

## Awareness of Removable Prosthodontics on Clinical Experience of Dental Students - A Survey

Research Article

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## Abstract

A survey was conducted in saveetha dental college among clinical students. This survey was based on to find what are the difficulties the students are undergoing, and what are their preference of Prosthodontic treatment. Also to find their opinions on removable prosthodontics. The aim of the study is to estimate a survey of the removable prosthodontics clinical experience of dental students. A cross sectional study was conducted. This survey was questionnaire based. The sampling technique used was convenience sampling. The statistical analysis was performed using SPSS software. The independent Chi square test was performed to compare the variables, also chi square test was performed to find the mean for each question. Pre tested self administered questions were used as study instruments. From the questions asked, majority of the study population were aware on removable prosthodontics. 48% of the responded study population are Intern. 50% of the responded study population has better knowledge of prosthodontics. 73% of the responded study population has knowledge on removable prosthodontics. 34% of the study population are confident in performing RPD. And more than half of the study population (67%) are confident in performing implants.

**Conclusion:** From the study we can conclude that over 75% of the clinical dental students are well aware and have a likelihood towards the removable prosthodontics. But still they need more educational assessments on RPDs to further have confidence in performing the procedure. Also 25% are aware of RPDs but not sufficient knowledge, still there need to be some add on importance for RPDs in graduation curriculum and education curriculum.

**Keywords:** Fixed Prosthodontics; Implants; Prosthodontics; Removable Prosthodontics.

## Introduction

Prosthodontics is one of the twelve dental specialities, which is recognised by the american dental association (ADA) [8, 2]. ADA defines prosthodontics as “the dental speciality pertaining to the diagnosis, treatment planning, rehabilitation and maintenance of the oral function, comfort, appearance [7, 21] and health of patients with ethics associated with missing or deficient teeth or oral and maxillofacial tissues using biocompatible substitutes [15]. Removable prosthodontics is one of the procedures that are associated with Prosthodontics [5, 19]. Removable prosthodontics (RPDs) is concerned with replacing the teeth and soft tissue with a non-permanent prosthesis, which can be removed [9, 10]. RPD is

one of the implant methods in dentistry [18, 14]. Also removable prosthodontics are most preferred when compared to fixed prosthodontics in case of patients losing more than one tooth, it is due to the cost consumption where removable prosthodontics are cheaper compared to the fixed Prosthodontics [11, 16]. Basically this survey was conducted to compare, find and assume how the clinical dental students are managing the problems and what they require on their aspects in consideration of the removable Prosthodontics [17, 4].

## Materials and Methods

A cross sectional study was conducted among dental students in

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saveetha dental college. The institutional ethical committee approved the study. The study sample size of approximately 100. The sample technique used was convenience sampling. After obtaining ethical clearance, permission to conduct a survey was obtained from the university. To maintain liable privacy of act, we ensured not to get information on names or contact information. This study was conducted with all clinical students in the university, to get an versaitail result. A pre tested, self administered questionnaire was used as the study instrument, it was developed from the help of pre published literature.

The statistical analysis was performed using the SPSS software. The independent t test was performed to compare the variables. The data collection is done in google forms, the collected data has been uploaded into MS excel sheets or google sheets and the responses are converted into scoring. A p value of <0.05 was considered as statistically significant. A chi square test is done to estimate the mean p value. (p)=0.01-p<0.05.

Questions:

1. Do you have better knowledge of prosthodontics?
2. Are you aware of removable prosthodontics?
3. Are you an experienced clinical practitioner?
4. Have you done removable prosthodontics before?
5. How confident do you feel when performing removable prosthodontics on patients?
6. How frequently do you attend patients with removable prosthodontics?
7. Do you recommend giving more importance for teaching RPDs

8. Do you find difficulty in explaining procedures for RPDs to patients?
9. Do you find difficulty in convincing patients to undergo RPDs Procedure?
10. Do you find difficulty in handling removable prosthodontics patients?
11. Are you confident enough in restoring implants?
12. What is your most preferred choice of restorative implants?

Results and Discussion

In the study, 58% of the responded study population are male, and 42% are female. [Figure:1]. The clinical students are grouped into 3 different groups, as BDS (3rd-4th year), Intern and PGs. From the 100 study population 36% responded study population BDS, 48% responded study population are Intern, 16% responded study population are PGs. [Figure:2]

50% of the study population responded- Yes for having better knowledge of prosthodontics (p) = 0.01-0.846<0.05 statistically significant [Figure:3]. 73% of the study population responded- Yes are aware of removable prosthodontics, (p)= 0.01-0.587<0.05 statistically significant [Figure:4]. 69% of the study population responded- Yes for experienced clinical practitioners, (p)= 0.01-0.402<0.05 statistically significant [Figure:5]. 73% of the study population responded- Yes that they have done removable prosthodontics before, (p)= 0.01-0.519<0.05 statistically significant [Figure:6]. 34% of the study population responded- Confident in performing removable prosthodontics on patients, (p)= 0.01-

Figure 1. This Bar graph is showing percentage distribution for Gender. X-axis represents Different gender and Y-axis represents the percentage. 58% of the responded study population are Male and 42% of the responded study population are Females.

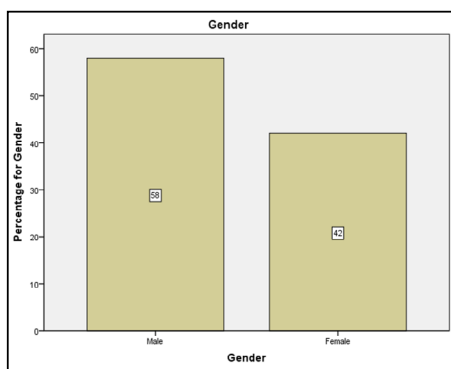


Figure 2. This Bar graph is showing percentage distribution for Year of study. X-axis represents Year of study and Y-axis represents Percentage. 36% of responded study population are 3rd-4th year, 48% responded study population are Intern and 16% responded population are PGs.

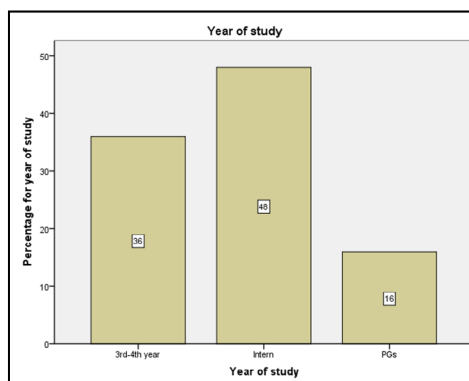


Figure 3. This pie chart represents the percentage distribution of having better knowledge of prosthodontics. Blue denotes Yes and Red denotes No. 50%(Blue) has responded Yes and 50%(Red) has responded No.

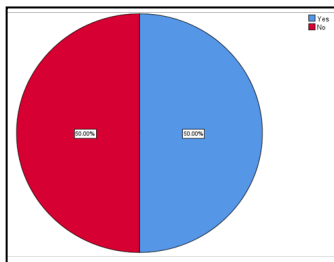


Figure 4. This pie chart represents the percentage distribution for awareness on removable prosthodontics. Blue denotes No and Red denotes Yes. 73%(blue) has responded Yes and 27%(red) has responded No.

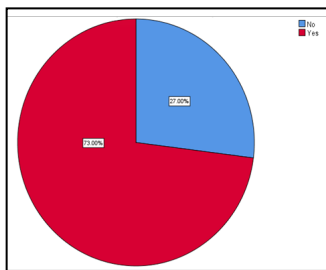


Figure 5. This pie chart represents the percentage distribution on experienced clinical practitioners. Blue denotes No and Red denotes Yes. 69%(blue) has responded Yes, 31%(red) has responded NO.

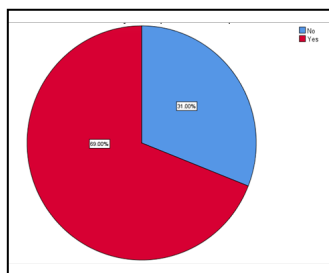


Figure 6. This pie chart represents the percentage distribution done on removable prosthodontics before. Blue denotes Yes and Red denotes No. 27%(blue) has responded Yes and 73%(red) has responded No.

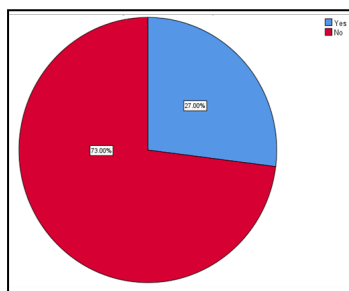
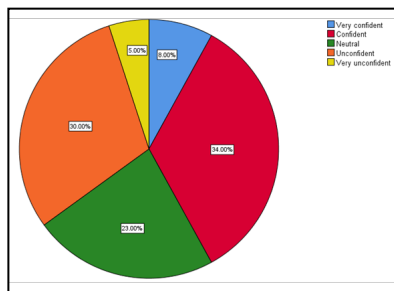


Figure 7. This pie chart represents the percentage distribution for confidence in performing RPDs on patients. Blue denotes very confident, Red denotes confident, Green denotes neutral, Orange denotes unconfident and Yellow denotes very unconfident. 8%(blue) has responded very confident, 34%(red) has responded confident, 23%(green) has responded Neutral, 30%(orange) has responded unconfident and 5%(yellow) has responded very unconfident.



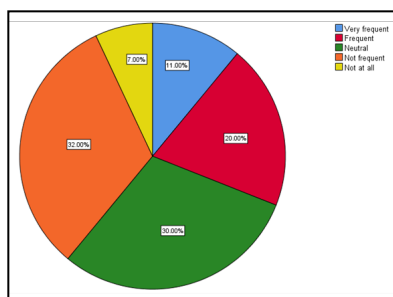
0.354<0.05 statistically significant [Figure:7]. 30% of the study population responded- Neutral for frequency of attending patients with removable prosthodontics, (p)= 0.01-0.165<0.05 statistically significant [Figure:8]. 64% of the study population responded- Yes for giving importance in teaching removable prosthodontics in graduation than other techniques, (p)=0.01-0.601<0.05 statistically significant [Figure:9]. 68% of the study population responded- Yes in finding difficulty in explaining procedure for removable prosthodontics to patients, (p)=0.01-0.516<0.05 statistically significant [Figure:10]. 73% of the study population responded- Yes in finding difficulty in convincing patients to undergo removable prosthodontics procedure, (p)=0.01-0.713<0.05 statistically significant [Figure:11]. 73% of the study population responded- Yes in finding difficulty in handling removable prosthodontics patients, (p)= 0.01-0.510<0.05 statistically significant [Figure:12]. 33% of the study population responded- Yes, confident enough in restoring implants, (p)=0.01-0.187<0.05 statistically significant [Figure:13]. 70% of the study population responded- RPD as their most preferred choice of restorative implants, (p)=0.01-0.730<0.05 statistically significant [Figure:14].

Removable prosthodontics is one of the major procedures in the field of prosthodontics, as well in the field of dentistry [3, 6]. Comparatively with fixed prosthodontics, removable prosthodontics are cheaper [20, 1]. Removable prosthodontics are considered as the most common implant in dentistry [12]. Most of the dental practitioners yet follow the removable prosthodontics, from the study we can consider 70% of the study population have answered RPD for their preferred choice of implant [8]. And even 70% of the study population responded that they are aware of the removable prosthodontics. Also 34% of the study population are confident enough in performing removable Prosthodontics [13]. There are also 2 more similar studies to be found which are in agreement with this study. From those two studies more than 50% of the responses are the same compared with this current study.

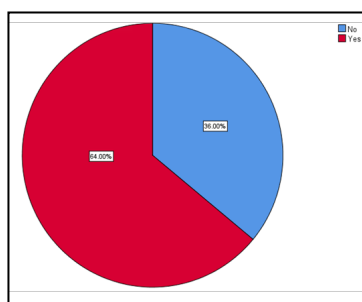
### Limitation

A limited number of study populations. Need to consider other universities clinical students' experience. Need to consider the number of outpatient counts. Need to consider graduated dental

**Figure 8.** This pie chart represents the percentage distribution for frequency of attending patients with RPDs. Blue denotes very frequent, Red denotes frequent, Green denotes Neutral, Orange denotes not frequent and Yellow denotes not at all. 11%(blue) has responded Very frequent, 20(red) has responded frequent, 30%(green) has responded neutral, 32%(orange) has responded not frequent and 7%(yellow) has responded not at all.



**Figure 9.** This pie chart represents the percentage distribution for recommending RPDs in graduation curriculum compared to other techniques. Blue denotes No and Red denotes Yes. 36%(blue) has responded No and 64%(red) has responded Yes.



**Figure 10.** This pie chart represents the percentage distribution for finding difficulty in explaining RPDs to patients. Blue denotes No and Red denotes Yes. 32%(blue) has responded No and 68%(red) has responded Yes.

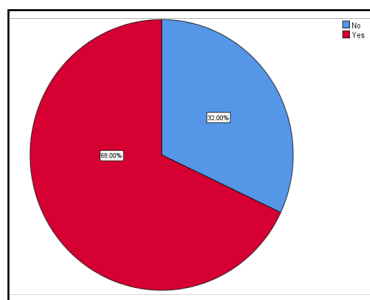


Figure 11. This pie chart represents the percentage distribution for finding difficulty in convincing patients to undergo RPDs procedure. Blue denotes No and Red denotes Yes. 27%(blue) has responded No and 73%(red) has responded Yes.

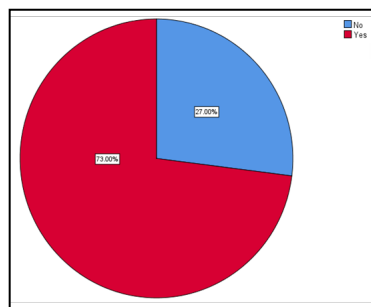


Figure 12. This pie chart represents the percentage distribution on finding difficulty in doing RPDs in patients. Blue denotes No and Red denotes Yes. 28%(blue) has responded NO and 72%(red) has responded Yes.

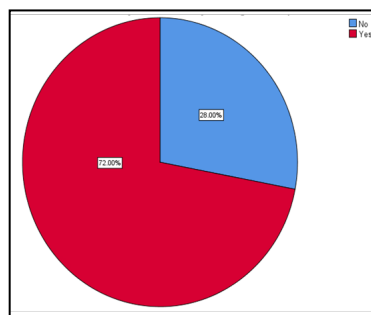


Figure 13. This pie chart represents the percentage distribution of confident enough is doing restorative procedures. Blue denotes Yes and Red denotes No. 33%(blue) has responded Yes and 67%(red) has responded No.

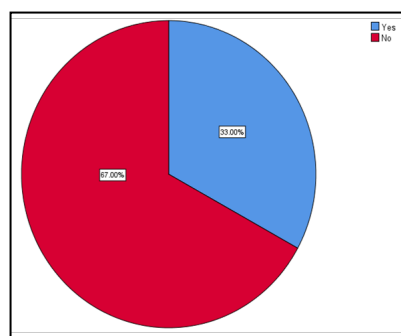
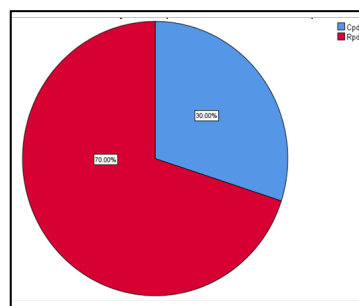


Figure 14. This pie chart represents the percentage distribution of most preferred choice of restorative implants. Blue denotes Cpd and Red denotes Rpd. 30%(blue) has responded Cpd and 70%(red) has responded Rpd.



practitioner opinions. Some have responded inappropriately.

### Future Scope

In future there will be a lot more importance for RPDs procedures, they will be given more importance in the graduation curriculum. These are basic implant techniques which will be taught in future generations. There is an importance for implants in dental curriculum.

### Conclusion

From the study we can conclude that over 75% of the clinical dental students are well aware and have a likelihood towards the removable prosthodontics. But still they need more educational assessments on RPDs to further have confidence in performing the procedure.

Also 25% are aware of RPDs but not sufficient knowledge, still there need to be some add on importance for RPDs in graduation

Figure 15. Bar graph representing association between year of study and knowledge of removable prosthodontics. X-axis represents year of study and Y-axis represents no.of study population. Blue denotes Yes and Green denotes No. Association between year of study and knowledge on prosthodontics was done using chi square test;  $p=0.033 < 0.05$  and indicating statistically significant. 50% of study population from 3rd-4th are aware, 55% of study population from Intern are aware and 45% of study population from PGs are aware.

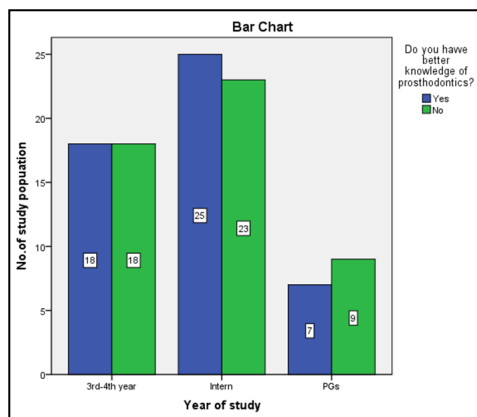


Figure 16. Bar graph representing association between year of study and knowledge on removable prosthodontics. X-axis represents year of study and Y-axis represents No.of study population. Blue denotes No and Green denotes Yes. Association between years of study and knowledge on removable prosthodontics was done using chi square test;  $p=0.036 < 0.05$  indicating statistically significant. 75% of study population from 3rd-4th year are aware of RPDs, 75% of study population from Intern are aware of RPDs and 60% of study population from PGs are aware of RPDs.

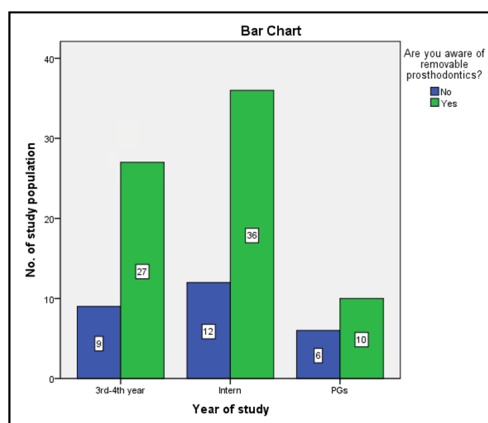


Figure 17. Bar graph representing association between year of study and confident in performing implants. X-axis represents year of study and Y-axis represents no.of study population. Blue denotes Yes and Green denotes No. Association between year of study and confidence in performing implants was done using chi square test;  $p=0.187 > 0.05$  indicating statistically insignificant. 60% of study population from 3rd-4th year are not confident, 80% of study population from Intern are not confident and 85% of study population from PGs are not confident.

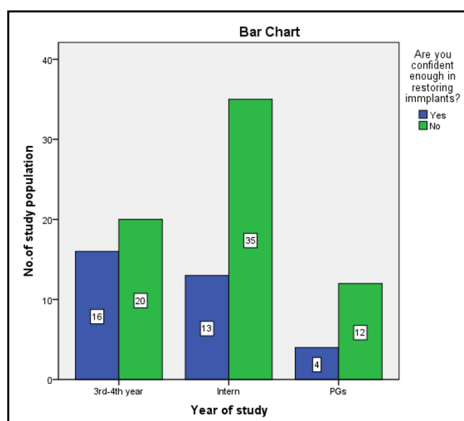
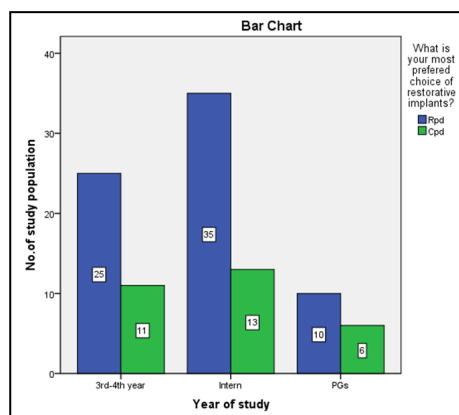


Figure 18. Bar graph representing association between year of study and preferred choice of implant. X-axis represents year of study and Y-axis represents No. of study population. Blue denotes Rpd and Green denotes Cpd. Association between years of study and preferred choice of implant was done using chi square test;  $p=0.047 < 0.05$  indicating statistically significant. 75% of study population from 3rd-4th year are preferring Rpd, 80% of study population from Intern are preferring Rpd and 60% of study population from PGs are preferring Rpd.



curriculum and education curriculum.

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