Knowledge, attitude and practice about fully adjustable articulators

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ABSTRACT

Background: A dental articulator is an instrument that gives certain important diagnostic information and simulates border movements of the mandible and can be helpful in many aspects of dentistry. The common uses of a fully adjustable articulator in diagnosis, the arrangement of artificial teeth, and the development of the occlusal surfaces of cast fixed restorations. The fully adjustable articulator is the most sophisticated instrument in dentistry for duplicating mandibular movement.

Materials and Methods: A questionnaire was created to provide knowledge about the fully adjustable articulators and it was distributed among 100 dental practitioners. The dental practitioners included both undergraduates and post graduates. The statistics of the questionnaire was collected and the results were tabulated. After collecting the questionnaire a basic idea about of fully adjustable articulators was given. Result: The study shows that only few people (16%) are using fully adjustable articulators in a regular basis, while most of the practitioners are not aware of it. Majority (40%) of them would probably recommend the usage of fully adjustable articulators. Majority of the practitioners (28%) were likely to buy an fully adjustable articulator. Conclusion: Several authors highlight the importance of utilization of articulators in dental practice. Dental professionals should always make use of fully adjustable articulators in cases of extensive oral rehabilitation, since this may interfere with the mastication of patients and cause even greater damage, instead of solving any existing problem. From this study we come to know that most of the dental practitioners recommend the usage of fully adjustable articulators. Hence fully adjustable articulators should be used in a regular basis.

KEY WORDS: Articulators, Fully adjustable articulators, Mandibular movement, Maxillomandibular relationship

INTRODUCTION

A dental articulator is an instrument that gives certain important diagnostic information and simulates border movements of the mandible and can be helpful in many aspects of dentistry.[1] The common uses of fully adjustable articulators are diagnosis, the arrangement of artificial teeth, and the development of the occlusal surfaces of cast fixed restorations. The major use of articulators are to allow the prosthetic work in the absence of patient. Arc of occlusion and dimensional measurements of the jaw relations could be transfer to the articulator according to its simplest or adjustable articulation depending to the types of articulators.[2] There are few types of dental articulators and they are classified according to many sizes and shapes.

Generally, the dental articulators are classified according to their ability to adjust and duplicate the patient’s specific condylar movements as Non-adjustable, semi-adjustable and fully adjustable articulators.[3-5] The more adjustable the articulator is, the more accurate it can be in duplicating condylar movement.[6-9] In dentistry, the fully adjustable articulators are the most sophisticated instrument for duplicating mandibular movement. A full adjustable articulator is used to reproduce more than one type of movement.[10-12] It has a centric relationship, retrusive and protrusive movement and it has a left-right lateral maxillomandibular relationship. It is an instrument that acts as the patient in their absence and provide media of working without the interference of cheek, lips, saliva and tongue.[10] The disadvantage of fully adjustable articulators are Multiple records are required with the possibility of errors.[9] They differ from the adjustable articulators in that the lateral condylar path inclinations are adjusted according to records taken from the patient.[13-18]
MATERIALS AND METHODS
A cross sectional study was conducted among 100 dental practitioners to provide knowledge about fully adjustable articulators. A questionnaire containing 10 questions was distributed to 100 dental practitioners which includes both under and postgraduates. They were asked to fill the questionnaire. The filled questionnaires were checked and if any questions left incomplete were asked to be filled. After the questionnaires was collected a basic idea about fully adjustable articulators was given.

RESULTS
The results from the questionnaire were obtained and they were tabulated. The questions in the questionnaire were categorised into two. First few questions dealt about the personal life of the dental practitioners. And the next questions were based on the usage, efficacy and recommendation of the fully adjustable articulators. Among the 100 dental practitioners, majority (58%) of them were under graduates [Figure 1].

Most of them (42%) passed out within 2010–2015 [Figure 2].

Only few (16%) of the dental practitioners used the fully adjustable articulators in a regular basis, while many practitioners were not aware of the usage of fully adjustable articulators [Figure 3].

Internet was the major source (36%) of information to gain knowledge about fully adjustable articulators while television (26%) friends/relatives (22%) were some good sources too [Figure 4].

Most of the dental practitioners (32%) rated the usage of fully adjustable articulators as excellent and only few people (14%) described its performance as poor [Figure 5].

Majority of the practitioners (42%) would probably recommend fully adjustable articulators [Figure 6].

DISCUSSION
An Articulator is a mechanical device that resembles the temperomandibular joint. It is one of the instruments that can be used in the absence of the
patient. It plays a major role in prosthodontics. The articulators are classified as semi adjustable articulators and fully adjustable articulators. The semi-adjustable articulator plays an important role in dentistry, since it allows adequate diagnosis and treatment planning to promote the oral health of our patients. It also reduces the intervention of prosthodontics. Fully adjustable articulators are the most sophisticated instrument used in dentistry. Fully adjustable articulators may be adjusted with positional records or pantographic tracings. A fully adjustable articulator is used to reproduce more than one type of movement. It has a centric relationship, protrusive and retrusive movement and it has a left-right lateral maxillomandibular relationship. The horizontal and lateral condylar path inclination can be obtained from the patient mouth beside the using of face-bow. When compared to other types of articulators, fully adjustable articulators are more efficient. From the results obtained in the questionnaire, we come to know that only few dental practitioners are aware about the fully adjustable articulators. Among 50 of the dental practitioners, majority of the practitioners are post graduates while the rest are undergraduates. More of the practitioners are unaware about fully adjustable articulators, while some of the practitioners are aware about it but use it sometimes, very few of the practitioners use it on regular basis. Internet was the major source of information to come to know about the fully adjustable articulators, television was next the next major source and information from friends and relatives were the next source. Magazine and radio were minor sources of information. Majority (32%) of the practitioners rated the usage of fully adjustable articulators as excellent, some (26%, 28%) of the practitioners described the usage as fair and good, while very few of them described the usage as poor. Most (34%) of the dentists would probably recommend fully adjustable articulators, few (26%, 28%) people would definitely recommend and very few of them would definitely not recommend. So, majority of them are likely to buy fully adjustable articulators.

CONCLUSION

Several authors highlight the importance of utilization of articulators in dental practice. Dental professionals should always make use of fully adjustable articulators in cases of extensive oral rehabilitation, since this may interfere with the mastication of patients and cause even greater damage, instead of solving any existing problem. From this study we come to know that most of the dental practitioners recommend the usage of fully adjustable articulators. Hence fully adjustable articulators should be used in a regular basis.
REFERENCES


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