



(RESEARCH ARTICLE)



## Raising awareness in the community: Addressing the consequences of missing teeth in the oral cavity through a community service program

Imam Safari Azhar <sup>1,\*</sup>, Primanda Nur Rahmania <sup>1</sup>, Michael Josef Kridanto Kamdjaja <sup>1</sup>, Cindy R. Putri <sup>2</sup>, Made S. Danaswari <sup>2</sup> and Nakhwah U. K. Addunya <sup>3</sup>

<sup>1</sup> Department of Prosthodontics, Faculty of Dental Medicine, Universitas Airlangga, Surabaya, 60312, East Java, Indonesia.

<sup>2</sup> Prosthodontics Program, Faculty of Dental Medicine, Universitas Airlangga, Surabaya, 60312, East Java, Indonesia.

<sup>3</sup> Under graduated Program, Faculty of Dental Medicine, Universitas Airlangga, Surabaya, 60312, East Java, Indonesia.

World Journal of Advanced Research and Reviews, 2024, 21(01), 091–094

Publication history: Received on 17 October 2023; revised on 26 November 2023; accepted on 28 November 2023

Article DOI: <https://doi.org/10.30574/wjarr.2024.21.1.2402>

### Abstract

A community service program is designed to raise awareness among the general population regarding the detrimental consequences of missing teeth in the oral cavity. This program aims to empower individuals to make informed decisions about their oral health by providing comprehensive information and practical solutions to address the challenges associated with missing teeth. The paper highlights the significance of addressing the consequences of missing teeth. It also emphasizes the importance of oral health education, prevention, and early intervention in maintaining optimal oral health. The community service program utilizes a multi-faceted approach to engage individuals of diverse backgrounds. It includes informative workshops, interactive sessions, and demonstrations to foster a greater understanding of the causes, prevention, and available treatment options for missing teeth. The program also collaborates with local oral health professionals and organizations to provide access to affordable dental care. By facilitating access to appropriate dental services, the program endeavors to increase awareness, foster a sense of responsibility, and improve the quality of life for community members affected by missing teeth. Ultimately, the result is that we can serve as a comprehensive guide for developing and implementing similar community service programs centered around raising awareness of the consequences of missing teeth. It underscores the potential impact of such initiatives in fostering a healthier and more informed community while advocating for the importance of oral health in overall well-being.

**Keywords:** Missing teeth; Oral Health Education; Dentures

### 1 Introduction

The community service program with the theme Improving public awareness of the effects of missing teeth on the oral cavity at Posyandu Puskesmas Trawas, Mojokerto, East Java, has the aim of providing education to the community so that oral health can be maintained by replacing missing teeth. The specific target of this program is expected to help older people at Puskesmas Trawas Mojokerto to prevent more severe damage due to missing teeth that are not replaced so that they can improve their quality of life.

The method used in this program is to form management and operational teams that work together. The first team is innovative and, conceptualizes implementation activities, and provides education. The second team is the implementation team in charge of consulting. The third team is the secretariat team responsible for the administration and the finances of the program [1]. These teams consist of teaching staff from the Department of Prosthodontics, Faculty of Dentistry, Universitas Airlangga, and students from the Specialist Dentist Education Programme at the Faculty of Dentistry, Universitas Airlangga.

\* Corresponding author: Imam Safari Azhar

The activity plan will be held at the Trawas sub-district office in collaboration with Posyandu Puskesmas Trawas Mojokerto, with a target of approximately 80 participants. Participants are members of the Posyandu Puskesmas Trawas. Participants will receive counseling about the consequences of missing teeth. The target of this activity is to increase participants' knowledge about the effects of missing teeth, with increased knowledge about the causes of tooth decay and the consequences if damaged and missing teeth are not replaced are expected to help improve the quality of life of the community [2] in Trawas, especially older people.

In conducting community empowerment and development, there is a need for continuous follow-up in a program. First of all, it is necessary to conduct a thorough evaluation of the empowerment program that has been implemented. This evaluation can be in the form of surveys, interviews, or group discussions with program participants [3]. By identifying aspects that have worked well and challenges faced, the program can be adjusted and improved for the follow-up period. Furthermore, cooperation with community health centers for therapy and rehabilitation is essential. The health center can be a place for people to consult, check their denture health, and get further guidance [1]. By conducting comprehensive and sustainable follow-up measures, increased community empowerment in denture wearing can positively impact the dental health and the community's general well-being.

---

## 2 Material and methods

### 2.1 Implementation methods and data collection

The Department of Prosthodontics Faculty of Dental Medicine, Universitas Airlangga, came to Trawas and is divided into three stages. In the first stage, participants took a pre-test before counseling. In the second stage, the team undertook to conduct video screenings and educate the public about the consequences of missing teeth through media presentations. In the last step, the team gave a post-test for the participants to see the progress of the participant's understanding of the contents of the counseling. In addition, patient data collection was also carried out, conducting dental examinations and consulting on dental problems by the Department of Prosthodontics Faculty of Dental Medicine Universitas Airlangga.

This post-test is conducted to assess whether there is a change in the knowledge of the community about maintaining oral health. Knowledge about maintaining and maintaining oral health after the implementation of education in the community. Measurement of variables in data collection is carried out using a questionnaire containing 5 statement items. The measurement scale is where each statement is given a score of 20 for the correct answer and a score of 0 for the wrong answer. The lowest score is 40, and the highest score is 100—data processing and analysis using SPSS, which is presented in diagram form.

---

## 3 Results

There are five points that are the focus of this research. Definition of missing teeth, how to maintain dental health, consequences of missing teeth, types of dentures, and how to care for dentures. From the data collection, it was found that there was an increase in the understanding of the Trawas community on all subtopics. The highest increase in knowledge of the types of dentures was 69.44%, and the lowest increase in awareness of the causes of broken teeth was 5.66%.

From this data collection, it was found that there was an increase in the understanding of the Trawas community towards all of these sub-topics. There was the highest increase in knowledge of the types of dentures, namely as much as 69.44%, and the lowest increase in understanding about the causes of broken teeth, amounting to 5.66%.

After the community was given counseling with presentation media and video filling out the pre-test and post-test questionnaire sheets, it can be seen that the increase in the average value that occurred from before and after the pre-test value of counseling, it can be seen that the average value with presentation media and video has increased where the average value which was initially 37 after being given counseling increased to 49.8, so it is known that the difference in the average value before and after counseling with poster media is 12,8.

Based on the results of the normality test (Shapiro-Wilk), it can be seen that the pre-test score before being given counseling using presentation media and the post-test score after being given counseling obtained a significance value of 1.525 and 1.293, where both values are more than 0.05. From these results, both groups are normally distributed, so it can be concluded that there is a significant difference in knowledge level between before and after being given

counseling with presentations, difference in knowledge level between before and after being given counselling with presentations.

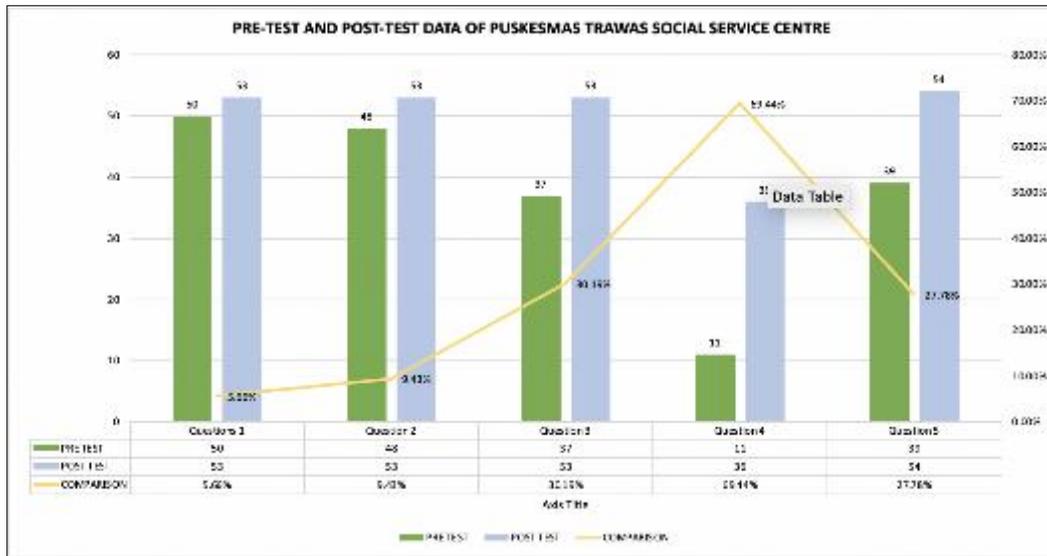


Figure 1 The diagram of presentase pre-test and post-test

No	PRE TEST	POST TEST	COMPARISON
Questions 1	50	53	5.66%
Question 2	48	53	9.43%
Question 3	37	53	30.19%
Question 4	11	36	69.44%
Question 5	39	54	27.78%
<b>AVERAGE</b>	<b>37</b>	<b>49.8</b>	<b>25.70%</b>

Figure 2 The table of results

#### 4 Discussion

Oral health plays a significant role in a person's overall well-being, and maintaining healthy teeth and gums is essential for quality of life [3]. Dentures, as prosthetic replacements for missing teeth, also contribute to oral health and function as esthetics. Educating individuals about proper oral hygiene practices, such as regular brushing, flossing, and dental check-ups, can prevent common dental issues like cavities and gum disease [4].

People should understand how oral health impacts overall health. On the other hand, knowledge about oral health enables individuals to recognize potential issues in their early stages, allowing for timely intervention and prevention of more severe problems. Knowledge empowers individuals to take control of their oral health through proactive measures, reducing the need for invasive treatments later on [4].

Educating individuals about the different types of dentures, such as whole, partial, and implant-supported dentures, helps them make informed decisions about their oral health care [5]. Proper care of dentures, including cleaning techniques and maintenance, should be communicated to avoid complications like irritation and infection [6]. Individuals prevented from transitioning to dentures should receive guidance on adjusting to their new oral appliances, including speech and eating adjustments.

---

## 5 Conclusion

Increasing knowledge about oral health and dentures is crucial for preventing dental issues, promoting overall health, and ensuring a better quality of life. By implementing diverse education addressing challenges strategies and collaborating with healthcare professionals, we can empower individuals with to take proactive steps towards optimal oral health and successful denture use.

---

## Compliance with ethical standards

### *Disclosure of conflict of interest*

Authors declare that there are no conflicts of interest regarding the publication of this paper.

---

## References

- [1] McMillan AS, Wong MCM. Emotional effect of missing teeth in community dwelling elderly people in Hong Kong. *Int J Prosthodont* [serial online]. 2004; 17(2):172-6.
- [2] Magdarina DA.. Persentase Pengguna Protesa di Indonesia. *Media litbang kesehatan*.. 2010; 20 (2) :50-8
- [3] Gunadi HA, Margo A, Burhan LK, Suryatenggara F, Setiabudi I. *Buku ajar geligi tiruan sebagian lepasan*. Jakarta: Hipokrates; 2012.
- [4] Esan TA, Olusile AO, Akeredolu PA, Esan AO. Socio-demographic factors and edentulism the Nigerian experience. *BMC Oral Health* [serial online]. 2004; 4(3):1-6.
- [5] Laporan Hasil Riset Kesehatan Dasar (Riskesdas) Nasional. Badan Penelitian dan pengembangan kesehatan. Departemen Kesehatan dan Kesehatan Republik Indonesia. 2013.
- [6] Sarwono SW. *Psikologi Remaja*. Jakarta: PT Raja Grafindo Persada,. 2011; p.11- 13