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Assessment of the Novice Dental Staff Knowledge about the Management of Gingival Tissue at Selected Prothotodontic Clinics, Saudi Arabia

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Abstract: ***There are a variety of techniques and materials that allow the clinician to manage the gingival tissues during restoration and when making an impression. These include gingival retraction cords, chemical reagents, electro surgery, laser tissue sculpting, copper tube impressions, hydraulic impressions, and non-invasive, a traumatic displacement/haemostatic materials. In most cases gingival retraction cord is the most effective method for retracting tissue to the depth of the sulcus. The other methods have their advantages and indications. In any case, the control of the soft tissue for exposing the margins of the tooth preparation for restoration and impressioning is critical. It would be worthwhile for the clinician to understand all the choices available. The aim of this study was to assess the Novice Dental Staff knowledge about the Management of Gingival Tissue at Selected Prothotodontic Clinics. Looking forwards prevention strategies for improving the management of management of Gingival Tissue. Methods: A descriptive research design was utilized in the current research. A total of 150 Novice Dental Staff at selected prothotodontic clinics was given a structured questionnaire On June, 2016. They were asked to indicate that there was a high level of Novice Dental Staff knowledge about the Management of Gingival Tissue. Descriptive statistics like percentage was used to describe the findings using SPSS 20. Results: The current research study aim was to assess the Novice Dental Staff knowledge about the Management of Gingival Tissue at Selected Prothotodontic Clinics which was found to be (73.1%). Conclusions: Concerning the Novice Dental Staff knowledge toward the about the Management of Gingival Tissues at Selected Prothotodontic Clinics, the data findings showed that; there was a Approximately high level of knowledge for Novice Dental Staff about the Management of Gingival Tissue within the selected setting.***

Keywords: Management of Gingival Tissue, Novice Dental Staff & Prothotodontic Clinics

1. Introduction

Today, periodontal disease, trauma, and congenital defects can result in both soft tissue and hard tissue defects that can present with aesthetic problems. The management of these problems may be limited to prevention or surgical management which can result in significant morbidity especially if a second surgical site for grafting is utilized. This article describes the various prosthodontic techniques to improve gingival aesthetics using contemporary materials such as gingival colored composite and gingival colored porcelain in addition to more traditional materials such as standard prosthetic acrylic. (Rao & Patel ,2009).

According to McMurdo &Gillespie, (2000), The preservation or reproduction of optimal muco-gingival aesthetics can be difficult to achieve from both a surgical and prosthetic perspective. An increasing patient and clinician awareness of the importance of gingival and smile aesthetics has resulted in the development of both surgical and prosthetic techniques aimed at improving or maintaining these aesthetic characteristics.

Woodford & George, (2009), mentioned that Unsightly recession defects may present with concomitant buccal cervical cavities which may require restoration to protect from further tooth surface loss, reduce plaque retention or decrease dentinal sensitivity. Where recession is more generalized and especially in those patients who have undergone successful periodontal therapy, the loss of papillae may also be unsightly and the term 'black triangle syndrome' has been coined. The maintenance of papillae after extraction can be difficult especially where heavily restored teeth, trauma or congenital conditions present with both compromised quality and quantity of bone and soft tissues. Surgical techniques advocated for recreating gingival architecture around recession or alveolar defects are technique-sensitive and may require a graft from an additional surgical site with consequent additional morbidity.

Where edentulous spaces present with marked vertical and horizontal defects bone grafting may be required to support implant rehabilitation especially in the aesthetic zone. If patients are keen to improve these aspects, the surgical option may be presented without much alternative. (Boscia,et al., 2012).

2. Methods

A descriptive research design was utilized in the current research. A total of 150 Novice Dental Staff of selected prothotodontic units, Saudi Arabia, were given a structured questionnaire during June 2016.This number constitute, more than two third of the Novice Dental Staff of the time of data collection. All wards representing units concerning all the subspecialties' were consider as a setting for the current research. The Novice Dental Staff at each unit was contacted to discuss the importance of the research and the study protocol. An anonymous 20-items questionnaire was adopted from valid & reliable tool using the guidelines from a Taxonomy for Augustine (1993). All questions had fixed answer categories.

The questionnaire was pilot-tested and dealt with the following topics: demographic data; data concerning knowledge about the Management of Gingival Tissue. Descriptive statistics like percentage was used to describe the findings using SPSS 20. All categories data were analyzed using the Chi-squared test with or without Yates' correction; Statistical significance for all analyses was presumed for P at 0.05.

3. Results

The current research study aim was to assess the Novice Dental Staff perspective about the Management of Gingival Tissue. The Mean Score for the level of knowledge about items pertaining to Novice Dental Staff within the study setting
Was (73.1%).

Regarding the Novice Dental Staff knowledge about the Management of Gingival Tissue., contained by the study setting, the data findings showed that; there was a highest level of Novice Dental Staff knowledge towards the about the Management of Gingival Tissue. within the selected setting.

Table 1: Frequency and Percentage of items pertaining to the Level of Knowledge of the Novice Dental Staff knowledge about the management of Gingival Tissues at Selected Prostodontic Clinics

Sl.No.	Knowledge of Items	Frequency of correct Response	Percentage of correct Responses
1	Among the first techniques developed and available to clinicians for displacement of gingival tissues, especially for crown and bridge impressions, were mechanical displacement	20	40
2	Mechanical displacement refers to physically moving the gingival tissues aside from the tooth/tooth preparation margins to allow for visualization and access for treatment	43	86
3	In many cases, the materials used for gingival retraction can be used by themselves or in combination with other materials and techniques.	37	74
4	Among the most popular methods of gingival displacement is the use of gingival retraction cord.	45	90
5	Gingival retraction cords can be woven, braided or twisted in a variety of configurations to provide for different diameters and thicknesses.	44	88
6	The choice of gingival retraction cord has proven itself to be one of personal preference by the clinician.	48	96
7	When handling gingival retraction cord one should use latex-free gloves.	44	88
8	Indirect latex contamination can have an inhibitory effect on the setting of vinyl polysiloxane impressions materials. This is especially critical in the gingival sulcus, where a minimal amount of light body is placed as an incomplete cure may result in gingival tears of the impression materials.	22	44
9	Clinician preference to braided cords relates to their tight and consistent weave	43	86
10	Knitted cords have increased in popularity. Knitted cords when saturated with astringents and when placed in the gingival sulcus expand creating a physical effect of enlarging the sulcus for access for impressions or to displace the gingival tissues when placing direct restorative materials.	45	90
11	Mechanical displacement of gingival tissues with gingival retraction cords, one would be remiss if there was no mention of retraction cord placement, packing instruments.	9	18
12	Within the Mechanic-chemical methods a variety of chemical solutions and gels have been recommended for use with gingival retraction cords because of the properties as drugs to act as an astringent or haemostatic agent.1	41	82
13	When deciding which technique to use with gingival retraction cord, it is important to evaluate the health of the gingiva and the depth of the gingival sulcus.	24	48
14	In most cases, gingival retraction cord is the most effective method for retracting tissue to the depth of the sulcus.	39	78
15	Unfortunately, many times on the day of the tooth preparation, gingival bleeding is difficult to control or when packing a cord into the sulcus, the tissues start to bleed making impression difficult or impossible.	48	96
16	For this reason a new class of gingival retraction materials have been introduced. These cordless retraction materials, e.g, Expasyl (Kerr); Racegel (Septodont) Traxodent (Premier); GingiTrac (Centrix) provide for excellent hemostasis and some gingival retraction.	16	32
17	When there is minimal sulcus depth, the clinician is limited in many cases to placing only a single cord.	38	76
18	When possible, recommendations for improved gingival retraction with cord include use of a double cord technique where a thin cord is placed flush in the sulcus, followed by a wider diameter cord.	49	98
19	Both braided and knitted cords can be used with this technique. It is advisable to use a chemical astringent-haemostatic agent in combination with the gingival retraction cord.	39	78
20	There are a variety of techniques and materials that allow the clinician to manage the gingival tissues during restoration and when making an impression. These include gingival retraction cords, chemical reagents, electro surgery, laser tissue sculpting, copper tube impressions, hydraulic impressions, and non-invasive, a traumatic displacement/haemostatic materials.	37	74

Mean Score concerning the level of knowledge of the Novice Dental Staff knowledge about the management of Gingival Tissues at within the study setting was (73.1%).

4. Discussion

The response rate to the current research was excellent, suggesting that this was an area of importance for prothotodontic staff. In this research, more than two third of the Novice Dental Staff were replied that there was a high level of knowledge about the Management of Gingival Tissues the compared to a study conducted by Ciavarelli, Figlock & Sengupta who studied the factors in aviation of the staff awareness in relation to methods of Management of Gingival Tissues it revealed that the hospital staff reported (46%) of the Novice Dental Staff. Moreover, In Saudi Arabia, it was reported that there was a lack of skills in relation to Management of Gingival Tissues are a common among women and is followed by several complications. The aim of this study was determine the prevalence and factors influencing prevention of Gingival Tissues. A cross-sectional study was conducted among 166 female students in Shadegan city, Iran; which was randomly selected with the proportional to size among different girls high school at Shadegan city for participation in this study. A structured questionnaire was applied for collecting data and data were analyzed by SPSS version 20 using bivariate correlations and logistic regression statistical tests. Almost 22.3% of the participants had history of experience Management of Gingival Tissues at last one in lifelong. The best predictor for Management of Gingival Tissues was perceived susceptibility with odds ratio estimate of 0.810 [95% CI: 0.664, 0.987]. Based on our result, it seems that designing and implementation of educational programs to increase susceptibility about chance of getting Management of Gingival Tissues among the female students.

Prevalence of knowledge about the Management of Gingival Tissues between women is high; in this regard, Eriksson et al in their study reported 29.6% of women were diagnosed as having of disease of Gingival Tissues at least one. Furthermore, Sorto et al reported the disease of Gingival Tissues incidence among the women in their study was of 35.8%. Studies showed the prevalence of disease of Gingival Tissues in different parts of the world, which made it necessary to determine and control its predisposing factors. Along this, personal health behaviors were considered as the major predisposing factors .

On the other hand, studies on designing education programs showed that the most effective educational programs were based on theory-based approaches rooted in behavior change patterns. The very first step to plan an education program is to choose a proper pattern or theory in health education while effective health education directly depends on the dominance on using best theories and proper approaches in each event. Several studies, also, reported that it was essential to focus on mental factors in health education comprehensive preventive programs as mediating and predicators of behavior; as the result health care providers should be aware of various effective methods of management of Gingival Tissues on fulfilling the area of prevention and health improvement among the dentists specially the novice staff.

5. Conclusions

The current research aimed to assess the level of knowledge of the Novice Dental Staff knowledge towards the methods of management of Gingival Tissues. Looking forwards prevention strategies for improving the management of Gingival Tissues. The response rate to the current research was approximately high, suggesting that this was an area of importance for Dental staff. In this research, more than two third of the Novice Dental Staff were replied that there was a high level of knowledge of knowledge of the Novice Dental Staff knowledge towards the methods of management of Gingival Tissues.

The current study recommends utilization of continuous educational measures to enhance the dental staff to increase their knowledge towards the methods of of knowledge of the Novice Dental Staff knowledge towards the methods of management of Gingival Tissues.. Furthermore applying performance feedback and increased availability of specialist of knowledge of the Novice Dental Staff knowledge towards the methods of management of Gingival Tissues..

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