

Research Report

Education on children's dental health through illustrated books based on local wisdom in Probolinggo District

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ABSTRACT

Background: Dental problems are health problems that have to be taken into account, especially in Indonesia, where it is known that the correct brushing time for Indonesian people is only 2.8%. Meanwhile, in the working area of the Dringu Health Center in Probolinggo Regency, East Java, Indonesia the prevalence of dental caries in Taman Sari Village reached 46%. **Purpose:** This study aims to determine the knowledge of *Pos Layanan Terpadu/Posyandu* (Integrated Service Post) cadres from the socialization of children's dental health illustration books activities with local languages in the working area of the Dringu Health Center, Probolinggo Regency, East Java, Indonesia. **Methods:** This activity is a socialization for children's dental health illustration books using the Madurese language, involving cadres and staff of the Dringu Health Center, Probolinggo Regency, East Java, Indonesia. The increased knowledge of the participants is assessed through the results of the pre-test and post-test that have been done. **Results:** The results showed that there was an increase in participants knowledge by 21%. **Conclusion:** The socialization of dental health illustration books in local languages in the working area of the Dringu Health Center, Probolinggo Regency, East Java, Indonesia can increase participants knowledge about dental health.

Keywords: illustration book; dental health; the local language; public health; medicine

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INTRODUCTION

Dental problems are health problems that are still experienced by both developed and developing countries, including Indonesia. Based on Riskesdas (2018), the proportion of people with dental health problems is as high as 73.5% in 34 provinces in Indonesia. In addition, the correct brushing time for the Indonesian population is only 2.8%.¹ Meanwhile, at one of the *Pusat Layanan Kesehatan Masyarakat* (Puskemas) or Community Health Centre in Probolinggo Regency, the Dringu Health Center, data showed that the prevalence of dental caries at the Dringu Health Center was 46%, Mrangon Lawang village 36%, Kali Salam village 34%, Randu Putih village 30%, Kali Rejo village 28%, and Kedung Dalem village 25%.²

One form of early prevention that must be done to avoid dental health problems in childhood is by making an early visit to the dentist. The American Academy of Pediatric Dentistry (AAPD) and the American Dental

Association (ADA) recommends that an initial visit to the dentist for children be initiated within 6 months after the eruption of the first deciduous teeth or 1 year of age. During this visit, the dentist can detect early signs of a carious lesion, perform a caries risk assessment, evaluate dental development, provide direction and diet counseling, and provide motivation to parents to adopt good behavior for oral disease prevention.³

In Indonesian people themselves, the habit of visiting the dentist has not become a routine thing to do, especially for children. Visits to the dentist are only done if there are complaints from children regarding their teeth. Children's oral and dental health must get serious attention, even though it is still in the primary dentition period, because it will determine the health of their permanent dentition. However, many parents think those primary dentitions are only temporary and will be replaced by permanent teeth, so they often assume that tooth decay to the primary dentition due to poor oral hygiene is not a problem.⁴

One of the spearheads of health services in the community is the health cadre. Health cadres are volunteers recruited from, by, and for the community who are tasked with assisting health services. The existence of cadres is often associated with routine services at the *Pos Layanan Terpadu/Posyandu* (Integrated Service Post), posyandu cadre must work voluntarily and sincerely, be able to carry out posyandu activities, and be able to mobilize the community to carry out and participate in posyandu activities.⁵ Health cadres play a very important role in providing health services for the community, so their existence needs to be maintained.⁶

In general, a person uses language as a means of communication. Language is the most effective communication tool to convey thoughts, ideas, intentions, and goals to others. The use of language in each region varies depending on the needs of its users. Every region in Indonesia has a local language that distinguishes it from other regions. Like other areas, residents of the city of Probolinggo have a local language that is often used, namely Madurese. Therefore, the purpose of this study is to determine the increase the knowledge of cadres on the dental and oral health of children at an early age through a local wisdom approach using an illustrated book in Madurese in the working area of the Dringu Public Health Center, Probolinggo Regency, East Java, Indonesia

MATERIALS AND METHODS

This community service implementation activity will be held in September 2022 at the Dringu Health Center in Probolinggo Regency, East Java, Indonesia. This is done because of the high incidence of dental caries, so there is a need for education for cadres to improve dental health for children at an early age, which will increase prevention of dental and oral health problems. The use of the right media is important for this purpose. The activities carried out were the socialization of local language illustrated books, namely the Madurese language, which was attended by cadres in the Dringu Health Center area of Probolinggo City. Participants in the socialization were cadres in the Dringu Health Center area of Probolinggo City. Evaluation of activities carried out

in community service is done by giving pretests and post-tests to participants, which aim to determine the increase in knowledge of participants.

RESULTS

The activity that has been carried out is the socialization of illustrated books using the local language, namely Madurese, which is located in the meeting room of the Dringu Health Center, Probolinggo City. The activity was attended by the Head of the Puskesmas, Dringu Health Center staff, and Cadres in the Dringu Health Center area. After the socialization, we found that the respondents experienced an increase in knowledge (21%), which can be seen from the results of the pre-test and post-test that have been filled out by each cadre, as well as the participants activity in each discussion (Figure 1).

DISCUSSION

Community service activities aimed at increasing the knowledge of cadres on the dental and oral health of early childhood through a local wisdom approach using a Madura language illustration book showed that there was an increase in knowledge, as indicated by the average value of the pre-test and post-test (21% margin). The knowledge of cadres in each socialization is very influential on the success of health services, especially in the prevention of dental health problems. This is corroborated by previous research, which proves that knowledge and training are very influential in improving health services in the community.^{7,8}

Based on the results of previous studies, it is known that the satisfaction of mothers of children under five years of age is good with posyandu services, where cadres always monitor and evaluate children’s health conditions. In addition, it is also supported by cadre training and comparative studies of posyandu cadres with other posyandu as learning media so that they can follow the improvement efforts that have been made.⁹ One of the efforts to increase the ability of cadres in early detection of under-five age dental health by cadre training, is in line with previous

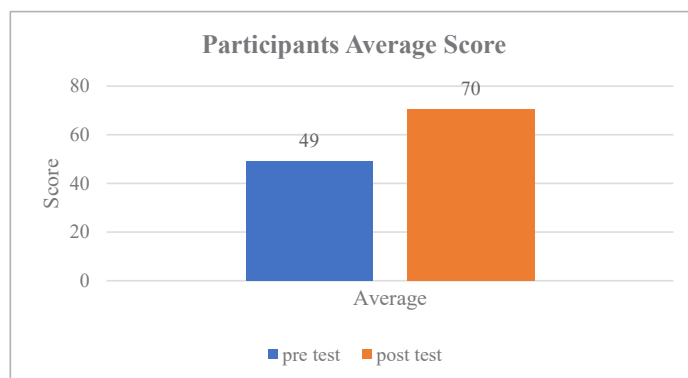


Figure 1. Participants’ average score pre-test and post-test.

research, namely increasing the understanding of health cadres through counseling and training.^{9,10} A cadre also plays an important role in education about optimal nutrition and preventing and identifying risk factors for health problems in children under five in the Posyandu work area.¹¹

One of the factors that can affect changes in a person's knowledge is the existence of information. The source of this information can be obtained from counseling and education through illustration books.¹² Illustrated books are information in the form of writing and pictures that can make it easier for someone to understand the information being conveyed in the form of a book. In addition, this community service activity also held discussions with cadres in the form of questions and answers. Combinations of illustrated books, discussions, and questions and answers will make the process of conveying information better. Previous research stated that the provision of education in the form of illustrated books was able to provide information that could increase respondents' knowledge.¹³ However, it cannot improve attitudes and behavior to prevent health problems in adolescents.¹⁴

The local language is one of the communication tools used in a certain area; in Probolinggo Regency, East Java, Indonesia, the majority use the Madurese language. Previous research has shown that health education using local languages can increase respondents' compliance with taking preventive actions against health problems.¹⁵ This is in line with previous research, namely that the use of local language poster media is effectively used as an alternative medium for health promotion.¹⁶ In the previous study, we showed that the dental health education illustration book can be used efficiently for dental health promotion in Islamic boarding schools.¹⁷ Dental health educations are a good approach to increasing dental health awareness in the community.¹⁸ It can be done in children, adolescents, and even the elderly to teach them about how important it is to maintain dental and overall health by practicing healthy living behaviors.¹⁹⁻²¹

CONCLUSION

Community service activities held in the working area of the Dringu Public Health Center, Probolinggo Regency, East Java, Indonesia which were attended by several cadres as participants, showed that the knowledge of cadres had increased by 21%, as seen from the results of the pre-test and post-test that had been carried out by the cadre.

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