



RESEARCH ARTICLE

KNOWLEDGE AND ATTITUDE OF DENTAL STUDENTS' PREPAREDNESS IN PERFORMING  
CLINICAL PROCEDURES AFTER A FIXED PROSTHODONTICS COURSE

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ABSTRACT

**Aim & Objective:** To assess the preparedness amongst the dental students of Saveetha Dental College in performing clinical procedures after a preclinical fixed prosthodontics course.

**Background:** During the undergraduate course of 5 years in dentistry, the students spend 3 years of their education getting trained in the clinic working with patients. But to be able to work in clinic with patients, there has to be a certain level of preparedness in the student. For this purpose, the students have preclinical courses in all the fields which they'll have to perform.

**Reason for the project:** Each college has a different protocol maintained and different amounts of information is dispensed to the student. This project is to see from the view of the students if they believe they have been given the correct amounts of exposure and practice before they can start working in clinic.

**Result :** The preparedness of the Saveetha Dental College students in treating a patient after a preclinical fixed prosthodontics course is assessed.

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INTRODUCTION

It is the ultimate goal of health care professions education to craft a program that involves the various levels of learning that inculcates a competent practice (Barrero, 2015). Such programs should give the students an environment of an actual work setting where they will have to achieve acceptable, consistent results. For such a result, there will have to be a constant change in the curricula, contents and course in pursuit of the best result (Office of Planning, 2010; Maresca, 2014 and Susarla, 2003). Traditionally, students gain their knowledge and skill from the seminars, clinical exposure, peer interactions and classroom environment. Before the student is allowed to work in clinics, to ensure they have attained a level of understanding on the procedure and they are able to perform the procedure without difficulty, the students are made to work on mannequins. The preparation of a tooth is first performed on a typhodont. The level of skill, knowledge and if the integration of the two is assessed before the transition occurs to the next level of the curriculum. Dental Council of India, else known as DCI, is a statutory body which is constituted by an Act of the Parliament through the Dentist's Act of 1948. The main goal of the council is to regulate the education of the future dentists, dental profession, maintains educational

standards along the lines of curricula, admissions and examinations and dental ethics regulation in the country (<http://mohfw.nic.in/kk/95/ib/95ib0401.htm>). Along with a constant evolution in the teaching techniques, changes in requirements of competency as mandated by Commission on Dental Accreditation (CODA) requires continuous assessment to ensure compliance of the curriculum (Commission on Dental Accreditation, 2014). According to previous commentary and expert opinion on the assessment in health professions education, we must evaluate the ability of the student to recall and recognizespecific facts and technical skills as well as the students' capacity to combine elements from different contexts and put them to use in scenarios that require problem-solving along with critical thinking (Susarla, 2003; Triola, 2010; Schultze-Mosgau, 2004 and Mattheos, 2001). Assessment of elements of the curriculum which are of both new as well as old, represents a successful education in the knowledge, skills, efficiency and professional values that defines the competency of the dental practices (Peroz , 2009 ; Quinn, 2003; Obrez , 2011; Curnier, 2010; Kleinert, 2007 and Welk, 2006). There are a huge variety of reasons as to why students may perform well in preclinical exercises but not as well in clinic. Traditional curriculum possesses one major disadvantage, formal style of teaching, that is, teacher lectures as the student is expected to absorb all the information parted by the teacher (Feld, 1995). The differences between a preclinical and clinical setting can be numerous, some of which being, complexity of the cases presented in a dental

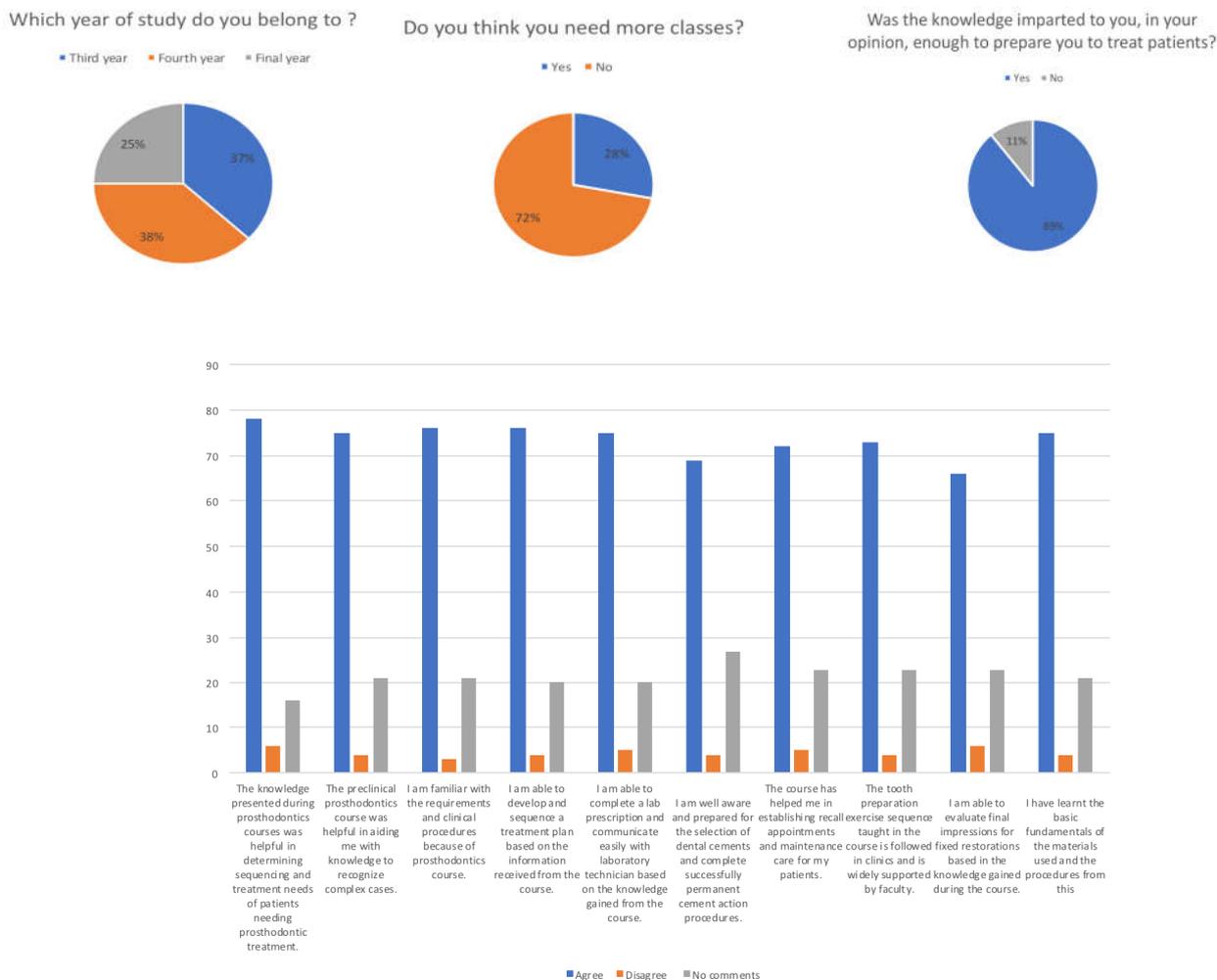
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college hospital, faculty shortages, lack of faculty collaboration, the requirement to integrate many skills to treat a patient (Henzi *et al.*, 2006 and DeBate, 2011).

### MATERIALS AND METHODS

A questionnaire of structured format containing 13 questions was prepared on the topic of students preparedness in performing clinical procedures after attending the preclinical fixed prosthodontics course. Ten questions of agree-disagree pattern were constructed based on the fundamentals taught in the preclinical course.

neutral stance on the statement. Around 75% of the students believe that they are able to recognize complex cases with the knowledge they have been given. Less than 5% of the participants don't agree with the statement while above 20% have not agreed or disagreed with the statement. About 75% of the participants believe that they are familiar with the requirements, clinical procedure, dental cements and their properties and how to use for fixing the prosthesis, the sequencing of a treatment plan and are able to prescribe and communicate easily with the lab technicians involved with the fabrication of the fixed prosthesis due to the information and knowledge imparted during the fixed prosthodontics



The questionnaire was circulated to the students of Saveetha Dental College belonging to third, fourth and final year of the BDS course after having attended the preclinical fixed prosthodontics course in second year. A sample size of 100 participants enrolled in the survey. The participants volunteered to be a part of the survey.

The data collected from the participants is entered and processed using Microsoft Excel.

### RESULTS

In the study conducted, out of 100 participants, 25% of the participants belonged to third year while 37% belong to fourth year and the remaining were from final year of the course. More than 75% of the students agree that the course was helpful in determining the sequencing and treatment needs of the patients requiring a fixed prosthesis. About 15% have a

preclinical course conducted by the institution. Around 20% of the participants have not agreed or disagreed with the statements put forth and 5% of the students did not agree with the statements. Above 70% of the students found that the sequencing of the preparation of tooth that was taught during the preclinical course was widely accepted by the clinical faculty and is easy to perform on the patient while above 20% gave no comments on the statement put forth and less than 5% of the participants didn't agree. More than 75% of the students believe that they have learnt the basic fundamentals of the materials used and the procedure of usage of the materials in the fixed prosthodontics while less than 5% disagree with this.

Less than 70% of the students are able to evaluate final impressions for a fixed prosthesis and above 5% of the students found that they were unable to evaluate the final impressions for a fixed prosthesis.

## DISCUSSION

It was found that the students have benefitted from the preclinical prosthodontics course on fixed prosthodontics and the students were able to communicate with the lab technicians on what they need as they are aware of the laboratory procedure as well. They are able to evaluate final impressions and have good working skills after having practiced the clinical procedures before performing on a patient directly. The students are aware of the protocol to be followed in the preparation of the fixed prosthesis, recall appointment protocol as well as the maintenance techniques of the prosthesis. The students are able to perform without any difficulty in the understanding of the procedure and are able to render results required.

## Conclusion

It was found that the students in clinics are able to give desirable results after attending the fixed prosthodontics preclinical course and were able to render patients' satisfaction.

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