Arabia

²Lecturer Preventive Dentistry, Riyadh Elm University, Saudi Arabia

*Corresponding Author: Shahzeb H Ansari, Lecturer Preventive Dentistry, Riyadh Elm University, Saudi Arabia.

Received: June 26, 2018; Published: August 29, 2018

Abstract

Introduction: Diagnosis of Periodontal disease is not straightforward since it requires specific diagnostic tools and knowledge. Periodontal diagnosis help to identify any site of infection that require periodontal management and the most common causes of periodontal disease is bacterial infection. The goal of periodontal therapy is to reduce pathogenic bacteria and the progressive inflammation and recurrence of disease. Diagnostic tools of periodontal disease provide information about differential diagnosis, site of disease and severity of infection.

Materials and Methods: Total of 500 questionnaires written in English were distributed to dental students in Riyadh city. Out of those, 360 questionnaires were returned. The questions assessed the knowledge of dental student about diagnosis and treatment of periodontal disease.

Results: 82% of the participants believed that the prevalence of periodontal disease increases with age. 77% reported that there is relation between periodontal and systemic diseases, whereas 62% had referred their patients with advanced periodontal disease to a specialist.

Conclusions: Overall satisfactory knowledge of dental students was observed.

Keywords: Dental Student's Knowledge; Periodontal Examination; Periodontal Disease

Introduction

Periodontal health is the most important of overall dental treatment, so diagnosis of periodontal disease is the first sign for successful treatment [1]. The study by Lanning, *et al.* [2] examined the variations among faculty in diagnosis and management of common periodontal diseases using a questionnaire methodology. The study reflected substantial variation among instructors in radiographic interpretation, diagnosis, and treatment planning for common periodontal diseases. The study also highlighted the need for consistent use of accepted practice guidelines and greater consensus-building opportunities to reduce variations in diagnosis. Diagnosis of Periodontal disease is not straightforward since it requires specific diagnostic tools and knowledge. Periodontal diagnosis help to identify any site of infection that require periodontal management and the most common causes of periodontal disease is bacterial infection. The goal of periodontal therapy is to reduce pathogenic bacteria and the progressive inflammation and recurrence of disease. Diagnostic tools of periodontal disease provide information about differential diagnosis, site of disease and severity of infection. The tools include probing pocket depths, bleeding on probing, clinical attachment levels, plaque index, and radiographs for alveolar bone levels. In a healthy periodontium, the gingival tissues appear as stippled, pale pink or coral pink, firm in texture and extend from the free gingival margin to muco gingival line [3].

Periodontal treatment planning is very important to the endodontic, orthodontic, ousted integrated dental implant success and both diagnosis and treatment should follow the classification of the disease. Treatment of inflammatory periodontal disease requires effective plaque control. Patient's motivation is an important factor for ideal treatment of periodontal disease in addition to educational and informative knowledge. Plaque-induced inflammatory periodontal diseases have been divided into gingivitis and periodontitis. Gingivitis refers to inflammatory reactions largely confined to marginal gingival tissues and there are two types of gingivitis: plaque induced and non-plaque induced. Dental plaque induced (gingivitis) is related to the presence of plaque with or without local contributing factors or may be related to the systemic factors, medications or by malnutrition. Periodontal disease comprises a wider series of diseases than just periodontitis and the understanding of these diseases requires a diagnosis be made. Periodontitis refer to the diseases that affect the periodontal tissues and results in alveolar bone destruction and loss of attachment and the periodontitis undergo certain categories: Chronic periodontitis, Aggressive periodontitis, Periodontitis as a manifestation of systemic diseases, necrotizing ulcerative gingivitis/periodontitis, Abscesses of the periodontium, Combined periodontics-endodontic lesion and Developmental or acquired deformities and conditions.

The review given by Hourdin, *et al.* [4] sheds light on the interactions and associations between periodontal disease and a number of systemic complications including smoking, diabetes, obesity, hormonal changes, cardiovascular disease and pregnancy. For example, several studies have shown that smokers are at a significantly higher risk of periodontal attachment loss compared to non-smokers. On the other hand, lack of glycemic control in diabetes progressively changes the host response to bacteria leading to periodontal disease. The review also associates obesity to periodontal disease by referring to longitudinal studies conducted in Brazil that demonstrate this correlation. Dental student and general Dental Practitioner should be able to make accurate diagnoses, management, and treatment patients with periodontal disease and also help them with guidelines of the assessment and referral processes. In Saudi, the system of the oral health is in a transitional developmental stage, and the collection of systemic data is important to plan oral health care for the public. Oral health care preventive program is still lacking in Saudi, and more dental health education is needed as essential part for oral health standards among Saudi population [5]. The dental student must be well motivated and knowledgeable about periodontal health and disease to ensure their attitudes in the community because many of them have a low interest in the etiology, prevention and treatment of periodontal disease. Knowledge of oral health that related to periodontal diseases has a major role in the treatment and prevention of the disease among children, adolescents, and adults [5].

The American Academy of Periodontology (AAP) has proposed that conclusion and characterization of periodontal sicknesses be founded on clinical assessment.⁴ A total clinical examination ought to incorporate the accompanying: 1) patient's medicinal, dental, social, and family history; 2) periodontal diagramming including testing profundities and clinical connection levels; 3) elucidation of radiographic information including seriousness and example of bone misfortune; 4) clinical indications of irritation (seeping on examining) and area and seriousness of plaque and analytics; and 5) some other applicable signs and side effects, for example, torment or ulceration [6].

Contrasts in the basic leadership process can happen in any of these stages. The finding stage relies upon two elements: aptitude in location amid the examination, and information of the definition and criteria utilized for distinguishing proof of an ailment or condition. The second stage (choice about mediation) is related with the clinician's learning of the course of a given illness and present hazard factors that could impact viability of treatment. The third stage (treatment determination) is to a great extent subject to the initial two stages and fitting treatment choices related with the kind of malady exhibit. Nonetheless, this stage is affected by clinicians' close to home convictions and past treatment results [7].

Sheiham and Netuveli [8] utilized recreated patients to evoke analyses and treatment designs from dental understudies in the initial two investigations and from dental understudies and dental practitioners in the third examination. They inferred that methodologies used to collect symptomatically significant data relied upon the level of many-sided quality of the main jobs and on the clinical skill of

respondents. They additionally recognized a relative cover of indicative errands and treatment arranging undertakings among clinicians, which advanced powerfully as the interview advanced. These discoveries point out for cautious both the trouble of the clinical cases utilized as a part of research and a watchful assessment of the formative pathway from the learner-yet capable-clinician to the master dental expert [9].

There is potential for variety among periodontal and preventive staff in assessing a patient's periodontal condition and figuring periodontal judgments and treatment alternatives. This is especially evident when the workforce is expansive and its individuals have assorted preparing foundations. Various components are considered amid the way toward detailing a periodontal determination, guess, and treatment design, and a large number of these variables are subjective. This upgrades the probability of expanded variety among clinicians. Furthermore, changing reports in the writing and quick scattering of new information additionally aggravate the issue [10].

The effect of variety among clinical staff on understudy execution stays obscure. Understudies may profit by seeing a few approaches to approach clinical issues. This kind of introduction may upgrade their insight and specialized aptitudes expected to perform diverse treatment modalities and increment the treatment choices they can offer to patients. Conversely, impressive variety among workforce might be negative to understudy learning. Dental and dental cleanliness understudies may show their way to deal with clinical basic leadership after their teachers by concentrating on staff particular techniques for tending to clinical issues instead of learning proof based demonstrative and treatment criteria. In one report, understudies apparent contrasts between their educators to influence their clinical advance. Besides, huge variety among staff bargains the capacity to dependably survey understudy learning and showing viability and the nature of patient care. In like manner, the motivation behind this examination was to inspect the variety in staff reactions to a progression of online case practices in regards to understanding of clinical discoveries, periodontal finding, and treatment arranging [11].

Periodontal wellbeing is the establishment of good preventive and therapeutic dentistry. Nonetheless, periodontal sickness is pervasive in a huge extent of the Scottish populace, with epidemiological examinations recommending that around half of dentate grown-ups have confirmation of gingivitis and additionally periodontitis, including a critical minority who show indications of cutting edge illness. A standout amongst the most successive dental strategies did in Scotland is the basic supra-gingival scale and clean. Be that as it may, under 10% of patients get the more escalated classes of tend to overseeing patients with direct to extreme periodontal infection, with significant variety clear crosswise over Health Boards [10].

The explanations behind this are multi-factorial and complex yet may incorporate both professional and patient variables. Most patients with direct to serious periodontal infection can be satisfactorily overseen in essential care. Referral to a master or to auxiliary care is a proper pathway for the most serious instances of periodontal infection. Notwithstanding, there is worry that a clear hesitance to treat propelled sickness in essential care has brought about an expansion in improper referrals. Meetings with clinicians propose that drivers to referral incorporate an absence of certainty among general dental specialists (GDPs) in performing periodontal treatment, the time important to treat periodontal maladies adequately and the need to depend on the patient to be a dynamic accomplice in the treatment process. The medico-lawful safeguard associations report that an expanding number of cases identify with charges of inability to analyze and treat periodontitis [12].

Aim of the Research

The aim of this study was to investigate confidence and knowledge in diagnosis and management of periodontal disease among dental students.

Material and Methods

Ethical Approval

Study proposal was submitted to obtain formal approval from the Institutional Review Board of RCsDP. Total of 500 questionnaires written in English were distributed to dental students in Riyadh city. Out of those, 360 questionnaires were returned. The questions assessed the knowledge of dental student about diagnosis and treatment of periodontal disease.

Results

The results were then subjected to statistical analysis and discussion.

Item	Responses
Do you think periodontal screening is done to figure out if there is inflammation or not?	Yes: 82% No: 19%
Do you have knowledge about medication affecting periodontium ?	Yes:52% No:48%
Does the prevalence of periodontal disease increase with age?	Yes: 82% No: 18%
Is there's a relation between periodontal diseases and systemic disease?	Yes: 77% No: 23%
Does the radiographs assessment helpful in diagnosis and treatment planning for periodontitis?	Yes: 80% No: 20%
Did you refer the patient to periodontist when she/he need?	Yes: 62% No: 38%
Do you recall your patient for maintenance after periodontal treatment?	Yes: 35% No: 65%
Do you think smoker's prognosis is poor comparison with non-smokers?	Yes: 68% No: 32%
Do you assess systemic risk factors and refer for medical doctor?	Yes: 50% No: 50%
Do you refer your patient to periodontist for surgical procedure if needed?	Yes: 61% No: 39%
For you which sign of your patient you consult periodontist?	Bleeding: 19% Abscess: 19% Patients with systemic diseases: 29% Root caries: 11% Mobility: 22%
Root Planning is:	Removal of disease cementum: 25% Removal of calculus: 26% Removal of soft tissue: 22% Removal of material alba: 27%
Lamina dense is composed of which collagen fiber:	Type I: 31% Type II: 28% Type III: 29% Type IV: 13%
The primary cause of periodontal disease is:	Calculus: 38% Dental plaque: 26% Faulty restoration: 17% Malocclusion: 19%
Periodontal destruction is considered moderate when: *' CAL: Clinical attachment loss	1 - 2 mm CAL: 26% 3 - 4 mm CAL: 36% 4 - 5 mm CAL: 11% 5 mm CAL: 27%
Horizontal bone loss is present in:	Localized aggressive periodontitis: 18% Infrabony pocket: 19% Gen. aggressive periodontitis: 31% ANUG: 9% Chronic periodontitis: 23%
Furcation involvement is measured by:	Naber's probe: 69% WHO probe: 17% Michigan 'o' probe: 4% CPITN probe: 6% Periodontal explorer: 4%
Acute periodontal abscess is treated by:	Gingivectomy: 15% Antibiotics: 34% Periodontal flap procedure: 18% Drainage through gingival sulcus: 18% Gingivoplasty: 16%

Table 1: Frequencies of responses from the participants.

Item	Responses from each level	p-value
Do you think periodontal screening is done to figure out if there is inflammation or not?	8: 71%, 9: 85%, 10: 84% 11: 82% 12: 89%	0.089
Do you have knowledge about medication affecting periodontium ?	8: 33%, 9: 64%, 10: 56% 11: 42% 12: 63%	0.000
Does the prevalence of periodontal disease increase with age?	8: 60%, 9: 74%, 10: 92% 11: 89% 12: 94%	0.000
Is there's a relation between periodontal diseases and systemic disease?	8: 59%, 9: 75%, 10: 90% 11: 66% 12: 90%	0.000
Does the radiographs assessment helpful in diagnosis and treatment planning for periodontitis?	8: 59%, 9: 82%, 10: 84% 11: 82% 12: 94%	0.000
Did you refer the patient to periodontist when she/he need?	8: 43%, 9: 64%, 10: 71% 11: 66% 12: 66%	0.006
Do you recall your patient for maintenance after periodontal treatment?	8: 34%, 9: 39%, 10: 42% 11: 31% 12: 28%	0.370
Do you think smoker's prognosis is poor comparison with non-smokers?	8: 50%, 9: 66%, 10: 70% 11: 75% 12: 76%	0.007
Do you assess systemic risk factors and refer for medical doctor?	8: 29%, 9: 49%, 10: 53% 11: 51% 12: 65%	0.001
Do you refer your patient to periodontist for surgical procedure if needed?	8: 40%, 9: 64%, 10: 73% 11: 68% 12: 59%	0.001
For you which sign of your patient you consult periodontist? *	L.8: Bl 21%, Ab 22%, PSD 14%, RC 14%, Mo 27% L.9: Bl 15%, Ab 18%, PSD 34%, RC 10%, Mo 23% L.10: Bl 14%, Ab 27%, PSD 32%, RC 7%, Mo 21% L.11: Bl 26%, Ab 14%, PSD 23%, RC 9%, Mo 25% L.12: Bl 18%, Ab 10%, PSD 44%, RC 11%, Mo 17%	0.042
Root Planning is: **	L.8: RDC 23%, RC 14%, RST 27%, RMA 36% L.9: RDC 21%, RC 23%, RST 31%, RMA 25% L.10: RDC 22%, RC 32%, RST 22%, RMA 25% L.11: RDC 32%, RC 25%, RST 18%, RMA 25% L.12: RDC 27%, RC 37%, RST 14%, RMA 23%	0.103
Lamina dense is composed of which collagen fiber: ***	L.8: T.I 39%, T.II 29%, T.III 24%, T.IV 9% L.9: T.I 30%, T.II 23%, T.III 36%, T.IV 11% L.10: T.I 30%, T.II 27%, T.III 26%, T.IV 16% L.11: T.I 26%, T.II 31%, T.III 29%, T.IV 14% L.12: T.I 28%, T.II 28%, T.III 29%, T.IV 14%	0.886

The primary cause of periodontal disease is: ****	L.8: Ca. 49%, DP. 11%, FR. 14%, Ma. 26% L.9: Ca. 30%, DP. 15%, FR. 28%, Ma. 28% L.10: Ca. 37%, DP. 34%, FR. 19%, Ma. 9% L.11: Ca. 34%, DP. 32%, FR. 14%, Ma. 20% L.12: Ca. 38%, DP. 37%, FR. 13%, Ma. 13%	0.001
Periodontal destruction is considered moderate when: *****	L.8: 1-2. 21%, 3-4. 15%, 4-5. 23%, 5. 40% L.9: 1-2. 33%, 3-4. 28%, 4-5. 7%, 5. 31% L.10: 1-2. 22%, 3-4. 49%, 4-5. 4%, 5. 25% L.11: 1-2. 25%, 3-4. 40%, 4-5. 12%, 5. 23% L.12: 1-2. 30%, 3-4. 44%, 4-5. 10%, 5. 17%	0.000
Horizontal bone loss is present in: *****	L.8: LAP 14%, IP 30%, GAP 31%, ANUG 13%, CP 11% L.9: LAP 26%, IP 21%, GAP 30%, ANUG 10%, CP 13% L.10: LAP 14%, IP 15%, GAP 36%, ANUG 4%, CP 32% L.11: LAP 23%, IP 15%, GAP 25%, ANUG 9%, CP 28% L.12: LAP 14%, IP 15%, GAP 31%, ANUG 10%, CP 14%	0.046
Furcation involvement is measured by: *****	L.8: NP 49%, WHO 24%, MP 6%, CPITIN 14%, PE 7% L.9: NP 67%, WHO 80%, MP 7%, CPITIN 10%, PE 2% L.10: NP 81%, WHO 15%, MP 1%, CPITIN 1%, PE 1% L.11: NP 78%, WHO 14%, MP 5%, CPITIN 2%, PE 2% L.12: NP 69%, WHO 17%, MP 4%, CPITIN 4%, PE 5%	0.010
Acute periodontal abscess is treated by: *****	L.8: Gv 20%, Ab 27%, PFP 23%, DGS 7%, Gp 23% L.9: Gv 26%, Ab 30%, PFP 25%, DGS 7%, Gp 13% L.10: Gv 10%, Ab 37%, PFP 14%, DGS 26%, Gp 14% L.11: Gv 15%, Ab 34%, PFP 15%, DGS 22%, Gp 14% L.12: Gv 7%, Ab 39%, PFP 13%, DGS 28%, Gp 15%	0.005

Table 2: Comparison on the basis of dentistry levels.

*' Bl: Bleeding, Ab: Abscess, PSD: Patients with systemic diseases, RC: Root Caries, Mo: Mobility

***' RDC: Removal of disease cementum, RC: Removal of Calculus, RST: Removal of Soft Tissue Wall, RMA: Removal of Material Alba

****' TI: Type I, T.II: Type II, T.III: Type III, T.IV: Type IV.

*****' Ca: Calculus, DP: Dental plaque, FR: Faulty restoration, Ma: Malocclusion

*****' 1-2: 1-2mm. 3-4: 3-4mm, 4-5: 4-5mm, 5: 5mm

*****' LAP: Localized Aggressive Periodontitis, IP: Infrabony Pocket, GAP: Generalized Aggressive Periodontitis, ANUG: Acute Necrotizing Ulcerative Gingivitis, CP: Chronic Periodontitis

*****' NP: Naber's probe, WHO: WHO probe, MP: Michigan 'o' probe, CPITN: CPITN probe, PE: Periodontal explorer

*****' Gv: Gingivectomy, Ab: Antibiotics, PFP: Periodontal Flap Procedure, DGS: Drainage through the Gingival Sulcus, Gp: Gingivoplasty.

Discussion

The survey was carried out in order to record the relevant result for the study. It was seen that the answers depicted that the students did have enough knowledge regarding the periodontal diseases.

There is potential for variety among periodontal and preventive personnel in assessing a patient's periodontal condition and figuring periodontal findings and treatment alternatives. This is especially evident when the staff is extensive and its individuals have various preparing foundations. Various variables are considered amid the way toward detailing a periodontal analysis, guess, and treatment design,

and a large number of these components are subjective. This improves the probability of expanded variety among clinicians. Also, fluctuating reports in the writing and quick spread of new learning further aggravate the issue. There are contrasts between college dental specialists in their reactions to a long survey that got some information about pertinent ideas in periodontology. Did reactions among employees vary, as well as there were contrasts between staff reactions and confirmation based writing.

Dental and dental cleanliness understudies may display their way to deal with clinical basic leadership after their teachers by concentrating on staff particular methodologies for tending to clinical issues as opposed to learning proof based indicative and treatment criteria. In one report, understudies apparent contrasts between their teachers to influence their clinical advance. Moreover, huge variety among personnel bargains the capacity to dependably survey understudy learning and showing viability and in addition the nature of patient care. In like manner, the reason for this examination was to look at the variety in staff reactions to a progression of online case practices with respect to elucidation of clinical discoveries, periodontal conclusion, and treatment arranging.

When the levels of the dentists were compared, most of the answers which were received depicted that the most knowledgeable from all the stages were that from the stage 12. Also they seemed to have to have more understanding regarding the periodontal diseases. The answers which were recorded stated that most of them had their p-value less than 0.05 which meant that the questions were significant and they did have an impact on the stages from where the students belonged.

Not a ton of studies have researched the alignment of periodontal conclusion and treatment arranging among dental understudies at three dental schools. Every one of the schools in our examination utilized a similar order framework, so it was expected that there would be a level of understanding between the schools. Conclusion is vital in light of the fact that it is planned to be a rundown articulation that speaks to an insightful examination of all assembled data. While Armitage and Cullinan recommended that professionals ought not contend over a determination if the proposed treatment will be the same paying little respect to what the condition is marked, there are reasons why specialists should go to an accord on a conclusion. The conclusion fills in as the reason for deciding the most suitable treatment get ready for the patient. An exact conclusion is likewise imperative for correspondence among clinicians, amongst clinicians and patients, and amongst clinicians and insurance agencies [8].

Another study stated that, figuring out how to decipher clinical information and to detail a determination and treatment design are fundamental aptitudes that clinicians create amid their preparation in dental schools. While schools utilize the same AAP Classification System, a few reports have recorded ascension irregularities and high changeability in clinical basic leadership among dental employees. Lanning, *et al.* [2] discovered variety amongst preventive and periodontal employees and among periodontal graduate understudies in translating clinical discoveries, periodontal conclusions, and treatment arranging. At the point when employees are not predictable with the clinical basic leadership process, it brings about perplexity for the understudy and maybe deferred obtaining of proper clinical abilities. Outcomes of these varieties in clinical choices incorporate under- or overestimation of a malady, bringing about a wrong reason for choosing the most appropriate treatment. It is as needs be imperative that employees in charge of managing understudies through a clinical exam and afterward evaluation of the data accumulated are very much adjusted. Alignment is a procedure intended to show that institutionalization has been accomplished. From the point of view of dental instruction, personnel adjustment is an imperative procedure that improves the educational establishment supporting understudies' learning capacities and procurement of ability. Despite the fact that there is scanty research exploring alignment among dental understudies with regards to periodontal finding and treatment arranging, a few investigations have discovered that extensive discussion exists in the analysis and treatment arranging of periodontal sickness [13].

Tomasi, *et al.* [14] looked at the adjustment of predoctoral periodontal employees and of third- and fourth-year dental understudies at IUSD utilizing electronic clinical periodontal case introductions. Those specialists found that ascension for analysis and treatment arranging was general low for dental understudies and periodontal employees, yet that adjustment among fourth-year understudies was superior to for third-year understudies (Maurizio and Thomas, 2013).

Alignment has been a key purpose of enthusiasm at IUSD particularly in the Department of Periodontics. Month to month accord preparing gatherings are held for all periodontal employees with the objective of keeping up consistency while instructing predoctoral understudies. In John et al., reactions for judgments and treatment arranging of periodontal cases were thought about between dental understudies and periodontal employees. That review observed consent to be generally low (0.35 - 0.54), which is fundamentally the same as what we found in our examination amongst classes and schools, with all kappa coefficients going in the vicinity of 0.32 and 0.51. It is applicable to take note of that general understanding was most noteworthy for IUSD for both finding and treatment design (0.42, 0.46, separately), trailed by MUSoD (0.34, 0.41) and afterward WVUSD (0.33, 0.37). Similarly imperative to call attention to is that the cases utilized were from the IUSD case records. Albeit none of these cases were displayed in consistent addresses for the dental understudies in our investigation, some of them may have been utilized for clinical rounds, implying that we can't preclude the likelihood of some level of case commonality for a few cases. Additionally, IUSD is as of now the main school out of the three analyzed in this investigation to hold alignment gatherings for periodontal workforce. These instructional courses may have represented the general better adjustment of IUSD understudies. These conceivable purposes behind variety among schools might be thought about constraints of the examination [15].

Another study stated that, there was more ascension about treatment designs than analyze. John et al. additionally found that ascension among fourth-year understudies was superior to understanding among third-year understudies for the two findings and treatment designs. Like their discoveries, we found that third-year understudies had bring down understanding than fourth-year understudies at IUSD and WVUSD, though third-year understudies at MUSoD had higher ascension than fourth-year understudies (0.36 versus 0.32, separately). We would commonly anticipate that third-year understudies will have a lower understanding than fourth-year understudies because of the third-year class' absence of clinical involvement in treating periodontal patients in a clinical setting. The distinction seen at MUSoD may have been because of an adjustment in the educational modules that influenced the third-year yet not the fourth-year understudies. At MUSoD, a refresher course (three addresses) for the case-based exam for the third-year understudies was held in nearness to this investigation. Preceding this change, the vast majority of the instructive periodontal addresses were front-stacked in the educational programs in the initial two years. These outcomes for the third-year understudies at MUSoD represent that changing a couple of parts of the educational modules can be worthwhile and should fill in as a manual for assist change in alignment of periodontal analysis and treatment arranging. Another thought is that at IUSD all instructive and clinical educating is finished by periodontists and inhabitants, while at MUSoD instructional instructing is finished by periodontists and clinical instructing is finished by periodontists and dental hygienists. At WVUSD, the educational instructing and third-year clinical instructing are finished by periodontists, while the fourth-year clinical educating is finished by general practice employees. Regardless of whether these distinctions affected the examination comes about is theoretical now, however might be viewed as another conceivable restriction in translating our outcomes [16].

In this examination, we likewise took a gander at regardless of whether understudies were choosing the right determination and treatment get ready for each of the eleven cases. The agreement decision for finding and treatment design relating to each case was touched base at by the main agent and co-examiners at each school. These agents, who are board-affirmed periodontists, touched base at the accord understanding after an eye to eye survey of each case. These choices were made before start of the investigation. On the off chance that we take a gander at the level of right reactions of third-and fourth-year understudies at all three schools, it is obvious that the level of right reactions was when all is said in done much lower for conclusion than for treatment design. A similar pattern was seen in reactions for determination between schools for most of the cases, yet was just found in three cases for treatment design. Furthermore, the dominant part of treatment decisions was right [17-27].

Conclusions

- The overall knowledge regarding the diagnosis of periodontal diseases were found to be satisfactory.
- This knowledge was better revealed by the senior dental students.

Bibliography

1. IB Darby, *et al.* "Factors influencing the diagnosis and treatment of periodontal disease by dental practitioners in Victoria". *Australian Dental Journal* 50.1 (2005): 37-41.
2. Sharon K Lanning, *et al.* "Variation in Periodontal Diagnosis and Treatment Planning Among Clinical Instructors". *Journal of Dental Education* 69.3 (2005): 325-337.
3. J Highfield. "Diagnosis and classification of periodontal disease". *Australian Dental Journal* 54.1 (2009): S11-S26.
4. Solenn Hourdin, *et al.* "A screening method for periodontal disease". *Journal of Dentofacial Science* 16 (2012): 104.
5. Bader K Al-Zarea. "Oral Health Knowledge of Periodontal Disease among University Students". *International Journal of Dentistry* (2013): 647397.
6. Riordan P. "Dental Fluorosis, Dental Caries and Fluoride Exposure among 7-Year-Olds". *Caries Research* 27.1 (1993): 71-77.
7. Giannobile W, *et al.* "Saliva as a diagnostic tool for periodontal disease: current state and future directions". *Periodontology 2000* 50.1 (2009): 52-64.
8. Sheiham A and Netuveli G. "Periodontal diseases in Europe". *Periodontology 2000* 29.1 (2002): 104-121.
9. Ghallab N. "Diagnostic potential and future directions of biomarkers in gingival crevicular fluid and saliva of periodontal diseases: Review of the current evidence". *Archives of Oral Biology* 87 (2018): 115-124.
10. Tonetti M, *et al.* "Periodontal Regeneration of Human Infrabony Defects. III. Diagnostic Strategies to Detect Bone Gain". *Journal of Periodontology* 64.4 (1993): 269-277.
11. Kaushal S. "Evaluation of OSSIFI® as Alloplastic Bone Graft Material in Treatment of Periodontal Infrabony Defects". *Journal of Clinical and Diagnostic Research* 8.10 (2014): ZC61-ZC65.
12. Kalantharakath T and Rai J. "Biomimetic ceramics for periodontal regeneration in infrabony defects: A systematic review". *Journal of International Society of Preventive and Community Dentistry* 4.5 (2014): S78-S92.
13. EF Corbet. "Oral diagnosis and treatment planning: part 3. Periodontal disease and assessment of risk". *British Dental Journal* 213.3 (2011): 111-121.
14. Tomasi C, *et al.* "Factors influencing the outcome of non-surgical periodontal treatment: a multilevel approach". *Journal of Clinical Periodontology* 34.8 (2007): 682-690.
15. Sanz M and Kornman K. "Periodontitis and adverse pregnancy outcomes: consensus report of the Joint EFP/AAP Workshop on Periodontitis and Systemic Diseases". *Journal of Periodontology* 84.4 (2013): S164-S169.
16. Simpson T, *et al.* "Treatment of periodontal disease for glycaemic control in people with diabetes". *Australian Dental Journal* 55.4 (2010): 472-474.
17. McGraw C. "Treatment of periodontal disease for glycaemic control in people with diabetes". *Primary Health Care* 22.3 (2012): 14-14.
18. Lynn Roosa Friesen, *et al.* "Knowledge of Risk Factors and the Periodontal Disease-Systemic Link in Dental Students' Clinical Decisions". *Predoctoral Dental Education* 78.9 (2014): 1244-1251.

19. Larry A Sweeting, *et al.* "Periodontal Treatment Protocol (PTP) for the General Dental Practice". *The Journal of Dental Hygiene* 82.3 (2008): 16-26.
20. Esther S Rhee, *et al.* "Prevalence of periodontal disease among dental school patients". *Journal of Taibah University Medical Sciences* 9.2 (2014): 126-131.
21. Walter J Loesche and Natalie S Grossman. "Periodontal Disease as a Specific, albeit Chronic, Infection: Diagnosis and Treatment". *Clinical Microbiology Reviews* 14.4 (2001): 727-752.
22. Howard C Tenenbaum. "Future Treatment and Diagnostic Strategies for Periodontal Diseases: What's Around the Corner?" (2007).
23. Vineet Kini, *et al.* "Diagnosis and Management of Periodontal Disease in Children and Adolescents: A Brief Review". *Journal of Dental and Allied Sciences* 5.2 (2016): 78-83.
24. Cortellini P, *et al.* "Periodontal Regeneration of Human Infrabony Defects. II. Re-Entry Procedures and Bone Measures". *Journal of Periodontology* 64.4 (1993): 261-268.
25. Heaton B and Dietrich T. "Analytic epidemiology and periodontal diseases". *Periodontology 2000* 58.1 (2011): 112-120.
26. Steele P. "Clinical practice of the dental hygienist". *The Journal of Prosthetic Dentistry* 37.3 (1977): 357.
27. Tonetti M and Van Dyke T. "Periodontitis and atherosclerotic cardiovascular disease: consensus report of the Joint EFP/AAP Workshop on Periodontitis and Systemic Diseases". *Journal of Clinical Periodontology* 84.4 (2013): S24-S29.

Volume 17 Issue 9 September 2018

©All rights reserved by Shahzeb H Ansari, *et al.*