



Professional Attitudes Towards Denture Adhesives-A Questionnaire Study

**Dr. Josephine Flora A¹, Dr. Prabhu K², Dr. Karthik VC³, Dr. Kabilan P⁴,
Dr. Arunachalam K¹, Dr. SureshKumar K¹**

¹Postgraduate Student, ²Head of the Department, ³Reader, ⁴Senior Lecturer,
Department of Prosthodontics, Adhiparasakthi Dental College, and Hospital, Chengalpattu District-603319

***Corresponding Author:**

Dr. Josephine Flora A

Postgraduate Student, Department of Prosthodontics, Adhiparasakthi Dental College,
and Hospital, Chengalpattu District-603319

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Abstract

purpose:

The use of denture adhesives and their role in prosthodontics is a conflicting topic because it has received very little attention in the formal training of dentists, though the number of denture wearers has increased tremendously. The use of denture adhesives produces conflicting viewpoints among the various dental professionals and clinicians. The purpose of this study is to identify, discuss, clarify, and conclude the various aspects, ideas, and thoughts about the use of denture adhesives and their use in clinical practice and inclusion in the dental curriculum.

materials and methods:

The questionnaire way of survey method was used. A set of questionnaires containing a series of 9 questions were distributed and were asked to be answered. The questionnaire was distributed to the 102 participants to either develop a conclusion or to clarify the reasons for multiple schools of thought on the usage of denture adhesives.

results:

Of the randomly selected 102 participants, the answered questionnaire was collected and analyzed for the opinion and knowledge regarding the use of denture adhesives.

conclusion:

Denture adhesives can enhance the fit of the prostheses and can aid in the retention and stability of the prostheses. However, inappropriate use of denture adhesives can lead to the development of various oral conditions like candidiasis and tissue irritation, etc. On the whole, it is concluded that denture adhesives can aid as a beneficial adjunct when used judiciously.

Keywords: Bio-adhesion, cohesion, Denture adhesives, retention, saliva, stability, Tray adhesives

Introduction

A The use of denture adhesives and their role in prosthodontics is a conflicting topic because it has received very little attention in the formal training of dentists, though the number of denture wearers has increased tremendously. The use of denture adhesives produces conflicting viewpoints among the various dental professionals and clinicians.[1] The major

components of denture adhesives are a blend of polymers having different degrees of solubility.[2]The favorable properties of a denture adhesive are its sensitivity to hydration, rapid onset of action, adequate duration of action, resistance to dissolution, and ease of cleanability.[3]

Denture adhesives are available in two forms paste and powder. Since people began using denture adhesives more than 200 years ago, dentists have been slow to acknowledge their place in prosthetic dentistry. [4]Denture adhesives were used initially as a substitute for proper fit and adjustment, and denture adhesives are equated with poor clinical skills and a lack of prosthetic expertise.[5]

Tutors of various dental courses either tend to ignore this in their curriculum or otherwise tend to use it in case of inadequately fabricated and ill-fitting dentures to mask the underlying technical problems and to gain patient comfort by creating the cushioning effect.[6]Moreover, there is no statement in the current Professional attitudes toward denture adhesives. The use of denture adhesives and their role in prosthodontics has been an intriguing and conflicting topic, both in clinical practice and dental education.[7]

Purpose Of The Study:

The purpose of our study is to identify, discuss, clarify, and conclude the various aspects, ideas, and thoughts about the use of denture adhesives and their use in clinical practice and inclusion in the dental curriculum.

Material And Methods:

The questionnaire way of survey method was used. All the dental practitioners, academicians, and post-graduates of our college were included in the study.

Question 1: Denture adhesives have the potential (either positive or negative) to influence the following:

- a) Enhancing the fit of the prosthesis (ie, the retention and stability)
- b) Avoiding good clinical practice
- c) Providing psychological comfort to the denture patient
- d) Masking underlying denture problems
- e) Contributing to patients not seeing a dentist for recall and/or to avoid fees (ie, spending money) associated with denture care, adjustment, or replacement

a=31.4%,b=7.8 %,c=35.3%,d=23.5 %,e=2.0 %

Question 2: In your clinical opinion, denture adhesives can contribute to the development of the following conditions:

- a) Oral cancer
- b) Denture stomatitis

A set of questionnaires containing a series of 9 questions were distributed and were asked to be answered. The questionnaire with answers from the participants was collected back and analyzed. The sample size of our study includes 102 participants. The questionnaire was distributed to the participants to either develop a conclusion or to clarify the reasons for multiple schools of thought on the usage of denture adhesives.

The questionnaire that was distributed addressed the following topics in detail. They are as follows:

- (1) general perceptions,
- (2) specific clinical uses/misuses,
- (3) patient education,
- (4) general opinions of utility.

Results:

Of the randomly selected 102 participants, the answered questionnaire was collected and analyzed. The panelists were instructed to select the most opt answers for the first three questions based on their own opinion and thoughts about the use of denture adhesives either positive or negative opinion. From questions 4 to 8, the participants were instructed to encircle either strongly agree (SA), agree (A), disagree (D), or strongly disagree (SD) in response to each question. And, the final question assessed their method of usage of denture adhesives in their clinics.[7].

- c) Leukoplakia
- d) Candidiasis
- e) An imbalance in the oral flora due to microbial contamination
- f) Resorption of the alveolar bone as a result of tissue irritation

a= 8.8 %,b=10.8 %,c=5.9 %,d=14.7 %,e=49.0 %,f=10.8 %

Question 3: Denture adhesives can be useful for the following clinical situations:

- a) To stabilize trial bases in the early stages of denture fabrication
- b) To allay the patient's fears at the trial arrangement of teeth on denture bases visit
- c) To augment retention, comfort, and function during the interim period after the insertion of immediate dentures
- d) To overcome patients' anxiety for a short period (2-3 weeks) after insertion of new complete dentures (ie, not immediate dentures)
- e) To provide additional retention and stability for patients who have inadequate oral anatomy

a=51.0 %,b=7.8 %,c=7.8 %,d=28.4 %,e=4.9 %

Question 4: Patient education on the use (appropriate and/or inappropriate) of denture adhesives is an important part of denture service for patients with ill-fitting dentures

SA =36.3%, A = 52.9%, D =5.9% , SD =4.9%

Question 5: Patient education on the use (appropriate and/or inappropriate) of denture adhesives is an important part of denture service for patients with well-fitting dentures

SA =11.8%, A =68.6%, D = 16.7%, SD =2.9%

Question 6: Overall, denture adhesives can be a beneficial adjunct to the dentist when fabricating dentures

SA = 12.7%, A =70.6% , D =13.7% , SD =2.9%

Question 7: Overall, denture adhesives can be a beneficial adjunct to the dentist related to patient management (eg, patient acceptance of the denture)

SA =11.8% , A =53.9% , D =8.8% , SD=25.5%

Question 8: Recognizing that some patients may independently choose to use a denture adhesive, dentists should routinely inform patients of the proper use and misuse of denture adhesives (regardless of whether the dentist deems a denture adhesive necessary for that patient)

SA = 36.3%, A =52.9% , D =2.9% , SD =7.8%

Question 9: Do u advise the use of denture adhesives in your clinics for your patients?

Yes=43.2%, no=56.9 %

Discussion:

In both clinical practice and dental education, there is debate over the usage of DAs and their function in denture retention.[8]

Prosthodontists prescribed DA for patients with regular dentures in 41.3% of the respondents' cases. In comparison to other studies, this is within the range mentioned by Koksai et al[9] (41.8%), Polyzois et al[10] (60.3%), and Mantri et al[11] (84.3%). Because dentistry curricula vary from country to

country and dental care trends vary widely, these discrepancies are to be expected.

According to the responders, Denture adhesive is a beneficial adjunct to stable trial bases in the early stages of denture manufacture. It also improves the prosthesis' fit, gives the patient psychological comfort, and allays the patient's anxieties during the trial placement of teeth on the denture bases. This finding agreed with those of the study conducted among academic prosthodontists for the simple reason that reliable record bases are necessary for accurately recording jaw connections.[12]

The majority of responders to the current study were aware of the possibility of adverse clinical effects of Denture adhesive usage. The panelists concurred that denture adhesives may contribute to the development of diseases or conditions (denture stomatitis, candidiasis, an imbalance of oral flora, and the resorption of alveolar bone). They also agreed that neither leukoplakia nor oral cancer would be brought on by the use of denture adhesives.

Within the bounds of this study design, it was determined that Denture adhesives are a helpful adjunct in patient management and can streamline clinical dental procedures. Yet, for denture adhesive use to have the greatest positive effects, sufficient concern and precautions are needed. Dentists and patients shouldn't substitute good clinical procedures or appropriate denture maintenance with the use of Denture adhesives. The best use of Denture adhesives depends on their rational, selective, and supervised application. The best method to maximize the advantages of Denture adhesives use is to give it a strong emphasis in dentistry school curricula and to require practitioners to participate in regular, demanding continuing education courses.

Conclusion:

The panel of participants who participated in our study concluded as follows:

1. Denture adhesives can enhance the fit of the prostheses and can aid in the retention and stability of the prostheses
2. It can lead to the development of various oral conditions mainly candidiasis, microbial contamination, and resorption of the alveolar ridge due to tissue irritation

3. It can aid to stabilize the trial bases in the early stages of fabrication and help to overcome patients' anxiety.
4. It is an essential part for the dentist to educate about the use and misuse of denture adhesives and the even more essential part is the sole role of the dentist to use the denture adhesive judiciously in the clinical practice
5. Majority of the dentists, recommend the use of denture adhesives in their own clinics.
6. On the whole, it is concluded that denture adhesives can aid as a beneficial adjunct when used judiciously.[7]

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