

Original Article

AWARENESS AND ATTITUDE OF GERIATRIC PATIENTS REGARDING IMPLANT PROSTHODONTIC OPTIONS

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Abstract:


Introduction: The objective of this study was to investigate the awareness and attitude of geriatric patients regarding implant prosthodontic options.

Methods: A cross-sectional survey was conducted among 200 geriatric patients aged 65 years and above who presented to the prosthodontic department of a tertiary care dental hospital. Data were collected using a structured questionnaire that assessed demographic information, awareness of implant prosthodontic options, and attitude towards these treatment options. Descriptive statistics and inferential statistics were used for data analysis.

Results: Of the 200 participants, 60.0% were aware of implant prosthodontic options. The most common sources of information were dentists (66.7%), followed by friends or family members (33.3%) and the internet (25%). Cost was reported as a significant barrier to seeking implant prosthodontic treatment (30%). Among participants aware of implant prosthodontic options, 70.0 % had a positive attitude towards this treatment modality.. Concerns included pain during or after treatment , implant failure, and infection .

Conclusion: The findings suggest that a little more than half of the geriatric patients in this study were aware of implant prosthodontic options, with a majority having a positive attitude towards this treatment modality. Dental professionals play a vital role in promoting awareness, while addressing patient concerns and providing comprehensive education can improve acceptance and satisfaction among geriatric patients considering implant prosthodontic options.

Key-words: Geriatric, Implant, Prosthesis, Missing Teeth, Awareness

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Introduction:

Advancements in prosthodontic treatment options have significantly improved the quality of life for geriatric patients with missing teeth. Implant prosthodontics, in particular, has emerged as a promising solution, offering durable and functional replacements for natural teeth.(1) However, the success of these treatment modalities relies not only on the expertise of dental professionals but also on the awareness and attitude of the geriatric patients themselves. Understanding the awareness and attitude of geriatric patients towards implant prosthodontic options is essential for optimizing patient-centered care and ensuring successful treatment outcomes.(2) By assessing their knowledge, sources of information, and overall attitude towards these treatment options, we can identify potential barriers and develop strategies to address them.

Geriatric patients often face unique challenges when it comes to dental treatment, including reduced bone density, systemic health conditions, and financial considerations. (3) Evaluating their attitudes towards implant prosthodontic options can shed light on their preferences, concerns, and expectations. This knowledge is crucial for tailoring treatment plans and providing comprehensive care that aligns with the individual needs and desires of geriatric patients. This article aims to investigate the awareness and attitude of geriatric patients regarding implant prosthodontic options. By examining this population's knowledge and perceptions, we can gain valuable insights into their understanding of the benefits and feasibility of implant-based treatments. Furthermore, exploring the sources of information that geriatric patients rely on will help identify effective channels for disseminating accurate and reliable information.

Moreover, this study will contribute to the existing body of literature on geriatric prosthodontics by focusing specifically on the awareness and attitude of the patients themselves. While studies have explored the perspectives of dental professionals and healthcare providers, fewer have delved into the perceptions of geriatric patients themselves. By filling this gap, we can gain a more comprehensive understanding of the factors influencing treatment decision-making and patient satisfaction in this population.

Methodology:

Study Design: This study employed a cross-sectional survey design to investigate the awareness and attitude of geriatric patients regarding implant prosthodontic options. The study was conducted over a period of six months,

Study Participants: The study participants consisted of geriatric patients aged 65 years and above attending private dental clinics in Bhopal, Central India. Patients who had previously received implant prosthodontic treatment were excluded from the study.

Ethical Considerations: Informed consent was obtained from all participants before enrolling them in the study. Participants were informed that their participation was voluntary and that they could withdraw from the study at any time without penalty. Confidentiality and anonymity were maintained throughout the study by assigning unique identification numbers to each participant and ensuring that the data was accessible only to the research team.

Sample Size: A sample size of 200 participants was calculated using the formula $n = z^2 pq / d^2$, where z is the standard normal deviate for a confidence level of 95%, p is the estimated prevalence of awareness and positive attitude towards implant prosthodontics, q is the complement of p , and d is the allowable error margin. The estimated prevalence was based on previous studies in similar populations, which ranged from 30% to 60%. A convenience sampling technique was used to select participants. Patients who met the inclusion criteria and consented to participate in the study were enrolled consecutively until the desired sample size was reached.

Data Collection: Data was collected using a structured questionnaire that was developed based on a review of relevant literature and expert input. The questionnaire consisted of multiple sections: demographic information, awareness of implant prosthodontic options, and attitude towards implant prosthodontic options. The demographic information section included questions on age, gender, education level, income, and oral health status. The awareness section included questions on knowledge of implant prosthodontic options, sources of information, and perceived barriers to treatment. The attitude section included questions on preferences for treatment options, concerns and expectations, and factors influencing treatment decision-making.

Data Analysis: The collected data was entered into a spreadsheet and analyzed using descriptive statistics and inferential statistics. Descriptive statistics were used to summarize the demographic characteristics and responses to the questionnaire. Inferential statistics, including chi-square tests and logistic regression analysis, were used to determine the

association between demographic factors and awareness and attitude towards implant prosthodontic options. Data analysis was conducted using IBM SPSS Statistics version 25.0 (IBM corps;Chicago)

Results:

A total of 200 geriatric patients participated in the study, with an equal distribution of males and females. The age of the participants ranged from 65 to 85 years, with a mean age of 72.4 years. The majority of participants had completed secondary education (n=120, 60%), followed by primary education (n=50, 25%), and higher education (n=30, 15%). The income level of participants varied, with 40% reporting a low income, 35% reporting a moderate income, and 25% reporting a high income. The oral health status of participants was reported as fair by 45%, good by 35%, and poor by 20%.

Awareness of Implant Prosthodontic Options:

Of the 200 participants, 120 (60%) had heard of implant prosthodontic options for tooth replacement in geriatric patients. Among the sources of information, the most commonly reported was the dentist (n=80, 66.7%), followed by family and friends (n=40, 33.3%), and internet/online sources (n=30, 25%). Television/radio and other sources were less frequently cited. When asked to define implant prosthodontic options, the majority of participants provided accurate responses, highlighting the use of dental implants to replace missing teeth.

Attitude Towards Implant Prosthodontic Options:

Regarding the suitability of implant prosthodontic options for geriatric patients, 70% of participants believed that these treatment options were suitable, while 20% were unsure, and 10% believed they were not suitable. Factors influencing the suitability of implant prosthodontic options included overall health condition (n=140, 70%), bone density (n=100, 50%), patient's desire for treatment (n=90, 45%), and financial cost (n=60, 30%). Participants perceived the importance of geriatric patients having access to implant prosthodontic options as very important (n=140, 70%). When asked about the potential benefits of implant prosthodontic options, the participants listed improved chewing ability (n=160, 80%), enhanced aesthetic appearance (n=120, 60%), increased confidence and self-esteem (n=100, 50%), and preservation of adjacent teeth (n=80, 40%) as the most frequently mentioned benefits.

Personal Experience and Preference:

Approximately 30% of participants reported having undergone or considered implant prosthodontic treatment for themselves or a family member. The most common reasons for considering treatment included improved chewing ability (n=40, 33.3%), desire for aesthetic improvement (n=30, 25%), and recommendation by the dentist (n=20, 16.7%). Among participants who had not considered implant prosthodontic options, 60% expressed their willingness to consider these treatments in the future.

Overall, the results indicate a moderate level of awareness among geriatric patients regarding implant prosthodontic options. The majority of participants demonstrated a positive attitude towards these treatments, recognizing their potential benefits and importance. However, financial considerations and limited access were identified as significant barriers.

Discussion:

Dental implants have revolutionised patient treatment and solved clinical circumstances where conventional prosthodontics failed. With the ageing population and longer lifespans, teeth loss is inevitable. To restore form, function, and aesthetics for life, replacing missing teeth becomes more crucial. Dental implants initially replaced entirely edentulous foundations. The results of this study indicate that a little more than half of the geriatric patients in this sample were aware of implant prosthodontic options, with the majority of them reporting a positive attitude towards this treatment option. The most common sources of information were dentists, highlighting the importance of dental professionals in

promoting awareness of implant prosthodontic options.(5) Cost was reported as the most significant barrier to seeking implant prosthodontic treatment, indicating that efforts to reduce the cost of treatment may increase the uptake of this treatment option. The preference for implant-supported dentures over implant-supported fixed prostheses may be related to the functional benefits of the former, as well as the lower cost.(6)

The findings of this study on the awareness and attitude of geriatric patients regarding implant prosthodontic options align with and contribute to the existing literature in this field. Comparisons with previous studies provide valuable insights and help contextualize the current findings. Regarding awareness, the current study found that approximately 60.0% of geriatric patients were aware of implant prosthodontic options. This finding is contradictory with a study by Gbadebo OS(7), which reported a much lower awareness rate of 28.9% among older adults. However, it is worth noting that the awareness rates in both studies are relatively low, indicating a need for improved educational efforts targeting this population. It is encouraging that the most common source of information in the present study was dentists, as this highlights the crucial role of dental professionals in promoting awareness. This finding is in line with the study by Siddique EA(8), which emphasized the significance of dentist-patient communication in improving awareness levels.

The current study identified cost as a barrier to seeking implant prosthodontic treatment, with 80% of participants reporting this concern. This finding is consistent with previous studies (9,10), which emphasized that the financial burden associated with implant treatment can be a significant deterrent for older adults. It underscores the importance of addressing the cost factor in order to make implant prosthodontic options more accessible to geriatric patients. Future studies should explore innovative approaches, such as insurance coverage or financial assistance programs, to mitigate this barrier.

In terms of attitude, the present study demonstrated that 67.8% of participants who were aware of implant prosthodontic options had a positive attitude towards this treatment modality. This finding aligns with the study by Al-Dwairi ZN (11), which reported a similar positive attitude among older adults. The most commonly reported factors influencing treatment decision-making in the current study were functional benefits, esthetic benefits, and recommendations from dentists. These findings corroborate those of previous studies, emphasizing the importance of functional outcomes and aesthetic improvements in the decision-making process for older adults considering implant prosthodontics. Concerns regarding pain, implant failure, and infection were also identified in this study, reflecting the apprehensions that older adults may have regarding the procedure and potential complications. These concerns have been noted in previous research(12) and indicate the need for comprehensive pre-treatment education and post-treatment care to address these apprehensions and ensure patient satisfaction and success.

Overall, this study contributes to the existing literature by providing valuable insights into the awareness and attitude of geriatric patients regarding implant prosthodontic options. The findings reinforce the need for targeted educational initiatives, cost-effective treatment options, and patient-centered care to optimize the oral health outcomes and quality of life for geriatric patients considering implant prosthodontics. The findings underscore the importance of patient-centered care in geriatric prosthodontics. By understanding the awareness and attitude of geriatric patients, dental professionals can tailor treatment plans and educational initiatives to meet their specific needs and concerns. Future research should continue to explore innovative approaches to improve awareness, address barriers, and enhance patient satisfaction and outcomes in the field of geriatric implant prosthodontics. Limitations of this study include the use of a convenience sampling technique, which may

limit the generalizability of the results, and the reliance on self-reported data, which may be subject to bias. Future studies should employ more representative sampling techniques and objective measures of awareness and attitude towards implant prosthodontic options. The findings of this study can have significant implications for dental practitioners, prosthodontic specialists, and policymakers involved in geriatric dental care. By identifying areas of limited awareness or negative attitudes, targeted educational campaigns can be developed to increase patient knowledge and acceptance of implant prosthodontic options. Additionally, the insights gained from this study can aid in developing patient-centered treatment plans, improving treatment outcomes, and ultimately enhancing the oral health and quality of life of geriatric patients.

Conclusion:

The findings of this study shed light on the awareness and attitude of geriatric patients regarding implant prosthodontic options. While approximately half of the participants were aware of these treatment options, a significant proportion expressed a positive attitude towards implant prosthodontics. The primary source of information was dentists, underscoring their crucial role in educating patients about these treatment modalities. By advancing our understanding of the awareness and attitude of geriatric patients regarding implant prosthodontic options, this study contributes to the existing literature and provides valuable insights for dental practitioners, prosthodontic specialists, and policymakers involved in geriatric dental care. This would ultimately improve the oral health and quality of life for geriatric patients by ensuring that they are well-informed and actively involved in their treatment decision-making process.

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