

**INCREASING KNOWLEDGE ABOUT DENTAL AND ORAL HEALTH AMONG POSYANDU CADRE IN CIBEUREUM HEALTH CENTER INDONESIA
(PENINGKATKAN PENGETAHUAN TENTANG KESEHATAN GIGI DAN MULUT DI KALANGAN KADER POSYANDU DI PUSKESMAS CIBEUREUM INDONESIA)**

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ABSTRACT

Posyandu cadres have an important role in promotional efforts, namely providing counseling to visitors to the Posyandu community. The purpose of the research is to evaluate the knowledge and skills of dental health cadres in conducting early detection of dental and oral diseases so they can refer and actively participate in improving dental and oral health. The training was carried out through the presentation of material to dental health cadres in the Cibeureum area. Some of the educational media used are educational power points via zoom meetings. In this study, quasi experiment pretest and posttest design were carried out, and the research data was analyzed using a non-parametric paired sample test. The study was conducted on 35 cadres of Posyandu in the Cibeureum area. There was a significant difference between the pre-and post-training scores, with a p-value of 0.002. The counselling and

education program for Posyandu cadres in the Cibeureum area has proven to be effective in increasing cadre knowledge. It is hoped that from the program, cadres can actively participate in community dental health unit activities.

Keywords: cadre; knowledge; posyandu

ABSTRAK

Kader Posyandu memiliki peran penting dalam upaya promotif, yaitu memberikan penyuluhan kepada pengunjung masyarakat Posyandu. Tujuan penelitian yaitu untuk meningkatkan pengetahuan dan keterampilan kader kesehatan gigi dalam melakukan deteksi dini penyakit gigi dan mulut agar mampu merujuk serta turut berpartisipasi aktif dalam meningkatkan kesehatan gigi dan mulut. Pelatihan dilakukan melalui pemaparan materi kepada kader kesehatan gigi di wilayah Cibeureum. Beberapa media edukasi yang digunakan adalah materi berbentuk powerpoint edukatif via zoom meeting. Dalam penelitian ini dilakukan quasy experiment pretest dan posttest design dan data penelitian dianalisis menggunakan paired sample test non-parametrik. Penelitian dilakukan pada 35 kader posyandu wilayah Cibeureum. Terdapat perbedaan yang signifikan antara skor sebelum dan sesudah pelatihan dengan nilai p-value 0.002. Program penyuluhan dan edukasi kader posyandu wilayah Cibeureum terbukti efektif dalam meningkatkan pengetahuan kader dan diharapkan dari program tersebut, kader dapat berpartisipasi aktif dalam kegiatan Unit Kesehatan Gigi Masyarakat.

Kata kunci: kader; pengetahuan; posyandu

INTRODUCTION

According to the *Global Burden of Disease* in 2016, oral diseases, especially

caries, are a major problem because they affect almost half of the world's population (3.58 million people). Periodontal disease is

the 11th most common disease worldwide, and oral cancer is the 3rd most common cancer in the Asia-Pacific region. Based on Riskesdas 2018, in Indonesia the most common dental problems are tooth decay (45.3%) and the majority complain of abscesses (14%).^{1,2}

Efforts to improve dental and oral health can be carried out using preventive and curative approaches. The benefits of this health promotion will not be obtained in the short term but will be felt after the long term. Therefore, the government's top-down health promotion and disease prevention are no longer effective, because people do not feel part of the program.^{3,4}

Posyandu is a form of community-based health effort that belongs to the community and is integrated into its life and culture. So far, there are still many *Posyandu* cadres who do not have adequate understanding and skills to carry out their duties. *Posyandu* cadres have an important role in promotional efforts, namely providing counselling to the *Posyandu* community.^{4,5}

The duties of *Posyandu* cadres start from the preparation stage for the establishment of *Posyandu*, planning with institutions that organize *Posyandu*, activity planners, as well as guiding and providing a healthy community, as well as motivating the community to come to the *Posyandu* and

implementing the clean and healthy living habits.⁶

Community empowerment in the field of dental and oral health is one way to support the implementation of health development, one of which is by empowering health cadres. The cadres can be given training on maintaining dental and oral health.^{7,8}

The Cibereum Health Center's working area covers 29 RWs and 171 RTs. Currently, the most service activities carried out at the Cibereum Health Center are pulp treatment, which is always the most medical service activity every month. It can be seen that the Community Dental Health Business in the Cibereum Health Center area is still not optimal. As a solution to this condition, the researcher maximized UKGM activities by counselling and educating *Posyandu* cadres in the Cibereum Health Center area.

Holding counselling is a form of cadre behaviour in an effort to socialize the role of *Posyandu* to gain sympathy from the community, so it is hoped that it can foster a positive perception of *Posyandu* and also organize *Posyandu* cadres to be more active in carrying out their duties.

METHOD

The research was conducted in the form of a presentation of counselling materials and education on how to maintain

dental and oral health from an early age, delivered to dental health cadres of 29 Posyandu in the area assisted by the Cibereum Health Center as one of the programs' efforts to increase the knowledge of dental health cadres about how to maintain dental and oral health from an early age so that it can help the UKGM Program of the Cibereum Health Center.

The counselling program will be implemented on March 23, 2024. The research design used was a *quasi-experiment pretest and posttest design* with the stages of activities carried out as follows: (1) In the preparation stage, the activity began with identifying the causes of problems in the Cibereum Health Center area through interviews. The second stage was to determine the priority of the problem using the ultrasound method. The third stage is to determine alternative problem-solving with a SWOT (*Strength, Weakness, Opportunity, and Threats*) analysis. The next stage involved planning the program to be carried out. (2) The implementation stage consists of opening activities, conducting *pre-tests* using valid and *reliable* questionnaires, and conducting counselling with *Zoom meetings* with PowerPoint presentation media. (3) The evaluation stage is in the form of a post-test using a valid and reliable questionnaire to determine the extent of cadres'

understanding of the material presented.

Furthermore, the level of knowledge is divided by categories of good, sufficient, and poor by data analysis techniques with percentages with the formula:⁹

$$P = \frac{x}{y} \times 100\%$$

Information:

x : Score obtained

y : Score total

The percentage results of the score obtained for data processing of each variable are interpreted on a qualitative scale as follows:⁹

The questionnaire to measure the knowledge of *Posyandu* cadre mothers consisted of 10 self-developed questions and was developed. The correct answer was given a score of 10, and the incorrect answer was given a score of 0. The highest score was 100. The measurement was conducted rationally. The knowledge variable was divided into three categories: good, sufficient, and poor levels of knowledge. Based on the benchmark assessment, the score interval for each category is 0-30, including poor knowledge, 40-60 for sufficient knowledge, and 70-100 for good knowledge.

RESULT

The results of the study were

processed and analyzed using the SPSS statistical test, namely, the *paired sample test*.

Table 1. Knowledge frequency distribution before and after training

N	Level of Knowledge	Before training		After Training	
		Frequency	(%)	Frequency	(%)
1.	Good	1	2	18	52
2.	Sufficient	9	26	13	37
3.	Poor	25	72	4	11
Total		35	100	35	100

The table 1 above shows that the level of knowledge of dental health cadres of 29 Posyandu in the assisted areas of the Cibereum Health Center increased after counselling and education on how to maintain dental and oral health from an early age with a good level of knowledge of 18 cadres (52%), sufficient knowledge of as many as nine cadres (37%), and poor knowledge of more than four cadres (11%).

Table 2. Normality test

Variable	Statistics	P Value	N
Pre Test	0.95	0.002	35
Post Test	0.88		

The results of the Shapiro-Wilk normality test showed that the significance value seen from the P-value was 0.002, which showed a value of < 0.05 , so the data of the respondent's pre-test knowledge and

post-test of respondent's knowledge were not normally distributed.

Table 3. Differences in knowledge before and after training

Variable Knowledge	Mean	SD	P Value	N
Before Counseling	41.14	21.11	0.00	35
After the Counseling	78.85	18.90		

Table 3. above shows that the results of the level of knowledge of dental health cadres of 29 Posyandu in the assisted area of the Cibereum Health Center before and after the training with a P-value of 0.00. This value shows that there is a significant difference between cadre knowledge before and after counselling and education on how to maintain dental and oral health from an early age in *pre-test* and *post-test data*. It shows that one of the ways that can be done to increase cadre knowledge is through counselling and education activities.

DISCUSSION

The target of the counselling and education program as an effort to improve dental and oral health is *Posyandu* cadres. *Posyandu* cadres are promotive, and preventive efforts can be carried out through counselling and education on dental and oral health to convey health messages to the community, groups, or individuals in the hope of increasing

knowledge.⁷

Dental and oral health cadres are volunteer personnel who are selected, appointed, or appointed by the community can lead the development of *Posyandu* in a place or village and have received dental and oral health education or training so that they can become companions to health centers, especially in order to realize dental and oral health programs in the community.^{10,11} Empowering community dental and oral health is an active and continuous process where the community must play an active role in health program activities to improve the quality of healthy life.¹⁰

In this program, education and counselling are presented through educational power points, it is hoped that cadres can understand and apply them in daily life. It is in line with the concept of science that knowledge is obtained through the five senses, and the results can be the basis for a person to apply in daily life.¹²

The knowledge provided to cadres includes how to maintain dental and oral health, the right time and frequency for brushing, nutritious food, and regular dental checkups. By gaining knowledge about the frequency of brushing teeth, a person can avoid dental problems. It is in line with research that states that the acquisition of this knowledge will improve the way to

maintain dental health and reduce the number of bacteria in the mouth.¹²

Based on the results of the evaluation, it was determined (Table 1) that the level of knowledge of *Posyandu* cadres in the Cibeureum area shows an increase with the level of knowledge both as many people, sufficient as many people, and poor as many. Most levels of health knowledge are in the good category. According to research, the higher the level of knowledge a person has, the level of maintenance of dental and oral health will also increase.^{13,14}

Counselling and education provided to *Posyandu* cadres statistically (Table 3) can increase the knowledge of cadres, same as Bintari's research.¹⁵ The result of this research is expected to increase the role of cadres to refer people who have problems with their teeth to dentists and educate the public about food and drinks that can cause cavities and cadres to actively participate in improving dental and oral health at *Posyandu*.

CONCLUSION

The counselling and education program for *Posyandu* cadres in the Cibeureum Region has been carried out well; the purpose of this activity is to increase the knowledge of cadres about dental and oral health, so it is hoped that the participants of this activity can apply the

knowledge gained to carry out their role in promotive and preventive activities of dental and oral health through community dental health in their respective *Posyandu*.

CONFLICT OF INTEREST

This research does not have any conflict of interest.

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