ISSN- O: 2458 - 868X, ISSN–P: 2458 – 8687
Index Copernicus Value: 49. 23

International Journal of Medical Science and Innovative Research (IJMSIR)
IJMSIR : A Medical Publication Hub
Available Online at: www.ijmsir.com
Volume – 3, Issue –3, May - 2018, Page No. : 222 – 231

A Survey To Assess The Difficulties Faced By Dental Students During The Clinical Procedures, While Making Complete Denture Prosthesis.

Dr. T.Ashish[1], Post Graduate Student, A.B Shetty Memorial Institute of Dental Sciences, Mangalore.
Dr. Bharathraj Shetty[2], Department of prosthodontics, A.B Shetty Memorial Institute of Dental Sciences, Mangalore.
Prof. (Dr.) Chethan Hegde[3], Head of Department, Department of Prosthodontics, A.B Shetty Memorial Institute of Dental Sciences, Mangalore

Correspondence Author: Dr. T.Ashish , Post Graduate Student, A.B Shetty Memorial Institute of Dental Sciences, Mangalore.

Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

This clinical survey deals with the various difficulties faced by the dental students during the execution of clinical procedures of complete denture prosthesis. The questionnaire survey assessed the students, using the Likert scale for all who were in their clinical phase of under graduation, including the house surgeons and the post graduation students of the department of prosthodontics were surveyed. The aim of this survey was to analyze and to find the various difficulties faced by the dental students during the clinical procedures, while making complete denture so that the root cause of difficulty may be understood and eradicated for a better learning and better clinical grasp for all.

Keywords- Complete denture prosthesis, Likert difficulty scale.

Introduction

Complete edentulism is defined as the state of loss of all the permanent teeth, leading to a condition known as edentulousness. The loss of teeth can be attributed to biological factors such as dental caries, trauma, periodontal disease and also non-biological factors, like poor access to dental care by the patient. One of the treatment modality to treat an edentulous patient is by providing the patient with complete denture prosthesis. Complete denture fabrication requires not only proper clinical skills but also knowledge by the clinician, to execute and fabricate perfect dentures for completely edentulous patients. There are various clinical procedures involved, prior to fabrication and final insertion of a complete denture in a patient. During the execution of such clinical procedures, the clinician may find certain clinical procedures difficult.

The need for this epidemiological survey is to evaluate and find which all clinical procedures clinicians find difficult and also to assess the level of difficulty being faced by them.

Review of Literature

- In a study conducted it was observed, the choice of an impression material for a particular situation depends on the treatment being provided, operator preference and so on. Even with the introduction of more advanced and more accurate rubber base impression materials,

irreversible hydrocolloid impression materials have stood the test of time.[1]

• In a study conducted on systematic review of impression technique for conventional complete denture, it was concluded the success of complete dentures largely depends on accuracy of impression. Accurate impression needs a thorough understanding of anatomy, physiology of supporting structures, properties and manipulation of materials. This study presented a wide range of materials and techniques are available for different situations. Based on the particular condition, dentist needs to select material and technique of impression for success of complete denture therapy.[2]

• In a study conducted, it was observed the location and preparation of the posterior palatal seal is frequently neglected procedure. This seal contributes significantly to the retention of a maxillary complete denture. Hundreds of dentures have failed due to the improper establishment of the distal limit and to an improper posterior palatal seal. Its location and preparation on the master cast are often done by the dentist or dental technician without reference to anatomical landmarks of the mouth. This study aims toward rationale and importance of posterior palatal seal, anatomical reference landmarks, functions, methods to record and discusses various problems associated with recording posterior palatal seal.[3]

• A study was conducted and it emphasized, at how carefully prescribed special trays can be helpful in everyday dental practice. Guidelines are suggested for the design of custom trays, that will, hopefully, lead to improvements in the quality of working impressions.[4]

• In a study conducted, it was concluded definition of centric relation has evolved over the years. With greater understanding of the mandibular movements the concept of antero-superior position of the head of the condyle may change again in future. Definition of centric relation needs to be clinically oriented, to lessen the confusion and controversies, by eliminating clinically invisible parts from the definition. The clinician can be confident about his centric relation recording and understanding which in turn shall be helpful in his ability to plan several treatment procedures[5]

• In a study conducted, it was attempted to evaluate the efficacy, consistency and relative accuracy of the various methods used to record centric jaw relations. There are various techniques to record centric jaw relation namely- Intra oral graphic tracing , Extra oral gothic arch tracing, Nick and Notch method Mush bite technique. The centric relation is a repeatable and recordable relation which remains constant throughout life and an accurate recording of maxillomandibular relation plays a pivotal role in the success of the complete denture rehabilitation.[6]

• In a study conducted on occlusal plane location in edentulous patients, it was observed, occlusal plane orientation is an important factor in the construction of a complete denture. Occlusal plane could be oriented using landmarks in the mandibular arch as well as in the maxillary arch. In the mandibular arch there are few landmarks which could be used to orient the occlusal plane like the retromolar pad, corner of the lips (lower lip length) whereas the maxillary arch has a number of landmarks, of which the ala-tragal line is the most commonly used and the same being the most controversial.[7]

• In a study conducted, emphasis was laid down towards different factors in influencing selection and arrangement of teeth for complete denture prosthesis to enhance esthetics as esthetics have become increasingly important

in the practice of modern prosthetic rehabilitation and are synonymous with a natural, harmonious appearance.[8]

- In a study conducted, particular attention was drawn to guidelines on the selection of teeth for complete dentures. Factors influencing selection of teeth were discussed and presented.[9]
- In a study conducted on the science of anterior teeth selection for a completely edentulous patient it reviewed, the evolution of concepts for teeth selection and the recent techniques employed for selecting anterior teeth for complete dentures.[10]

- In a study on the esthetics considerations in the selection of teeth for complete denture patients an attempt had been made to briefly describe the various methods advocated in the literature and to reach a practical method. And for the sake of clarity and simplicity, the matter had been dealt with deferent aspects of geometrical analysis of face form, arch form, facial profile and other parameters like age, sex and personality of the patients.[11]

- In a study conducted on trial dentures, insertion of processed dentures and review of complete dentures has mentioned checklists to assist the practitioner in verifying the acceptability/non-acceptability of complete dentures at trial insertion and insertion visits. The relative roles of clinician, technician and patient have also been discussed.[12]

Aims and Objectives of the Study

To assess the difficulties faced by dental students during clinical procedures, while making complete denture prosthesis.

Materials and Methods

Sample selection

The study sample consisted of dental students (undergraduate students- in their final year of study, house surgeons) and post graduate students from the department of prosthodontics.

Inclusion criteria:

1. Subjects who have basic clinical knowledge of complete denture prosthesis.
2. Subjects who belong to the following class groups- undergraduate students (final years & house surgeons) and post graduate students (perusing masters in prosthodontics)

Exclusion criteria: Subjects who have not started with the clinical complete denture procedures

Methodology

The information for survey was collected with the help of a questionnaire. The questionnaire had comprised of questions related only to the clinical steps pertaining to the execution of complete denture prosthesis. Subjects were evaluated for the various difficulties faced by them during these clinical procedures, for the execution of complete dentures (which was done on the basis of the questionnaire) and also the level of difficulty faced by them was evaluated by asking the subjects to mark their difficulty level and to assess the predicament, the Likert difficulty scale was used.

Likert difficulty scale :

Level of difficulty-

1- very difficult

2- Difficult

3- Neutral

4- Easy

5- Very easy

Results

Table 1- Difficulty levels faced by students for the Selection of stock tray for making primary impression

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question I	1	0	1(1.3%)	0	1(0.5%)	0.06(NS)
	2	1(1.0%)	5(6.5%)	1(3.7%)	7(3.5%)	
	3	46(46.9%)	31(40.3%)	7(25.9%)	84(41.6%)	
	4	47(48.0%)	31(40.3%)	16(59.3%)	94(46.5%)	
	5	4(4.1%)	9(11.7%)	3(11.1%)	16(7.9%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 1 depicts the difficulty levels faced by all the students, in which it has been found that 48% of the final year students found selection of stock tray for making primary impression, easy whereas 40.3% of the house surgeons found it to be in between difficult to neutral level of difficulty and 59.3% of the post graduate students also found it to be easy. These values prove to be statistically non significant with a p-value of 0.06

Table 2- Difficulty levels faced by students for making the primary impression.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question II	1	1(1.0%)	0	0	1(0.5%)	0.06(NS)
	2	16(16.3%)	8(10.4%)	1(3.7%)	25(12.4%)	
	3	38(38.8%)	34(44.2%)	10(37.0%)	82(40.6%)	
	4	43(43.9%)	34(44.2%)	13(48.1%)	90(44.6%)	
	5	0	1(1.3%)	3(11.1%)	4(2.0%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 2 depicts the level of difficulty faced by all the students, in which it has been found that 43.9% of the final year students found making the primary impression, easy whereas 44.2% of the house surgeons also found it to be between difficult to neutral level of difficulty and 48.1% of the post graduate students found it to be easy as well. These values prove to be statistically non significant with a p-value of 0.06.

Table 3- Difficulty levels faced by students during execution of peripheral tracing.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question III	1	1(1.0%)	1(1.3%)	0	2(1.0%)	0.54 (NS)
	2	25(25.5%)	20(26.0%)	8(29.6%)	53(26.2%)	
	3	53(54.1%)	34(44.2%)	12(44.4%)	99(49.0%)	
	4	19(19.4%)	19(24.7%)	6(22.2%)	44(21.8%)	
	5	0	3(3.9%)	1(3.7%)	4(2.0%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 3 depicts the level of difficulty faced by all the students, in which it has been found that 54.1% of the final year students found execution of peripheral tracing to be of Neutral level of difficulty, whereas 44.2% of the house surgeons found it to be of neutral level of difficulty aswell and 44.4% of the post graduate students also found it to be neutral. These values prove to be statistically non significant with a p-value of 0.54

Table 4- Difficulty levels faced by students during recording of the posterior palatal seal area.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question IV	1	2(2.0%)	1(1.3%)	2(7.4%)	5(2.5%)	0.43(NS)
	2	41(41.8%)	26(33.8%)	8(29.6%)	75(37.1%)	
	3	40(40.8%)	35(45.5%)	10(37.0%)	85(42.1%)	
	4	15(15.3%)	14(18.2%)	7(25.9%)	36(17.8%)	
	5	0	1(1.3%)	0	1(0.5%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 4 depicts the level of difficulty faced by all the students, in which it has been found that 41.8% of the final year students found recording of posterior palatal seal area to be of difficult, whereas 45.5% of the house surgeons found it to be of neutral level of difficulty and 37.0% of the post graduate students also found it to be neutral. These values prove to be statistically non significant with a p-value of 0.43.

Table 5 - Difficulty levels faced by students for achieving appropriate extension of the custom tray.

Difficulty Level		Class			Total	p-value
		Final yr	Intern	Pg		
Question V	1	3(3.1%)	3(3.9%)	0	6(3.0%)	0.22(NS)
	2	21(21.4%)	15(19.5%)	6(22.2%)	42(20.8%)	
	3	46(46.9%)	34(44.2%)	10(37.0%)	90(44.6%)	
	4	28(28.6%)	21(27.3%)	8(29.6%)	57(28.2%)	
	5	0	4(5.2%)	3(11.1%)	7(3.5%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 5 depicts the level of difficulty faced by all the students, in which it has been found that 46.9% of the final year students found achieving appropriate extension of the custom tray to be of neutral level of difficulty, whereas 44.2% of the house surgeons also found it to be of neutral level of difficulty and 37.0% of the post graduate students also found it to be neutral level of difficulty as well. These values prove to be statistically non significant with a p-value of 0.22

Table 6- Difficulty levels faced by students for manipulation of zinc oxide eugenol material ,for making secondary impression.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question VI	1	1(1.0%)	1(1.3%)	0	2(1.0%)	0.005*
	2	17(17.3%)	15(19.5%)	3(11.1%)	35(17.3%)	
	3	52(53.1%)	34(44.2%)	5(18.5%)	91(45.0%)	
	4	26(26.5%)	23(29.9%)	14(51.9%)	63(31.2%)	
	5	2(2.0%)	4(5.2%)	5(18.5%)	11(5.4%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 6 depicts the level of difficulty faced by all the students, in which it has been found that 53.1 % of the final year students found manipulation of zinc oxide eugenol material for making secondary impression,to be of neutral level of difficulty, whereas 44.2% of the house surgeons also found it to be of neutral level of difficulty whereas 51.9% of the post graduate students found it to be easy. These values prove to be statistically significant with a p-value of 0.005

Table 7- Difficulty levels faced by students for achieving a uniform thickness for the wash impression.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question VII	1	1(1.0%)	2(2.6%)	0	3(1.5%)	0.37(NS)
	2	27(27.6%)	23(29.9%)	7(25.9%)	57(28.2%)	
	3	51(52.0%)	37(48.1%)	11(40.7%)	99(49.0%)	
	4	19(19.4%)	13(16.9%)	7(25.9%)	39(19.3%)	
	5	0	2(2.6%)	2(7.4%)	4(2.0%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 7 depicts the level of difficulty faced by all the students, in which it has been found that 52.0% of the final year students found achieving a uniform thickness of the wash impression, to be of Neutral level of difficulty, whereas 48.1% of the house surgeons also found it to be of neutral level of difficulty and 40.7% of the post graduate students found it to be of neutral level of difficulty as well. These values prove to be statistically non significant with a p-value of 0.37

Table 8 - Difficulty levels faced by students for Maxillary occlusal plane assessment using a fox plane, during jaw relation.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question VIII	1	4(4.1%)	3(3.9%)	2(7.4%)	9(4.5%	0.03*
	2	21(21.4%)	20(26.0%)	4(14.8%)	45(22.3%	
	3	48(49.0%)	31(40.3%)	8(29.6%)	87(43.1%	
	4	25(25.5%)	22(28.6%)	9(33.3%)	56(27.7%	
	5	0	1(1.3%)	4(14.8%)	5(2.5%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 8 depicts the level of difficulty faced by all the students, in which it has been found that 49.0% of the final year students found maxillary occlusal plane assessment using a fox plane during jaw relation,to be of neutral level of difficulty, whereas 40.3% of the house surgeons also found it to be of neutral level of difficulty whereas 33.3% of the post graduate students found it to be easy. These values prove to be statistically significant with a p-value of 0.03

Table 9 - Difficulty levels faced by students for establishing adequate freeway space, during jaw relation.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question IX	1	2(2.0%)	2(2.6%)	1(3.7%)	5(2.5%)	0.08(NS)
	2	22(22.4%)	32(41.6%)	9(33.3%)	63(31.2%)	
	3	51(52.0%)	32(41.6%)	8(29.6%)	91(45.0%)	
	4	16(16.3%)	9(11.7%)	7(25.9%)	32(15.8%)	
	5	7(7.1%)	2(92.6%)	2(7.4%)	11(5.4%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 9 depicts the level of difficulty faced by all the students, in which it has been found that 52.0% of the final year students found establishing adequate freeway space during jaw relation,to be of neutral level of difficulty, whereas 41.6% of the house surgeons found it to be in between of difficult to neutral level of difficulty whereas 33.3% of the post graduate students found it to be difficult. These values prove to be statistically non significant with a p-value of 0.08

Table 10- Difficulty levels faced by students while recording of centric relation.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question X	1	4(4.1%)	5(6.5%)	5(18.5%)	14(6.9%0	0.12(NS)
	2	31(31.6%)	32(41.6%)	8(29.6%)	71(35.1%)	
	3	43(43.9%)	32(41.6%)	9(33.3%)	84(41.6%)	
	4	19(19.4%)	7(9.1%)	4(14.8%)	30(14.9%)	
	5	1(1.0%)	1(1.3%)	1(3.7%)	3(1.5%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 10 depicts the level of difficulty faced by all the students, in which it has been found that 43.9% of the final year students found recording of centric relation to be of neutral level of difficulty, whereas 41.6% of the house surgeons found it to be in between of difficult to neutral level of difficulty whereas 33.3% of the post graduate students found it to be again neutral. These values prove to be statistically non significant with a p-value of 0.12

Table 11- Difficulty levels faced by students while selection of artificial teeth for complete denture prosthesis.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question XI	1	3(3.1%)	0.0%	1(3.7%)	4(2.0%)	0.34 (NS)
	2	16(16.3%)	10(13.0%)	2(7.4%)	28(13.9%)	
	3	49(50.0%)	33(42.9%)	15(55.6%)	97(48.0%)	
	4	27(27.6%)	31(40.3%)	7(25.9%)	65(32.2%)	
	5	3(3.1%)	3(3.9%)	2(7.4%)	8(4.0%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 11 depicts the level of difficulty faced by all the students, in which it has been found that 50.0% of the final year students found selection of artificial teeth for complete prosthesis,to be of neutral level of difficulty, whereas 42.9% of the house surgeons also found it to be of neutral level of difficulty and 55.6% of the post graduate students found it to be of neutral level of difficulty as well. These values prove to be statistically non significant with a p-value of 0.34

Table 12- Difficulty levels faced by students for achieving desirable aesthetics, during trial of the denture

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question XII	1	1(1.0%)	1(1.3%)	0.0%	2(1.0%)	0.88(NS)
	2	24(24.5%)	17(22.1%)	4(14.8%)	45(22.3%0	
	3	46(46.9%)	40(51.9%)	17(63.0%)	103(51.0%)	
	4	25(25.5%)	18(23.4%)	5(18.5%)	48(23.8%)	
	5	2(2.0%)	1(1.3%)	1(3.7%)	4(2.0%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 12 depicts the level of difficulty faced by all the students, in which it has been found that46.9% of the final year students found achieving desirable aesthetics during trial of the denture, to be of Neutral level of difficulty, whereas 51.9% of the house surgeons also found it to be of neutral level of difficulty and 63.0% of the post graduate students found it to be of neutral level of difficulty as well. These values prove to be statistically non significant with a p-value of 0.88

Table 13 - Difficulty levels faced by students for achieving proper occlusal contacts, on final insertion of the denture.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question XIII	1	2(2.0%)	3(3.9%)	2(7.4%)	7(3.5%)	0.46(NS)
	2	26(26.5%)	22(28.6%)	7(25.9%)	55(27.2%)	
	3	52(53.1%)	34(44.2%)	14(51.9%)	100(49.5%)	
	4	18(18.4%)	16(20.8%)	3(11.1%)	37(18.3%)	
	5	0	2(2.6%)	1(3.7%)	3(1.5%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 13 depicts the level of difficulty faced by all the students, in which it has been found that 53.1% of the final year students found achieving proper occlusal contacts, on final insertion of the denture to be of Neutral level of difficulty, whereas 44.2% of the house surgeons also found it to be of neutral level of difficulty and 51.9% of the post graduate students found it to be of neutral level of difficulty as well. These values prove to be statistically non significant with a p-value of 0.46

Table 14 - Difficulty levels faced by students for assessment of stability in the final denture.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question XIV	1	7(7.1%)	5(6.5%)	1(3.7%)	13(6.4%)	0.29(NS)
	2	27(27.6%)	19(24.7%)	3(11.1%)	49(24.3%)	
	3	50(51.0%)	37(48.1%)	14(51.9%)	101(50.0%)	
	4	14(14.3%)	14(18.2%	9(33.3%)	37(18.3%)	
	5	0	2(2.6%)	0	2(1.0%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 14 depicts the level of difficulty faced by all the students, in which it has been found that 51.0% of the final year students found assessment of stability, in the final denture, to be of Neutral level of difficulty, whereas 48.1% of the house surgeons also found it to be of neutral level of difficulty and 51.9% of the post graduate students found it to be of neutral level of difficulty as well. These values prove to be statistically non significant with a p-value of 0.29

Table 15 - Difficulty levels faced by students for assessment of retention in the final denture.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question XV	1	6(6.1%)	3(3.9%)	0	9(4.5%)	0.02*
	2	20(20.4%)	18(23.4%)	2(7.4%)	40(19.8%)	
	3	61(62.2%)	42(54.5%)	13(48.1%)	116(57.4%)	
	4	11(11.2%)	12(15.6%)	11(40.7%)	34(16.8%)	
	5	0	2(2.6%)	1(3.7%)	3(1.5%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 15 depicts the level of difficulty faced by all the students, in which it has been found that 62.2% of the final year students found assessment of retention in the final denture, to be of neutral level of difficulty, whereas 54.5% of the house surgeons also found it to be of neutral level of difficulty and 48.1% of the post graduate students found it to be of neutral level of difficulty as well. These values prove to be statistically significant with a p-value of 0.02.

Table 16 - Difficulty levels faced by students for assessment of proper extensions in the denture, on intra oral examination.

Difficulty Level		Class			Total	p-value
		Final year	Intern	PG		
Question XVI	1	6(6.1%)	3(3.9%)	0.0%	9(4.5%)	0.55(NS)
	2	24(24.5%)	17(22.1%)	8(29.6%)	49(24.3%)	
	3	57(58.2%)	42(54.5%)	15(55.6%)	114(56.4%)	
	4	11(11.2%)	14(18.2%)	3(11.1%)	28(13.9%)	
	5	0	1(1.3%)	1(3.7%)	2(1.0%)	

***P<0.05 statistically significant, p>0.05 Non significant, NS**

Table 16 depicts the level of difficulty faced by all the students, in which it has been found that 58.2% of the final year students found assessment of proper extensions in the denture, on intraoral examination, to be of neutral level of difficulty, whereas 54.5% of the house surgeons also found it to be of neutral level of difficulty and 55.6% of the post graduate students found it to be of neutral level

of difficulty as well. These values prove to be statistically non significant with a p-value of 0.55.

Discussion

According to the study conducted it is seen, majority of the final year students find the clinical procedure of 'Recording the posterior palatal seal' to be most difficult followed by 'Recording of centric relation' and 'Assessment of stability, in the final denture' and no level of difficulty was seen in 'Selection of stock tray for making primary impression'

The house surgeons in majority have reported the clinical procedure of 'Recording of centric relation 'to be most difficult followed by 'Establishing adequate freeway space, during jaw relation' and ' Recording of posterior palatal seal area'**.** And again the least amount of difficulty being faced during 'Selection of stock tray for making primary impression[2]

Whereas the postgraduate students found the execution of clinical procedure of 'Recording of centric relation' to be most difficult followed by 'Establishing adequate freeway space, during jaw relation' and 'Recording of posterior palatal seal area'. No difficulty/Least amount of difficulty had been reported again during 'Selection of stock tray for making primary impression'. Similar level of difficulty was faced by the final year students, house surgeons and post graduate students in the clinical procedures of 'Recording of centric relation' and Recording the posterior palatal seal'. Similarity in the difficulties faced, were also noticed in the class group of house surgeons and post graduate students in the clinical procedures of 'Establishing adequate freeway space, during jaw relation' , 'Recording of centric relation' and ' Recording of posterior palatal seal area'**.**

The concept of centric relation, itself over a period of time is not a very well understood procedure by the students. The concepts and the procedure itself to record the accurate centric relation is variable as there is no subjective or objective reliable method to record and evaluate and to assess the established jaw relation. Also a variation in jaw relation amongst patients and the patient's adaptation to habitual position, may be the reason why the students are finding this procedure difficult.

As projected in the results it is observed ,most of the score lie in the neutral level of difficulty and a few lie in both neutral and difficult range whereas a few also lie in the difficult level. This can be attributed that the procedures are manageable by the students and here it's noticed that with the progression in the academic class (final year to post graduation) there has been a frank decrease in the level of difficulty being faced in majority of the clinical steps. Though as seen, the difficulty has not been completely eliminated but this decrease can be related with the increase in knowledge and better understanding of the clinical procedure and the dental material being used and also by the skill attained by practice and experience.

The ease or difficulty of any particular dental clinical procedure is not only proportional to the understanding of the clinical procedure by the clinician and its proper way of execution but also the understanding of the dental material being used and understanding its properties are equally important. Not all the dental materials possess the same properties, hence the way of handling them also differs and failing to understand and work with which, arises an improper result/finish leading to the difficulty being faced by the clinicians.

Certain clinical procedures like Border molding/Peripheral tracing and recording of proper Centric relation have

found to be difficult by post graduate students also, as these procedures not only requires patient compliance but also the development of skill by the clinician which can be attained over a period of time, by practice, knowledge and also by understanding the properties of the dental material being used. The patient can also be made to understand the procedure and importance of the procedure prior to its execution, making the patient compliant, so that the patient may follow the instructions of the clinician with ease during the procedure at all time helping to decrease the difficulty level.

Conclusion and Summary

The result obtained in this study show the common difficulties faced by the dental students during the execution of clinical procedure of complete denture. Nevertheless, the conventional complete denture treatment modality is very commonly practiced and has proved its success and presence over a period of time in restoring the completely edentulous patient. Thorough understanding of the clinical procedures of conventional complete denture is important and executing them properly with sound knowledge of the dental material and the clinical procedure will decrease the imperfection and difficulty giving not only better results but also good patient satisfaction.

The selection procedure for the under graduation course (BDS) are mainly done on the congestive score, obtained in the entrance examination and never done on the basis of psychomotor skills. This is a demerit, as it just tests the academic knowledge and never the skills, the candidate is possessing, which are equally important in the field like dentistry. Hence to tackle such types of difficulties from the clinical point of view and to eliminate them right from the start, the examinations must assess the psychomotor skills along with congestive skills and the score and later must aim to develop the skills and knowledge further.

References

1. V V.Nandini, K V Venkatesh, KC Nair. Alginate impressions: A practical perspective. J Conserv Dent jan-mar2008; 11(1):37-41
2. Shubha Rao, R. Chowdhary, S. Mahoorkar. A Systematic Review of Impression Technique for Conventional Complete Denture. J Indian Prosthodont Soc june 2010; 10(2): 105-111
3. Shelly Goyal, Mukesh K Goyal, Dhanasekar Balkrishanan, Veena Hegde, Aparna I Narayana. The posterior palatal seal: Its rationale and importance: An overview. Eur J Prosthodont Restor Dent 2014; 2(2): 41-47
4. P W Smith, R Richmond & J F McCord. The design and use of special trays in prosthodontics: guidelines to improve clinical effectiveness. Br. Dent. J. 1999; 187: 423-426.
5. Palaskar JN, Murali R, Bansal S. Centric relation definition: a historical and contemporary prosthodontic perspective. J Indian Prosthodont Soc 2013Sep; 13(3): 149-54.
6. Dr C Sabarigirinathan, Dr K Vinayagavel, Dr C Gunasekar, Dr Vikas, Dr Rupkumar, Dr Jeyanthi Kumari. A Critical Evaluation of different methods of recording centric jaw relation of completely edentulous individuals - An InVivo Study. IJOART Dec2013; 2(12): 31-41.
7. Shetty S, Zargar NM, Shenoy K, Rekha V. Occlusal plane location in edentulous patients: a review. J Indian Prosthodont Soc2013Sep; 13(3): 142-8.
8. Prasad k, hegde c, kumar a. Selection and arrangement of teeth for esthetic complete denture prosthesis-an art and science. Guident. 2013 jan 1;6(2).
9. McCord JF, Grant AA. Prosthetics: Registration: Stage III–selection of teeth.Br Dent J.2000 Jun 24;188(12):660

10. Kumar MV, Ahila SC, Devi SS. The science of anterior teeth selection for a completely edentulous patient: a literature review. J Indian Prosthodont Soc 2011 Mar 1;11(1):7-13.
11. Ahmad N, Ahmed M, Jafri Z. Esthetic considerations in the selection of teeth for complete denture patients. A review. Annals of Dental specialty. 2013;1:4-7.
12. McCord JF, Grant AA. Prosthetics: Trial dentures, insertion of processed dentures and review of complete denzures. Br Dent J. 2000 Jul 8;189(1):4.
13. Yarapatineni R, Vilekar A, Kumar JP, Kumar GA, Aravind P, Kumar PA. Comparative evaluation of border molding, using two different techniques in maxillary edentulous arches-An in vivo study. J Int Oral Health2013 Dec;5(6):82.
14. McCord JF, Grant AA. Prosthetics: impression making. Br Dent J. 2000 May 13;188(9):484.
15. Shetty S, Nag PV, Shenoy KK. The selective pressure maxillary impression: A review of the techniques and presentation of an alternate custom tray design.J Indian Prosthodont Soc. 2007 Jan 1;7(1):8
16. Sahoo S, Singh D, Raghav D, Singh G, Sarin A, Kumar P. Systematic assessment of the various controversies, difficulties, and current trends in the reestablishment of lost occlusal planes in edentulous patients. Ann Med Health Sci Res. 2014;4(3):313-9.
17. Millet C, Jeannin C, Vincent B, Malquarti G. Report on the determination of occlusal vertical dimension and centric relation using swallowing in edentulous patients. J Oral Rehabil 2003 Nov 1;30(11):1118-22.
18. Winkler S.Essentials of complete denture prosthodontics;Delhi;A.I.T.B.S pulishers.2009