

Original Research Article

Assessment of dental students perception regarding prosthodontics as a career option

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ABSTRACT

Objectives: The objectives of this study were to assess knowledge, attitude, and awareness among dental predoctoral students for choosing prosthodontics as a career option in VSPM Dental College and Research Center, Nagpur.

Material and Methods: A cross-sectional study was done to assess with the help of a self-administered questionnaire, 100 participants to ascertain predoctoral dental student's awareness about choosing prosthodontics as a career option. Descriptive statistics was used to calculate frequencies, proportions, and unadjusted associations for each variable.

Results: Statistically, the amount of awareness of choosing prosthodontics as a career option was found to differ significantly from one another. However, it was found that female participants were considerably more willing to choose prosthodontics as a career option than male participants. Out of 100 participants, 65 participants were willing to choose prosthodontics, six were not willing to choose prosthodontics and 29 were not sure.

Conclusion: Participants in this sample were mostly willing to choose prosthodontics as a career option.

Keywords: Awareness, Prosthodontics, Predoctoral students, Edentulous patients

INTRODUCTION

After a decade of downward trends, the specialty of prosthodontics had recently experienced a period of dramatic growth with increased numbers of highly qualified applicants, number of educational programs, and enrollments.^[1] Recent studies have confirmed that by the year 2025, more than 30 million patients will be edentulous and there will be an increased need for prosthodontists to treat edentulism.^[2] The prosthodontics services are needed well in the 21st century because millions of people will become edentulous.^[3] The study considered the students' perception on the quality life of edentulous patients and motivation to choose prosthodontics as a career option.^[4] Hence, satisfaction of providing care was the most important factor for those who decided to pursue prosthodontics as a career option.^[5]

This study aims to assess the knowledge, attitude, and awareness in dental predoctoral students to choose prosthodontics as a career option.

Aim

The aim of this study was to assess knowledge, attitude, and awareness of dental predoctoral students for choosing prosthodontics as a specialty for their career option.

MATERIAL AND METHODS

A cross-sectional survey was done to evaluate awareness among dental predoctoral students for choosing prosthodontics as a career option at VSPM Dental College and Research Center, Nagpur, Maharashtra.

Data were collected from 100 dental predoctoral students. The convenience sampling method was used between the age group of 21–25 years. Postgraduates were excluded from the study. All the predoctoral students were informed about the study and were asked to fill the closed-ended questionnaire. The

questionnaire was divided into four sections:

1. Demographic details
2. Knowledge about prosthodontics

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- Awareness for choosing prosthodontics as a career option. Participants were given yes, no, and not sure and were asked to choose the best option suitable.
- Willingness to choose prosthodontics as a career option.

A pre-validated questionnaire through Google Form was conducted among 100 dental predoctoral students studying in VSPM Dental College and Research Center. The questionnaire included closed- and open-ended questions, which were sent through the WhatsApp application among predoctoral students.

Data collected from the study were analyzed in the Statistical Package for the Social Sciences-: IBM Statistical Package for the Social Sciences 2020 statistical software.

Inclusion criteria

Dental undergraduate interns were included in the study from VSPM Dental College and Research Center.

Exclusion criteria

1st years, 2nd years, 3rd years, and final years were excluded from the study from VSPM Dental College and Research Center.

RESULTS

Demographic details

Total 100 participants were included in the study. Among 100 participants, 78 (78%) were female and 22 (22%) were male [Table 1].

Knowledge about prosthodontics

According to Figure 1, 9% of participants believe that prosthodontics is a challenging and complex branch. About 62% of participants believe that prosthodontics give job satisfaction, money, and fame.

Awareness for choosing prosthodontics as a career option

Figure 2 shows that 52% of participants were aware that prosthodontics is a lucrative branch in terms of monetary aspects. According to Figure 3, 50% of participants are aware that in the upcoming years, more than 30 million people will become edentulous ($P < 0.05$). However, according to Figure 4, nine participants or 9% people were not aware that prosthodontists improve the quality life of a patient ($P > 0.05$). Similarly, 54% of participants were aware that think treatment options such as implant placements and full mouth rehabilitation motivate predoctoral students to

choose prosthodontics as a specialty branch ($P > 0.05$). About 71% of participants were aware that treatment options such as computer-aided design computer-aided manufacturing (CAD-CAM) management procedure, implant-supported prosthesis, and maxillofacial prosthetic rehabilitation will become routine practice in the coming years [Figures 5 and 6].

In addition, 40 participants says that they feel motivated by senior staff and postgraduates to choose prosthodontics as a specialty branch ($P < 0.05$) [Figure 7].

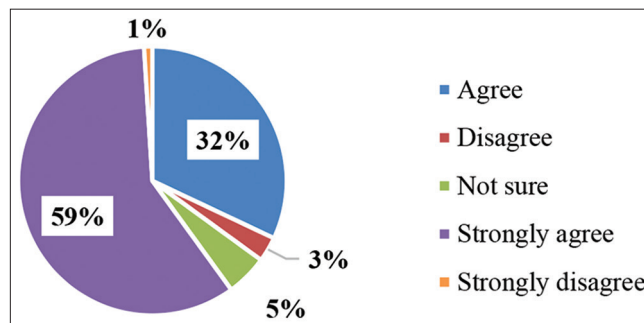


Figure 1: Prosthodontics is a complex and challenging branch to choose as a career option.

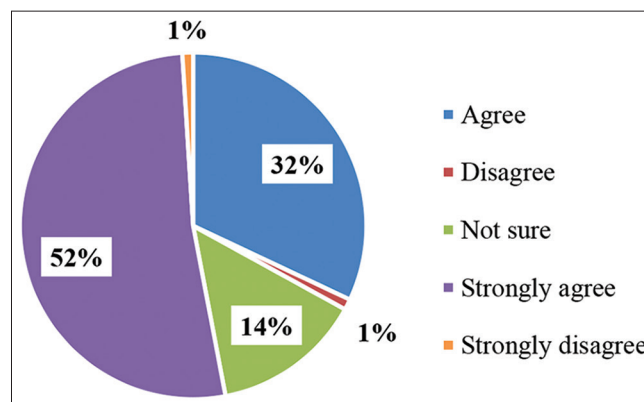


Figure 2: Prosthodontics is a lucrative branch in terms of monetary aspects.

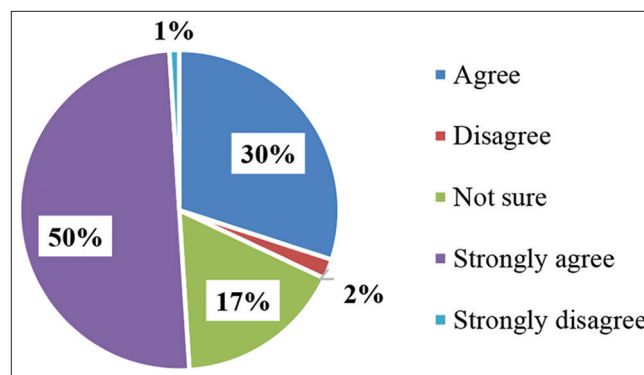


Figure 3: More than 30 million people will become edentulous which will increase the needs of prosthodontics in the upcoming years?

Table 1: Descriptive statistics.

	Frequency	Percent
Gender		
Female	78	78
Male	22	22

Willingness to choose prosthodontics as a career option

Predoctoral students were questioned about their willingness to choose prosthodontics as a career option to determine

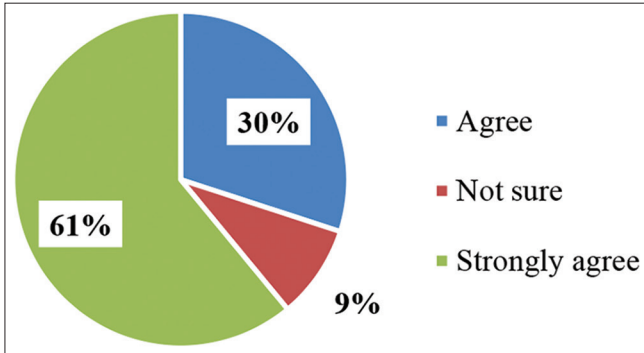


Figure 4: Do you feel prosthodontists improve the quality of life of a patient?

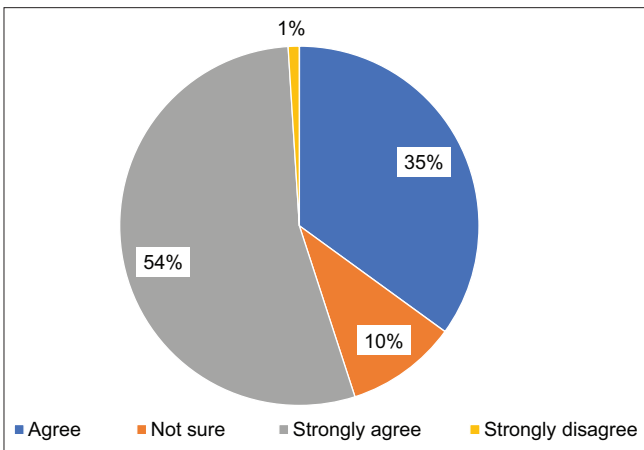


Figure 5: Do you think treatment options like implant placements and full mouth rehabilitation motivates predoctoral students to choose prosthodontics as a speciality branch?

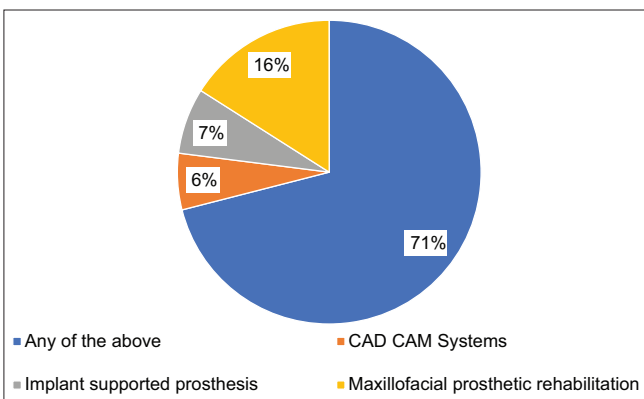


Figure 6: Which advanced treatment options are seen performing in prosthodontics branch apart from removable and complete dentures? CAD: Computer-aided design, CAM: Computer-aided manufacturing.

whether awareness about prosthodontics might motivate predoctoral students to choose prosthodontics. About 65% participants are motivated to choose prosthodontics as a career option ($P > 0.05$) [Figure 8].

DISCUSSION

The main objective of the study was to assess knowledge and awareness among the dental predoctoral students and their attitude toward choosing the prosthodontics branch for higher studies.

The outcome suggested that people of the VSPM DC RC were aware of the branch, new advancements in the treatment option, and also in terms of monetary aspects in the future era. According to the study, 50% of participants agreed to the fact that there will be an increased need of prosthodontists in the upcoming era as more than 30 million people will be becoming edentulous, so there is need of complete denture (fixed or removable).^[3,6,7] Out of 100 participants, 81% of people agreed that delivering complete dentures to the patient improves their appearance, functions, and overall quality life of a patient. Prosthodontics is often referred to as the “art and science” of dentistry. Students who appreciate both the technical and artistic aspects of dentistry, such as creating life like dental prostheses, may find this field particularly fulfilling. Dental predoctoral students choosing prosthodontics as a career option will have a unique journey ahead of them.

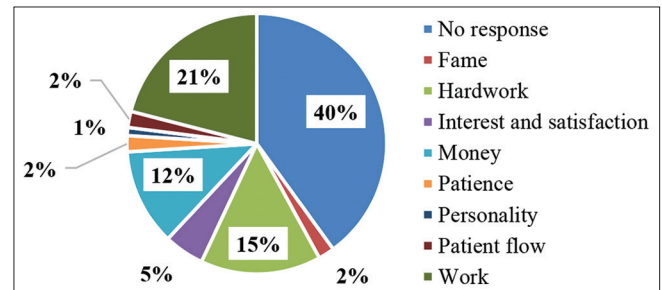


Figure 7: In what aspects do you feel motivated by senior staff and postgraduates to choose prosthodontics as a speciality branch?

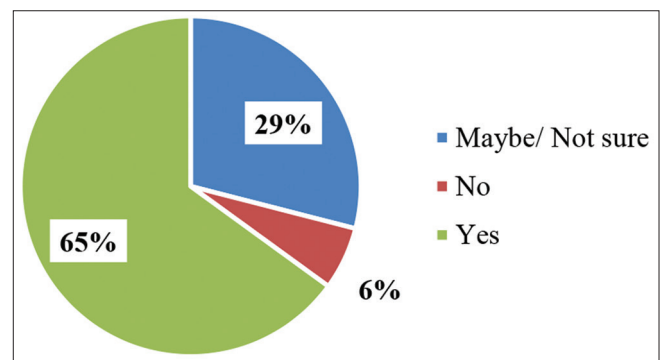


Figure 8: Are you motivated enough to choose prosthodontics as your speciality branch?.

Prosthodontics is a specialized field within dentistry that focuses on restoring and replacing damaged or missing teeth and oral structures. Prosthodontists play a crucial role in improving patients' quality of life by restoring their oral functions and appearance.

In contrast to other studies by Robert Wright, the results of the current studies show that participants are more knowledgeable for choosing prosthodontics as a career option (44% vs. 65%). This is so because this branch offers more treatment options and is made to treat the patients during the early years of graduation.^[4]

Also according to the study by Cooper, participants believed that more than 30 million people will become edentulous in the upcoming years (42% vs. 50%). Due to the increase in edentulism, there will be increased need of prosthodontists to restore the missing teeth and proper functions of the patient.^[1] In comparison to other studies by Douglass and Bosco, these study results showed that prosthodontics is a more interesting and satisfactory branch (4.5% vs. 5%). The awareness for choosing prosthodontics is less known to other participants of the study. The prosthodontic branch is satisfactory because it gives satisfaction to the doctors by restoring the missing teeth and oral functions of the edentulous patients.^[5,8]

According to this study, 15% of participants agreed to the fact that choosing prosthodontics requires interest, 2% agreed that it requires patience, 21% agreed that treatment done under prosthodontics makes them feel motivated to choose the branch and 12% participants are motivated to choose prosthodontics due to the monetary aspects. Changes in the knowledge, attitude, and awareness of dental predoctoral students are necessary for the successful interrogation of this study conducted.

The study by Jordan and Wrights showed that participants are aware about the fact that delivering complete dentures to the patients improves overall appearance, functions, and quality life of a patient (69% vs. 81%). This holds true because delivering complete dentures allows easy mastication, builds self-confidence about their appearance, and improves quality life of living.^[9,10]

According to the findings of study, internal motivation to change should be encouraged to treat edentulism rather than externally imposed motivation by others to choose prosthodontics. The effectiveness of the study and the application in their career after under graduation should be evaluated by more research. Furthermore, as this was 1 time survey, the student's responses may have changed after the completion of the internship.

As compared to the study done by Matlida *et al.*, the findings of this study also show that students mainly influenced by seeing and taught by their senior staff and patient satisfaction after getting proper treatment.^[11]

CONCLUSION

The participants in the study have a good understanding of prosthodontics branch for choosing as a career option. They

were aware of the scope and future about the branch and that it improves the quality of life of the edentulous patients. The staff should raise awareness about the prosthodontics branch and the need of prosthodontists in day-to-day life to treat edentulism and cosmetic problems to the general population. The Continuing Dental Education programs should be conducted for dental undergraduate students all over to motivate them to improve the quality life of a geriatric patient.

Ethical approval

The research/study approved by the Institutional Ethics Committee at VSPM Dental College and Research Center, number IEC/VSPMDCRC/14/2023, dated 13th June 2023.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

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Nil.

Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that they have used artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript or image creations.

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