

Research Report

Development of an illustrated module for dental health education enhancement in Islamic Boarding Schools

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ABSTRACT

Backgrounds: Dental and oral health problems in adolescents are increasing in Indonesia, as evidenced by the highest dental health problems of 73.5%. **Purpose:** To develop an illustrated module on dental health education for adolescents at the Isy Karimah Imtaq Islamic Boarding School, Karanganyar Regency, Central Java. **Methods:** The illustrated module socialization activity was held in September 2022 at Imtaq Shighor Isy Karimah, Karanganyar Regency, Central Java with 30 students as participants. Evaluation is done by giving a pre-test and post-test that has been filled out by the participant. **Results:** Based on the results of the evaluation, it was found that the average pre-test score was 69.2 while the post-test was 78.8, and the increase in participant knowledge was 6.9. **Conclusion:** students who participated in the socialization of the illustrated module experienced an increase in dental health knowledge for adolescents at the Islamic Boarding School.

Keyword: dental health education; dentistry; medicine; children; quality of life

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INTRODUCTION

Improving health status is important in everyday life to get a strong national generation. Health problems in Indonesia are increasing, one of which is dental and oral health. Dental caries is the highest-order disease in dental and oral health. Based on the 2018 basic health research (Riset Kesehatan Dasar), shows that the proportion in Indonesia from 34 provinces that have the highest dental health problems is 73.5% and the lowest is 45%. In addition, the correct brushing time for the Indonesian population is 2.8%.¹ One of the promotive and preventive efforts in preventing dental and oral health problems for adolescents is in the school environment. A dental and oral health promotion activity in the school environment is declared effective if it involves students, teachers, and parents.² A Students can improve dental and oral health behavior through a social support approach from the surrounding environment.³

Based on dental and oral health data in Karanganyar Regency, in 2016 there were 68.664 elementary students, 21.732 students who received school Dental Health Efforts,

7.148 students who needed treatment, and 4.700 students who received treatment.⁴ Karanganyar is one of the student cities and cannot be separated from Islamic boarding schools in this area. Islamic boarding schools have long been institutions that have an important contribution to participating in educating the nation. Thus, Islamic boarding schools have an important role in shaping healthy behavior so that they can avoid health problems, one of which is dental and oral health.⁵

The environment is very influential on the health of students, especially dental health. Therefore, it is necessary to make promotive and preventive efforts to avoid dental health problems. One of the biggest Islamic boarding schools in Karanganyar is Isy Karimah.⁶ Several problems exist in the Islamic boarding school environment, including dental caries, gingivitis, and sensitive teeth.⁷ Dental and oral health problems can affect the quality of life, including in terms of students' self-confidence.⁸⁻¹⁰ Therefore, students and administrators of the Karanganyar Islamic Boarding School need to prioritize dental and oral health by taking preventive measures such as brushing their teeth regularly,

paying attention to diet, and making regular visits to the dentist. By taking regular preventive measures, dental and oral health problems can be prevented or corrected more easily and effectively.¹¹ In addition, the formation of strong adolescents at the Isy Karima Islamic Boarding School is a great opportunity in shaping healthy behavior among adolescents, both in general adolescent health and dental and oral health. During puberty, teenagers often experience health problems including dental and oral health. This is following the 2018 basic health research which stated that there was an increase in caries at the age of 10-14 years.¹

One of the effective media used for health promotion is an illustration book. Illustrated books are designed books that become scientific literature accompanied by complete and effective designs as learning media that are interesting to learn, easy to understand, and increase student learning motivation.¹² Therefore, this program aims to improve the dental and oral health of students through the illustrated module at Imtaq Shighor Isy Karima, Karanganyar Regency, Central Java.

MATERIALS AND METHODS

This Community Service activity was held in September 2022 at Imtaq Shighor Isy Karimah, Karanganyar Regency, Central Java, and was attended by 30 students as participants. This activity is a community service evaluation activity and is not experimental research so it does not use clearance ethics. Among the activities was the distribution of pre-test questionnaires, socialization using an illustrated module related to dental and oral health in adolescents with students as participants, discussions and questions and answers with resource persons, ending with the distribution of post-test questionnaires. This activity aims to increase the knowledge of students in dental health problems at the Islamic boarding school Imtaq Shighor Isy Karimah Karanganyar. Evaluation of this activity is done by comparing the results of the pre-test and post-test that have been filled out by the students.

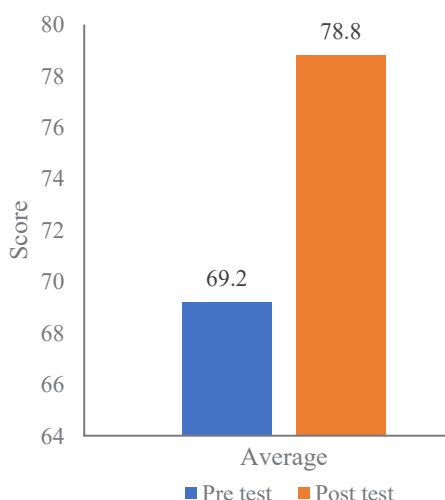


Figure 1. Participants average score

Among the questionnaire questions were the meaning of healthy teeth, risk factors for dental health, dental health problems, the impact of caries, and the dangers of broken teeth. The statistical analysis used is the average of the results of the pre-test and post-test, so that it can determine the increase in the participants' knowledge.

RESULTS

Based on the results of community service activities held at Imtaq Shighor Isy Karimah, Karanganyar Regency, by conducting socialization of the illustrated module related to adolescent dental and oral health issues at the Islamic boarding school attended by 30 students. After evaluating the pre-test and post-test, the results showed that there was an increase in the average score of students, which was 9.6% (Figure 1). Participants are also active in discussions and question and answer with resource persons.

DISCUSSION

Community service activities were carried out at Imtaq Shighor Isy Karimah by providing socialization of the illustrated module related to dental and oral health, which was attended by 30 students, the results showed that after the socialization using the illustrated module, the knowledge of the students experienced an increase as indicated by the average pre-school score. increased test and post-test. This is similar to previous research which explains that after counseling related to oral hygiene maintenance, the knowledge of students has increased compared to before the counseling.¹³

The illustrated module used in this activity can increase students' knowledge, this is reinforced by previous research which states that the use of illustrated notebooks and informative texts about dental trauma can lead to a significant increase in students' knowledge.¹⁴ Illustration book itself is a combination of written language and pictures, so that learning can occur, when someone reads or looks at the picture. This illustration method is very popular with readers because it is easy to understand, and the technological revolution makes it easier to get information. And this method is effective in delivering relevant information related to dental and oral health.¹⁵

Participants selected in this activity are santri, santri are a group of Muslim communities who are obedient to carry out their religious orders, and can also be interpreted as someone who studies Islam in a boarding school which is a place of learning.^{16,17} Meanwhile, pesantren is the oldest educational institution in Indonesia and adopts a religious education system that has developed since the early arrival of Islam in the archipelago.^{16,17} In general, the state of individual health in Islamic boarding schools does not get the attention of students. This habit is influenced by the habitual factors of the students before coming to the pesantren. This explains that students need knowledge about dental and

oral hygiene to always maintain dental and oral hygiene.¹⁸ In the field of dental and oral health, religious knowledge has no significant effect on dental status because there is no awareness that religious teachings that are carried out seriously will have a positive impact on health. Furthermore, to improve the dental caries status of students, a continuous effort is needed through the cooperation of students, parents, and boarding school administrators.¹⁹

An illustration can arouse curiosity, invite opinion, and debate.²⁰ Thus, the illustration book has a very important role because it has a person's sensitivity to an image. An illustration book is easy for readers to understand because of the size and type of letters that are easy to read by the reader so the illustration book is effective for education on preventing tooth decay in children.²¹

CONCLUSION

The illustrated module socialization activity which was held at Imtaq Shighor Isy Karimah, Karanganyar Regency which was attended by students, showed that there was an increase in knowledge related to dental and oral health after the socialization, which can be seen from the increase in the average score between the results of the pre-test and post-test. have been filled in by the participants

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