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# Students' Attitude Towards Dental Complete Denture Treatment: A Questionnaire Study

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### **Abstract**

Aim. The purpose of the study was to identify the students' opinion regarding the degree of difficulty felt by them when studying and performing clinical procedures for the manufacture of complete dentures. Materials and methods. A questionnaire survey was designed and distributed to the dental students from the University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca, Romania. The questionnaire had 5 questions about procedures involved in the fabrication of complete dentures. Results. The subjects involved were students (n=236) who had completed five years of dental education. Questionnaires were distributed and Data analysis was done using Excel spreadsheet. Conclusion. The students admit less confidence regarding the maxillomandibular relationship registration.

**Keywords:** students; questionaires; complete denture; teaching; dental school.

# 1. Introduction

Educational principles related to clinical and technical procedures taught to undergraduate students of dentistry play an important role in the professional development of future clinicians and in the quality of service given to their patients [1]. The process of making complete dentures requires several visits to the dentist before the prosthesis can be used comfortably. Conventional methods of making complete dentures entail taking preliminary impressions for the study casts, making custom trays for border molding, taking final impressions for the master casts, and making facebow transfer and maxillomandibular relationship records [2]. Quality of a denture depends upon a number of factors such as retention, stability, fit, vertical dimension, occlusion, esthetics, accumulation of food under denture, speech, difficulty in chewing, etc. Often there is not a total agreement between the patient and the dentist in assessing the adequacy of dentures and this differing perception of patients' needs makes management more difficult. A dentist should be aware of the factors that lead to treatment failure [3,4].

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However, dentists have their own level of convenience in performing the procedures. The interns, who are in the final year of the dental undergraduate course are expected to have enough competence to proceed with their private practice. This level of competence can be evaluated based on the perception of interns about themselves in performing various dental procedures. Also, these kinds of studies may reveal the strength and weakness of the education system itself since student reviews are the most essential component of monitoring the quality of education [5]. It is essential that the future dentist has a thorough knowledge about the procedures. This study evaluates the level of training of dental students in performing each of these procedures through a questionnaire.

# 2. Material and methods

The present study included a number of 236 dental students. An original questionnaire containing 5 questions was used to collect the data. A series of questions referred to the difficulties encountered by students in the theoretical study of total edentation and in the practical aspects of making the complete denture. There were also questions about patients' attitudes toward complete denture treatment from a student perspective.

The questionnaires were distributed by the faculty members of Department Of Prosthetic Dentistry of UMF "Iuliu Hatieganu" Cluj-Napoca, Romania. The respondents were asked to return the questionnaire immediately. All returned questionnaires were coded and introduced in Google Forms. The results were expressed numerically and as a percentage, using the Excel spreadsheet. The study was approved by the Medical Ethical Commission of "Iuliu Hatieganu" University of Medicine and Pharmacy in Cluj-Napoca, Romania.

# 3. Results

The specific sample study on dental students are good reflection in terms of knowledge, attitudes and practices in complete denture. Among a total of 236 dental students 139 were female and 97 male from Dental Medicine students of University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca, Romania. A significant percentage of students were romanian nationality (63,6%) and the rest came from French-speaking countries, mostly from France (36,4%). The students were asked to indicate the degree of difficulty of the treatment of total edentulousness, within the prosthetic treatments. The majority of students consider that the difficulty of treating total edentation is moderate, as illustrated in Figure 1.

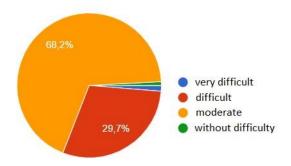


Figure 1: Students attitude toward degree of difficulty of the treatment of total edentulousness.

The students who reported difficulties in the treatment with complete dentures, consider that they are of a practical nature, on the first place being the clinical stage of determining and recording the maxillomandibular relationships (MMR). Some students reported a single clinical stage as being difficult, others indicated two or more (Figure 2).

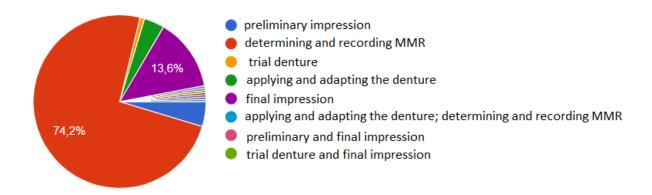


Figure 2: Students' answers regarding difficulties in treatment with complete dentures.

When proposing treatment with a total prosthesis for completely edentulous patients, the students found that the most common reaction was acceptance, followed by indecision, but there were cases of refusal or abandonment of treatment.

The last question was about the benefits of total dentures or dental bridges, which patients consider to be the most important. Following the direct observation of the students, they concluded that the two categories of patients give different importance to the advantages offered by prosthetic restorations, depending on their type. Thus, the wearers of complete dentures put in the foreground the functional efficiency, respectively the masticatory function, and the patients with dental bridge give more importance to the aesthetic aspect (Figure 3).

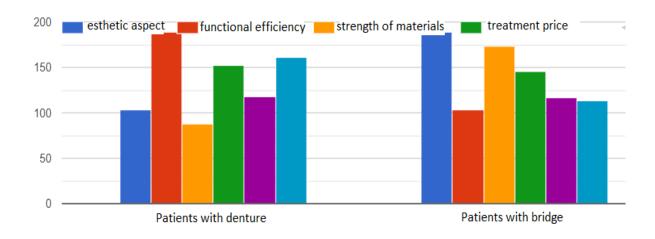


Figure 3: Aspects of prosthetic treatment considered of prime importance by patients.

## 4. Discussion

All dental schools still include complete denture teaching in their curricula but there is a large variation in the amount of experience students gain. Many young dentists are now qualifying without the complete denture skills required for practice and the system of vocational training does not provide the level of education required to provide all the skills that are missing [6]. In relation to preliminary and functional impressions, it is well known that the final quality of the obtained impression is much more linked to the molding technique and ability of the operator than to the material used. Although other clinical factors can also influence in this context such as the mucous membrane resilience and the degree of resorption of the residual ridges, clinical judgement is extremely important in the selection of the material and impression technique for each clinical case [1].

In our study, the surveyed students show the same level of theoretical training, but their answers show differences in terms of skill. Most find difficulty in the practical aspects of treatment (44.1%). Both theory and practice put in difficulty a good part of those surveyed (29.2%) and a quarter of students mention only the theoretical difficulty in the study of the total prosthesis. Although the students of our school of dentistry practiced the prosthetic field impression stage a year before the study of complete denture, they still find this work difficult. Determining and registering the maxillomandibular relationship is a laborious stage for them, both because of the novelty and the difficulty of the work itself (MMR = crucial step). The emotional reaction of an aged person is by subjective factors while the ability to make objective judgment diminishes with progressive senescence, therefore the patient's satisfaction may often be an expression of his general feeling of gratification towards dentist [7,8].

The presented results reveals a relatively uniform pattern in the majority of clinical and laboratorial procedures of complete denture treatment, similar to what is recommended by the Academy of Prosthodontics [1].

In this study, the dental students were more confident about trial denture try-in stage and applying and adapting the denture stage, but they admit less confidence regarding the maxillomandibular relationship registration which is a crucial step for complete denture fabrication. In a study by Vasanti Lagali-Jirge and colleagues20% of the subjects were very confident about replacing missing teeth with complete denture while 61% were confident, 14% average and 5% non confident [9, 10]. Another study by Punya Sekhri and colleagueshas reported the various perceived competencies in different branches of dentistry and 100% confidence was reported in fabrication of complete denture [11]. The limitation of our study would be the number of the respondents. Our sample was limited to students from the University of Medicine and Pharmacy "Iuliu Hatieganu" of Cluj-Napoca, Romania.

# 5. Conclusion

The students had an objective perception of the degree of difficulty of the different stages (clinical procedures) in the realization of complete dentures, considering the maxillomandibular relationship the most difficult phase, which remains the most difficult stage even for experienced doctors. This proves the maturity and sense of self-criticism. They also consider the need to insist during clinical internships with the practice.

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