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# The Impact of Flapless Compressive Immediate Dental Implants with Same-Day Loading on Quality of Life and Oral Health Among Edentulous Elderly Individuals in Jerusalem



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**Abstract**

This study aims to assess the impact of Flapless Compressive Immediate Dental Implants, which are placed immediately without surgery on the same day on the quality of life and oral health of elderly edentulous individuals in Jerusalem. The study focuses on the health, psychological, social, and economic aspects of this modern technique, which provides a quick and effective solution for restoring oral functions and aesthetic appearance without the need for complex surgery. The results demonstrate that this technique offers significant benefits to this age group, who often face health and psychological challenges due to tooth loss.

The study involved a group of elderly edentulous individuals who underwent Flapless Compressive Immediate Dental Implants, which are placed immediately without surgery on the same day. Participants' satisfaction was evaluated through questionnaires that addressed key aspects such as oral health, psychological and social improvements, and the economic costs of this technique compared to alternative treatments. The results revealed that the benefits were consistent across different age groups, highlighting the effectiveness of the technique for all elderly individuals.

The findings showed that Flapless Compressive Immediate Dental Implants, which are placed immediately without surgery on the same day, achieved high satisfaction rates ranging from 90% to 95%. Regarding health, 94% of participants reported significant improvements in their oral health, including relief from pain and

chronic dental issues. Psychologically and socially, 90% of participants noted an increase in self-confidence and improved social interactions after the treatment. Economically, 93% of participants indicated that this technique helped them avoid the high costs associated with traditional treatments. Additionally, the benefits were consistent across all age groups, reinforcing the technique's effectiveness for elderly individuals, regardless of age.

The study concluded that Flapless Compressive Immediate Dental Implants, which are placed immediately without surgery on the same day, are an effective and safe option for elderly edentulous individuals. The technique helps improve oral health, enhance self-confidence, expand social interaction, and provide significant economic advantages. Based on these findings, the study recommends increasing awareness of this technique, providing psychological support and pain management strategies during recovery, and improving financial access to these treatments through flexible payment options.

The study recommends developing educational programs for both elderly individuals and healthcare practitioners regarding the benefits of Flapless Compressive Immediate Dental Implants, which are placed immediately without surgery on the same day. The focus should be on improving psychological support and pain management during the recovery period. Additionally, making this technology more financially accessible through flexible financing options or insurance coverage is essential. Long-term studies should be conducted to assess the lasting effects of this technique on oral health and quality of life. Moreover, further research should aim at enhancing and expanding the use of this technology in the future.

**Keywords:** Compressive Immediate Dental Implants, Quality of Life, Elderly Edentulous Individuals, Oral Health.

## * Introduction

Dental implants are a modern medical solution that has revolutionized the field of dentistry by offering a practical and effective approach to tooth loss, especially among elderly individuals who suffer from complete edentulism. This type of treatment restores oral functions such as chewing and speaking, in addition to improving the aesthetic appearance, which positively impacts their quality of life. With advancements in implant technology,

new types of dental implants have emerged that allow for immediate application and completion within the same day. One notable example is the Flapless Compressive Implants, which are specifically designed for immediate loading on the same day, providing immediate primary stability and eliminating the need for extended waiting periods between implant placement and crown installation.

Elderly individuals are considered a demographic that faces unique challenges regarding oral health. Tooth loss at this age can lead to multiple health problems, including difficulties in nutrition and a lack of social interaction due to the impact on appearance or speech. Therefore, the use of immediate dental implant technologies, such as Flapless Compressive Implants with same-day loading, represents an opportunity to improve general health and reduce the negative effects of tooth loss. These techniques rely on an innovative design that ensures ideal force distribution, making them an effective and permanent solution for replacing lost teeth.

With the growing interest in the field of dental implants, there is an increasing need to study the impact of these new technologies not only on oral health but also on the quality of life of edentulous elderly patients. Understanding the impact of Flapless Compressive Implants with immediate loading on the same day on elderly edentulous individuals in terms of effectiveness and individual response will guide research and clinical efforts toward providing high-efficiency medical solutions. Thus, studying the effect of these implants offers a new perspective on improving oral health and achieving sustainable therapeutic outcomes for this demographic.

*** Research Problem and Questions**

Tooth loss among elderly individuals, especially those who suffer from complete edentulism, presents significant challenges that affect their overall health, nutrition, and social interactions. While traditional dental implant techniques have proven effective, they often involve lengthy treatment periods and invasive surgical procedures, which can be particularly unsuitable for elderly patients due to their health and physical limitations.

In response to these challenges, Flapless Compressive Implants with immediate loading **on** the same day have emerged as an innovative solution. These implants provide immediate primary stability without the need for invasive surgery, allowing the entire procedure, from

implant placement to crown installation, to be completed in a single day. Despite their potential to address the unique needs of elderly edentulous individuals, the effectiveness of these implants and their impact on the quality of life for this demographic remain underexplored.

Therefore, this study aims to investigate the impact of Flapless Compressive Implants with immediate same-day loading on the quality of life, oral functionality, and overall health outcomes of elderly edentulous patients. By addressing this gap, the research will provide valuable insights into the clinical and practical benefits of this innovative implant technology.

Therefore, the main research question is: What is the impact of Compressive immediate dental implants on the quality of life from the perspective of edentulous patients in Jerusalem?

From this main question, the following sub-questions arise: -

1- How do Compressive immediate dental implants affect the psychological and social aspects of elderly edentulous patients?

2- What are the common challenges faced by patients after receiving Compressive immediate dental implants?

3- How does the impact of Compressive immediate dental implants vary among elderly edentulous patients from diverse social and economic backgrounds in Jerusalem?

4- How do Compressive immediate dental implants affect the health and economic aspects of elderly edentulous patients?

5- Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the average responses of participants regarding the impact of Compressive immediate dental implants on quality of life from the perspective of elderly edentulous patients in Jerusalem attributed to variables such as gender, age, and educational qualifications?

*** Study Objectives**

The study aims to: -

1- Investigate the impact of Compressive immediate dental implants on the overall quality of life of elderly edentulous individuals.

2- Understand the impact of Compressive immediate dental implants on the psychological and social aspects of elderly edentulous individuals, including self-confidence levels and social interaction.

3- Identify the challenges and difficulties faced by elderly edentulous individuals after receiving

Compressive immediate dental implants, whether health-related or psychological.

4- Study the health impact of Compressive immediate dental implants on oral health and the reduction of issues related to tooth loss.

5- Evaluate the economic impact of Compressive immediate dental implants on elderly edentulous individuals, including treatment costs and its effect on financial stability.

6- Analyze whether there are statistically significant differences at the significance level ($\alpha \leq 0.05$) in the average responses of elderly edentulous individuals regarding the impact of Compressive immediate dental implants on quality of life and oral health based on variables such as gender, age and educational qualifications.

*** Significance of the Study**

Theoretical Significance: The theoretical significance of this study lies in highlighting the impact of Flapless Compressive Implants with immediate loading on the same day on the quality of life and oral health of elderly edentulous individuals. This study contributes valuable knowledge to the literature on dental implants by focusing on a specific and vulnerable age group—elderly individuals who have lost all their teeth. It expands the scientific understanding of the effectiveness of Flapless Compressive Implant techniques in improving oral health and quality of life, emphasizing the psychological and social benefits for elderly edentulous patients. Additionally, the study provides a robust theoretical framework that can serve as a foundation for future research on the effects of same-day immediate-loading implants in other patient demographics.

Practical Significance: From a practical perspective, this study aims to equip dentists and dental practitioners with precise information on the benefits of Flapless Compressive Implants with immediate same-day loading for elderly edentulous individuals. By offering insights into how this innovative technology can improve treatment outcomes, the study provides practical recommendations for optimizing the use of these implants in clinical settings. The findings are expected to support the development of treatment strategies tailored to the unique health and psychological challenges faced by elderly patients, leading to an enhanced treatment experience and improved quality of life.

Moreover, the study has implications for health policies

related to elderly edentulous patients by providing evidence that underscores the importance of investing in Flapless Compressive Implant technologies**.** These implants not only offer effective solutions for improving oral health but also reduce the financial, physical, and social burdens associated with traditional implant methods, making them a cost-effective and patient-centered option.

*** Study Limitations**

1- Spatial Limitations: Jerusalem.

2- Temporal Limitations: The period from 2018 to 2024.

3- Human Limitations: Patients of the researcher's private clinic in Jerusalem.

4- Subject Matter Limitations: The impact of Compressive immediate dental implants on quality of life and oral health from the perspective of elderly edentulous individuals in Jerusalem.

*** Study Terms**

1- Compressive Immediate Dental Implants: A modern dental implant technique aimed at replacing lost teeth using implants stabilized in the jaw with specific pressure to achieve immediate stability. This technique relies on evenly distributing pressure on the jawbone, promoting rapid adhesion between the implant and bone. It is particularly suitable for elderly edentulous individuals needing a fast and effective solution to restore oral functions and aesthetic appearance, thus improving their quality of life.

2- Quality of Life: Refers to the overall well-being experienced by individuals, including physical, psychological, social, and economic aspects. Quality of life relates to how various conditions, such as general health, social relationships, and the surrounding environment, affect a person's ability to enjoy life and perform daily activities. In this research, quality of life focuses on how Compressive immediate dental implants affect the lives of elderly edentulous individuals in areas such as self-confidence, social interaction, eating, and participation in daily activities.

3- Elderly Edentulous Individuals: Refers to individuals in old age who have lost all or most of their natural teeth. They face health, psychological, and social challenges due to tooth loss, which affects their ability to perform daily activities such as eating and speaking, in addition to impacting self-confidence.

4- Oral Health: Refers to the overall condition of the mouth and teeth, including the health of gums, teeth, and surrounding tissues, TMJ, Good

oral health contributes to maintaining normal oral functions like chewing and speaking, and reduces risks of diseases like gum infections, tooth decay, or jaw issues. In the context of this research, oral health concerns how Compressive immediate dental implants affect the oral health of elderly edentulous individuals.

*** Previous Studies**

Immediate dental compressive implants are considered one of the latest techniques in dental implantation, aimed at improving both oral function and aesthetics quickly and effectively. Despite significant progress in this field, there remain gaps in the scientific literature regarding the impact of this technique on patients' quality of life from different cultural and regional perspectives. In this context, numerous studies have attempted to understand how immediate implants affect different patients, both in terms of psychological satisfaction and oral functions. Various studies continue to monitor the outcomes of this type of treatment, including those that examine the impact of immediate implants on quality of life, the survival analysis of individual immediate implants, and the psychological and health evaluations related to this treatment. Immediate dental compressive implants are a modern technique that aims to enhance the patient experience and restore oral functions quickly. Previous studies have shown that this type of implant helps reduce the traditional waiting period, thus enhancing patient satisfaction and quality of life. Some research has explored the psychological and social impacts of immediate implants, noting significant improvements in self-confidence and aesthetic appearance. Other studies have demonstrated the effect of this implantation technique on oral functions, such as chewing and speech, which enhances functional comfort. However, there are still gaps in the literature regarding the evaluation of quality of life from patients' perspectives in specific regions such as Jerusalem, highlighting the importance of this study for a deeper understanding of these effects. Below are some studies conducted in this context, listed from the most recent to the oldest:

Direya, N. R. (2024)**,** titled "The impact of immediate dental compressive implants on quality of life from the perspective of patients in Jerusalem", explored the impact of immediate compressive implants on the quality of life from the patients' perspective in Jerusalem. The study found that these implants help

improve the quality of life of patients, as they reported increased functional comfort and self-confidence. The study relied on a field methodology that included questionnaires on psychological and social satisfaction, highlighting the impact of immediate implants on daily comfort and oral functions. The study recommended increasing the use of this technique in Jerusalem and called for future studies to assess its long-term effects.

Soegiantho et al. (2023), titled "Survival of individual immediate implants and reasons for loss: A systematic review of prosthodontic dentistry", evaluated the survival of individual immediate implants and explored the reasons behind their failure. The review methodology involved a collection of previous studies on immediate implants, which helped aggregate and analyze data on survival rates and failure causes. The study showed that individual immediate implants have a good survival rate, but several reasons for loss were identified, including infection, non-healing, and technical issues. Based on these findings, the study recommended improving implant techniques and monitoring influencing factors to ensure the success of individual immediate implants, along with the importance of ongoing research to understand the causes of failure and improve clinical outcomes.

Duong et al. (2022), titled "Oral health-related quality of life in patients rehabilitated with fixed and removable implant-supported dentures", assessed the oral health-related quality of life of patients using both fixed and removable implant-supported dentures. The sample included a group of patients who underwent rehabilitation using both types of dentures. The study used standardized tools to collect data on quality of life, focusing on factors such as treatment satisfaction and functional comfort. The results showed that patients using fixed implant-supported dentures had higher levels of satisfaction and quality of life compared to those using removable dentures. Based on these results, the study recommended prioritizing the use of fixed implant-supported dentures to enhance patients' quality of life and emphasized the need for further research to understand the impacts of each denture type on oral health and quality of life.

Komagamine et al. (2022), titled "Patient-reported outcomes for immediate loading of maxillary dentures supported by two implants shortly after implant surgery", evaluated patient-reported outcomes

regarding the use of maxillary dentures supported by two implants shortly after surgery. The sample included a group of patients who underwent dental implant surgery, using an experimental methodology to collect data on clinical and experimental outcomes. The study relied on standardized questionnaires to measure patient satisfaction and symptoms related to denture use, as well as oral health-related quality of life indicators. The results showed a significant improvement in patients' quality of life, with high levels of general satisfaction and fewer negative symptoms. Based on these results, the study recommended increasing the use of immediate loading of implant-supported dentures post-surgery to better meet patient needs and emphasized the importance of providing additional support during the recovery period. The study also suggested the need for long-term studies to understand the lasting effects of this loading technique.

Fernández-Ruiz et al. (2021), titled "Assessment of quality of life and satisfaction in patients with fixed dentures on zygomatic implants compared to the all-on-four concept: A prospective randomized clinical study", assessed quality of life and patient satisfaction with fixed dentures supported by zygomatic implants compared to the popular "all-on-four" concept. The sample included patients who underwent dental implant treatments, and the study relied on a randomized design to study the outcomes. Standardized tools were used to collect data on quality of life and treatment satisfaction, helping to measure improvements after clinical interventions. The results showed that patients using fixed dentures supported by zygomatic implants showed higher levels of satisfaction and quality of life compared to those with the "all-on-four" concept. Based on these results, the study recommended enhancing the use of fixed dentures supported by zygomatic implants as an effective option to improve patients' quality of life, while stressing the importance of ongoing research to better understand the long-term effects of these treatments.

Seyssens et al. (2020), titled "A 10-year prospective study on individual immediate implants", aimed to study the outcomes of individual immediate implants over 10 years. Patients who received individual implants were followed up. The results showed that 85% of the implants remained successful after 10 years, indicating the

sustainability of this technique. The study also noted high patient satisfaction regarding the appearance and function of the implants. It recommended the importance of long-term follow-up to monitor any potential changes.

Abou-Ayash et al. (2020), titled "Stabilizing full lower dentures with a single midline implant—impact on quality of life: Results from a two-year randomized clinical trial comparing different loading protocols", evaluated the impact of stabilizing full lower dentures with a single midline implant on patients' quality of life. The sample included patients who participated in a randomized clinical trial comparing different loading protocols. Standardized measures were used to assess quality of life and treatment satisfaction over two years post-implant. The results showed that stabilizing dentures with a single midline implant significantly improved quality of life and functional comfort compared to traditional dentures. Based on these results, the study recommended enhancing the use of this technique as an effective option to improve patient outcomes, and emphasized the need for long-term follow-up to understand the sustained effects on quality of life.

Awadalkreem et al. (2020), titled "The impact of immediately loaded basal implants on patient satisfaction", evaluated the impact of immediately loaded basal implants on patient satisfaction. The sample included patients who received basal implants with immediate loading. Standardized tools were used to collect data on patient satisfaction, focusing on aspects such as comfort and functional performance. The results showed that immediately loaded implants significantly improved patient satisfaction, reflecting a positive impact on their overall experience. Based on these results, the study recommended increasing the use of immediately loaded implants as an effective option in basal implant treatment, stressing the importance of further research to comprehensively understand the factors influencing patient satisfaction.

Jehn et al. (2020), titled "Oral health-related quality of life in cancer patients treated with patient-specific dental implants", assessed the oral health-related quality of life in cancer patients treated with patient-specific dental implants. The sample included patients who received implants after cancer treatment. The study used standardized tools to collect data on quality of life, focusing on aspects

such as treatment satisfaction and functional comfort. The results showed that patients who used patient-specific implants had a significant improvement in oral health-related quality of life compared to their pre-treatment condition. Based on these results, the study recommended enhancing the use of patient-specific implants as an effective option to improve quality of life in cancer patients, stressing the importance of further research to understand the sustained effects of this type of treatment.

Esposito et al. (2019), titled "A systematic review on the effectiveness of immediate implants in dental implantation", focused on evaluating the effectiveness of immediate implants in dental implantation compared to traditional implants. The results showed that immediate implants offer faster healing times with encouraging success rates.

Ochoa et al. (2019), titled "The impact of immediate implants on patients' quality of life after treatment", studied the impact of immediate implants on patients undergoing comprehensive dental treatment, showing significant improvements in their quality of life after the procedure.

Al-Abdullah et al. (2018), titled "Immediate implants and their impact on dental aesthetics", studied the immediate impact of implants on improving aesthetics compared to traditional implants, which take longer to show results.

Al-Hussain et al. (2017), titled "Study on the impact of immediate implants on patients' psychological comfort", showed that immediate implants improve patients' psychological comfort.

Wu et al. (2016), titled "Comparison between immediate and traditional implants in improving dental functions", analyzed how immediate implants affect the ability to chew and found noticeable improvement after the procedure.

Delano et al. (2015), titled "Immediate implants and their clinical impact on patients", highlighted that immediate implants can improve patients' quality of life in terms of daily performance and personal appearance.

The previous studies offer a comprehensive view of the impact of immediate dental compressive implants on patients' quality of life, highlighting their importance in the field of dentistry. The study by Direya (2024) clarifies the impact of immediate compressive implants on quality of life in Jerusalem,

demonstrating the significance of this technique in improving functional comfort and boosting self-confidence. The study by Soegiantho (2023) also highlights the importance of the survival of individual immediate implants and the identification of reasons for their failure.

*** Commentary on Previous Studies**

The previous studies contribute to providing various insights into the effect of immediate dental implants on patients' quality of life, outlining both the benefits and challenges associated with this modern technique. Many researchers point out that immediate dental implants have a significant ability to enhance patients' lives, both in terms of psychological comfort and oral functions. Through multiple studies, it is evident that immediate implants offer faster, more comfortable treatment options compared to traditional implants, significantly improving the quality of life for patients. For instance, the study by Direya (2024) highlights the positive impact of immediate implants on patients in Jerusalem, showing notable improvements in self-confidence and aesthetics, which is an essential aspect of patient satisfaction. This underscores the importance of this technique in psychological and social effects, improving patients' well-being and reducing the anxiety and stress often associated with tooth loss. Similarly, other studies, such as Soegiantho et al. (2023) and Seyssens et al. (2020), emphasize the sustainability and effectiveness of immediate implants, indicating that these implants have a good survival rate, with some factors influencing failure such as infection and technical issues. This highlights the need to improve implant techniques to ensure their long-term success.

On the other hand, Duong et al. (2022) emphasize the functional impact of implant-supported dentures, showing that fixed dentures offer higher satisfaction and quality of life compared to removable dentures. This reflects the importance of using immediate implants to improve functional comfort for patients, which reduces healing time and helps patients return to normal life more quickly. Similarly, Komagamine et al. (2022) showed similar results by exploring the use of immediate loading for implant-supported dentures, where patients undergoing this treatment showed significant improvements in their quality of life, with higher levels of general satisfaction and fewer negative symptoms.

Concerning the comparison between different implant types, the study by Fernández-Ruiz et al. (2021) showed that zygomatic implant-supported dentures outperform the "all-on-four" concept in improving patients' quality of life, highlighting the importance of selecting the optimal implant type based on each patient's needs. These results suggest that ongoing research to improve techniques and available options can help provide the most effective treatment for patients.

In the long term, the study by Seyssens et al. (2020) highlights the effectiveness of individual immediate implants over a 10-year period, which increases patients' confidence in this technique. The results showed that immediate implants are a sustainable option due to their high success rate, reflecting their ability to improve quality of life permanently. The study by Abou-Ayash et al. (2020) also presented similar results on stabilizing dentures with a single midline implant, demonstrating that this technique significantly improves functional comfort and quality of life compared to traditional dentures.

Regarding psychological factors, studies such as Awadalkreem et al. (2020) and Jehn et al. (2020) suggest that immediately loaded implants significantly improve patient satisfaction, reflecting their role in alleviating anxiety and stress related to tooth loss. These studies confirm that immediate implants not only enhance functional aspects but also contribute to patients' overall well-being by providing quick and effective solutions.

Based on these studies, it can be concluded that immediate dental implants represent a significant advancement in the field of dentistry, playing a prominent role in improving patients' quality of life by accelerating treatment periods, reducing healing times, and enhancing various aspects such as psychological comfort and aesthetic appearance. Despite these positive results, gaps identified in some studies, such as the lack of research.

Methodology and Procedures Study Method: The researcher used the descriptive analytical method as it is the most suitable for this study, as it relies on describing the real-world scenario.

Study Population and Sample: The study population consisted of all patients who underwent immediate compressive implants in the city of Jerusalem. The study was applied to a sample of 250 patients.

**Table 1: Distribution of the Study Sample According to Its Independent Variables**

| Variable | Category | Frequency | Percentage % |
|---|---|---|---|
| **Gender** | Male | 99 | 40% |
| | Female | 151 | 60% |
| **Age** | 60-69 years | 55 | 22% |
| | 70-79 years | 120 | 48% |
| | 80+ years | 75 | 30% |
| **Educational Qualification** | Diploma or less | 68 | 27% |
| | Bachelor's | 95 | 38% |
| | Postgraduate | 87 | 35% |
| **Total** | | 250 | 100% |

Study Tools: The researcher used the Oral Health-Related Quality of Life (OHRQoL) scale. Statistical Methods Used in the Study: After coding the responses of the sample participants, the data was entered and processed using computer software. The data was then statistically analyzed using the Statistical Package for Social Sciences (SPSS). Statistical treatments included frequency and percentage distributions of the sample according to study variables, means and percentages to estimate the relative weight of survey items, regression analysis to understand the regression equation of variables, independent t-test, and One-Way ANOVA.

*** Results**

The results of this study highlight the multiple benefits of Flapless Compressive Implants with immediate loading on the same day for elderly edentulous individuals. The findings revealed that most participants were highly satisfied with their implant experience, with satisfaction rates ranging from 90% to 95% across various aspects, emphasizing the effectiveness of this technology in enhancing daily life. This high satisfaction rate demonstrates the success of same-day Flapless Compressive Implants in addressing the health, psychological, and social needs of elderly edentulous patients.

*** Health Aspects**

The results confirmed that Flapless Compressive Implants with same-day loading significantly improved participants' oral health. A total of 94% of participants reported enhanced oral health, including the resolution of chronic issues such as pain, decay, and tooth loss. The minimally invasive nature of the procedure and its ability to restore oral functionality immediately made it a preferred alternative to traditional implants that require extended recovery periods, especially for this age group.

Psychological and Social Aspects: -

The study found a substantial psychological and social impact of same-day Flapless Compressive

Implants**,** with 90% of participants reporting increased self-confidence post-treatment. This improvement in self-image directly contributed to enhanced social interactions and reduced feelings of isolation, highlighting the psychological and social value of this innovative treatment in improving the quality of life for elderly edentulous individuals.

Economic Aspects**:** The results also revealed significant economic benefits associated with Flapless Compressive Implants, which are placed without surgery and loaded immediately in one day. A total of 93% of participants stated that the procedure helped them avoid additional costs related to alternative treatments. This economic advantage makes the technology an appealing option, particularly for elderly individuals who may face financial challenges.

Challenges and Pain During Recovery: -

While the benefits were evident, the study identified some temporary challenges, such as mild pain and difficulty eating during the initial recovery phase. About 13% of participants experienced these issues in the first few weeks; however, these problems were short-lived, and participants expressed complete satisfaction with their comfort levels after recovery, reinforcing the long-term effectiveness of the procedure.

*** Differences Between Age Groups**

The findings also demonstrated that the positive effects of Flapless Compressive Implants, which are placed without surgery and loaded immediately in one day, were consistent across various age groups (60-69 years, 70-79 years, and 80+ years). No significant differences in satisfaction levels were observed, confirming that these implants are a viable and effective treatment option for elderly patients regardless of age.

*** Discussion of Results**

The study's results underscore the effectiveness and broad benefits of Flapless Compressive Implants, which are placed without surgery and loaded immediately in one day, for elderly edentulous individuals. Participants reported high levels of satisfaction across health, psychological, and social dimensions, with satisfaction rates ranging from 90% to 95%. The ability of this implant technology to restore oral functionality, enhance self-confidence, and reduce costs significantly improved participants' quality of life.

Health improvements were notable, with 94% of participants reporting relief from chronic oral

health issues, while 90% indicated an improvement in psychological well-being due to increased self-confidence and social interaction. Economically, 93% of participants emphasized the cost-effectiveness of this technology in comparison to other lengthy or complex treatments.

Although the study identified minor challenges, such as temporary pain and eating difficulties during recovery, these issues were manageable and did not detract from overall satisfaction. Furthermore, the uniformity of positive outcomes across all elderly age groups highlights the adaptability and effectiveness of this approach for diverse elderly demographics.

*** Recommendations**

1- Promote Awareness and Education: Develop educational programs to inform elderly individuals and dental practitioners about the benefits of Flapless Compressive Implants with immediate loading on the same day**.** These programs can reduce anxiety, clarify misconceptions, and emphasize the health, psychological, and economic benefits of this treatment option.

2- Enhance Recovery Support: Provide tailored psychological support and pain management strategies during the recovery phase. Counseling sessions, pain management plans, and close follow-ups can help patients navigate temporary challenges and improve their overall experience.

3- Expand Financial Accessibility: Introduce flexible financing options, such as installment plans or insurance coverage, to make Flapless Compressive Implants more accessible to elderly patients facing financial limitations.

4- Conduct Long-Term Studies: Encourage longitudinal research to evaluate the long-term impacts of Flapless Compressive Implants**,** focusing on their durability, functional performance, and sustained quality-of-life improvements for elderly individuals.

By implementing these recommendations, the therapeutic experience for elderly edentulous individuals can be significantly enhanced, maximizing the health, psychological, and economic benefits of Flapless Compressive Implants, which are placed without surgery and loaded immediately in one day**,** and ultimately improving the quality of life for this demographic.

*** Conclusion**

This study highlights the significant impact of Flapless Compressive Implants, which are

placed without surgery and loaded immediately in one day, on the quality of life and oral health of elderly edentulous individuals. The findings confirm that this innovative approach effectively addresses the health, psychological, and economic challenges faced by this population, with satisfaction rates ranging from 90% to 95%.

From a health perspective, the study demonstrated that 94% of participants experienced notable improvements, including the resolution of chronic oral issues and the immediate restoration of oral functionality. The minimally invasive nature of the procedure, combined with its same-day effectiveness, makes it a highly favorable alternative to traditional implant methods, particularly for elderly individuals who may struggle with prolonged recovery periods.

Psychologically and socially, Flapless Compressive Implants played a transformative role in enhancing self-confidence and social engagement. With 90% of participants reporting a boost in self-esteem, the study underscores the psychological and social benefits of immediate functional restoration. Additionally, the economic advantages of this technology were evident, with 93% of participants acknowledging its cost-effectiveness compared to alternative treatments. This affordability is especially crucial for elderly individuals facing financial constraints.

While minor challenges, such as temporary pain and eating difficulties, were noted during the early recovery phase, these issues were short-lived and did not significantly impact overall satisfaction. Furthermore, the study found that the positive outcomes were consistent across different elderly age groups, reinforcing the adaptability and effectiveness of this treatment for diverse demographics.

In conclusion, Flapless Compressive Implants with immediate same-day loading represent a groundbreaking advancement in geriatric dentistry. Their ability to improve oral health, restore confidence, and offer economic benefits makes them a highly effective solution for elderly edentulous individuals. By integrating awareness programs, enhancing recovery support, and expanding financial accessibility, the adoption of this technology can be further optimized, ultimately improving the well-being and quality of life of elderly patients worldwide.

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