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# Increased Knowledge About Dental Caries in Visitors to Puskesmas I Abiansemal After Counseling Using Leaflet Media

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#### **ABSTRACT**

Background: Dental caries is still a problem in Indonesia, one of the causes is behavior, behavior can be changed by increasing knowledge and knowledge is usually improved by promotion. In conducting promotions, media is needed, one of the health promotion media is leaflets, leaflets in the form of leaflets containing information, promotions, can be carried, and contain correspondent numbers. The purpose of this study was to determine the increase in knowledge of dental caries before and after counseling using leaflet media at visitors to Puskesmas I Abiansemal Badung Regency in 2023. Methods: This type is descriptive research. The number of respondents was 67 visitors, the research was conducted in April. Data collection methods are through questionnaires (pre-test) and (post-test) which are then analyzed univariate. Results: The results showed that the level of knowledge of most before counseling with failed categories as much as (26.87%). But after being given counseling it increased, namely all with very good categories as many as 67 people (100%). The average knowledge of dental clinic visitors about dental caries before counseling was 53.58 including the category of less and after counseling was 93.88 including the category of very good, the increase in the average knowledge of dental clinic visitors before and after counseling increased by 40.3. The conclusion from the results obtained can be drawn that counseling using leaflets is effective for increasing dental caries knowledge in dental clinic visitors.

Keywords: Knowledge, Dental Caries, Counseling, Leaflet, Health Center



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### **INTRODUCTION**

Teeth and mouth are one part of the body that must receive special attention because these parts can affect a person's health condition. Dental health is an integral part of public health, so it is necessary to improve the ability in accordance with the development of health in general (Sariningsih, 2012). One of the causes of oral health problems in the community is behavioral factors or attitudes that ignore dental and oral hygiene (Taringan, 2013). Based on data from the World Health Organization (WHO) in 2018 the prevalence of dental caries in children was 60-90%, while the prevalence of dental caries according to Riskesdas in 2018 was 93%. This shows that parents' awareness of oral health is still lacking (WHO, 2018; (Al-Qahtani et al., 2020).

Based on Riskesdas data in 2018, on average, 45.3% of Indonesians experience oral health problems in the form of broken teeth, cavities, and pain. A significant increase in oral problems occurred in children aged 5-9 years (Riskesdas, 2018a).

The data also showed that in Bali, 41.06% experienced broken teeth, cavities, and pain. In children aged 5-9 years in Bali, 51.7% had broken teeth, cavities, and pain. In general, children are too lazy to brush their teeth, therefore children still need people to brush their teeth. Brushing teeth is one of the commonly known ways for people to maintain oral hygiene (Riskesdas, 2018b).

Leaflet is a promotional tool printed on art paper or art carton paper that has two or more folds. The appearance of the leaflet is attractive with illustrations and the language used is short, simple, and easy to understand (Roza, 2012), (Barik et al., 2019).

Health promotion with lectures accompanied by leaflet media is considered more effective in increasing knowledge than just lectures. Leaflet media is considered effective because the lecture method in delivering detailed messages is easily forgotten after a while, with the presence of visual aids, namely leaflet media, knowledge to the brain is the eye (75%-87%), with leaflet media as a visual aid, the absorption of information will be better (Jauharie, 2016).(Putri et al., 2021)(Manullang & Rosalina, 2021).

Based on the experience of researchers during fieldwork practice at Puskesmas I Abiansemal, counseling on dental health by lecturing to puskesmas visitors who are waiting for the queue is less effective, so that activities that make researchers want to know the increase in knowledge of people visiting the puskesmas regarding the prevention of dental caries using leaflet media.

## **METHODS**

The purpose of this study was to determine the increase in knowledge about dental caries after counseling using leaflet media at visitors to Puskesmas I Abiansemal Badung Regency in 2023. This study is a descriptive study with a survey design. Respondents taken in this study were 67 dental clinic visitors. The type of data collected in this study is primary data, namely the results of answering questions about dental caries before and after using a questionnaire question sheet and secondary data, namely the list of names of visitors to Puskesmas I Abiansemal. The data collection method is through questionnaires (pre-test) and (post-test).

### **RESULTS**



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Based on the results of research on dental clinic visitors totaling 67 people at Puskesmas I Abiansemal in 2023, several characteristics of the research subjects can be presented as below

Table 1

Frequency Distribution of Respondent Characteristics by Gender and Age Group

| Gender | Frequency | Persentage (%) |  |
|--------|-----------|----------------|--|
| Female | 49        | 73,13          |  |
| Male   | 18        | 26,87          |  |

Table 1. Shows that the number of respondents with the most gender is female as many as 49 people (73.13%) and the most age group is age (22-29) as many as 25 people (37.31%) and the least age group is age (38-45) as many as 6 people (8.95%).

Table 2
Level of Knowledge About Dental Caries Before and After Counseling Using Leaflet Media

| No |           | Before Counseling |       | After Counseling |     |
|----|-----------|-------------------|-------|------------------|-----|
|    | Criteria  | Visitor           | %     | Visitor          | %   |
| 1  | Very good | 1                 | 1,49  | 67               | 100 |
| 2  | Good      | 13                | 19,40 | 0                | 0   |
| 3  | Fair      | 35                | 52,24 | 0                | 0   |
| 4  | Poor      | 0                 | 0     | 0                | 0   |
| 5  | Failed    | 18                | 26,87 | 0                | 0   |
|    | Total     | 67                | 100   | 67               | 100 |

Table 2. Shows that there is an increase in knowledge in visitors before counseling most with sufficient criteria 35 (52.24%), after counseling all visitors become very good criteria 67 (100%).



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## Table 3

## Frequency Distribution of Average Level of Knowledge about Dental Caries Before and After Counseling Using Leaflet Media

|                      | Number<br>of<br>Student | Knowledge<br>Score | Average<br>Knowledge | Criteria  |
|----------------------|-------------------------|--------------------|----------------------|-----------|
| Counseling<br>Before | 67                      | 3590               | 53,58                | Less      |
| After<br>Counseling  | 67                      | 6290               | 93,88                | Very Good |

Table 3. Shows that the average level of knowledge of dental clinic visitors of Puskesmas Abiansemal I increased before counseling, namely 53.58 with poor criteria, while after counseling it was 93.88 with very good criteria.

### **DISCUSSION**

The results of the study describe the level of knowledge about dental caries before and after counseling using leaflet media at visitors to Puskesmas I Abiansemal Badung Regency in 2023 as many as 67 people with 49 women (73.13%) and 18 men (26.87%) and most of them were adults (Sugiyono, 2016).

The level of knowledge of dental caries in dental clinic visitors after counseling using leaflet media at Puskesmas I Abiansemal in 2023 shows that all respondents have very good knowledge criteria (100%). The average knowledge of dental clinic visitors after counseling using leaflet media was 93.88 with very good criteria. This has increased by 40.3 this is likely due to the interest of respondents at the

time of counseling using leaflet media. This result may be due to the lack of knowledge of visitors and the lack of maximum information obtained by visitors in the form of counseling or electronic media or reading articles about dental caries on the internet. According to Syah (2012), it states that a person's knowledge is influenced by internal factors which include attitude, interest, talent, and motivation. According to Notoatmodio (2014), it is stated that knowledge is influenced by information, if you often get information about a lesson, it will increase your knowledge and insight, while someone who does not often receive information will not increase knowledge and insight. The theory conveyed by Azwar (2011) is that in launching the achievement of information, media is needed



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that is able to generate public opinions so that it will affect a person's attitude If the more five senses used in receiving information, the clearer and more knowledge is obtained which will affect a person's attitude.

Prevention of caries and periodontal disease is very important both individually and in the community (Jepsen et al., 2017; Ermawati et al., 2021); (Antonio et al., 2005)) (Al-Qahtani et al., 2020).

The results of this study are in line with the research of Wulandari, et al (2020) entitled the effect of health education with leaflet media to increase knowledge and behavior in an effort to implement health protocols in traders at car free day tamanggung, it was found that the behavior before being given health education was with a standard deviation of 5.43 and after being given health education the standard deviation was 2.67.

### CONCLUSION(S)

Based on the results of research on increasing knowledge about dental caries after counseling using leaflet media on visitors to Puskesmas I Abiansemal Badung Regency in 2023, that most dental clinic visitors who had knowledge about dental caries before counseling with a failed category as many as (26.87%). But after being given counseling it increased, namely the excellent category of 67 people (100%). The average knowledge of dental

clinic visitors about dental caries before counseling was 53.58 including the category of less and after counseling was 93.88 including the category of very good, the average increase in knowledge of dental clinic visitors before and after counseling increased by 40.3.

## **Conflict of Interest**

This research is very simple, further research can be developed using other promotional media.

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