

Knowledge Level Of The Santri (Islamic Students) Before And After Giving Education About Tooth Extraction At Darul Istiqamah Maros Islamic Girls School

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ABSTRACT

Introduction: One of the problems that frequently occurs in adolescence, especially santri, is that they come to the dentist if the complaints of oral and dental disease are at an advanced stage and tooth extraction is chosen as the treatment. Therefore, the importance of providing education to students because adolescence is at a time of rapid physical, mental, and psychosocial changes that have an impact on various aspects of their lives. At this time, they began to choose something that was considered good by themselves, and they were eager to find out something new, especially providing education using PowerPoint Slide media. Microsoft Power Point is a software that can be used to help learning media and Power Point Media Slides are considered effective by its users.

Objective: To determine the difference in the knowledge level of the Islamic students before and after giving education about tooth extraction at Darul Istiqamah Maros Islamic Girls School.

Research method: This research used Quasi Experimental with pretest-posttest design. Using purposive sampling. The number of samples used was 45 people aged 14-17 years. The test used was the Wilcoxon test.

Results: The difference in the average value of the knowledge level of the students before and after giving education obtained a p-value of 0.000 ($p < 0.05$).

Conclusion: There is a difference in the level of knowledge of the Islamic students before and after giving education about tooth extraction at Darul Istiqamah Maros Islamic Girls School.

Keywords: Knowledge; education; tooth extraction

INTRODUCTION

Oral and dental health is an inseparable part of health in other organ systems. Oral and dental health is the health of the oral cavity, including teeth and their structures and supporting tissues that are free from disease and pain and function optimally. With healthy teeth, the function of teeth for chewing and for phonetics and aesthetics can work perfectly. The dental and oral health of the Indonesian people is still far from expectations, according to data from the World Health Organization (WHO) in The World Oral Health Report, it is stated that teeth and mouth disease still affects 90% of the Indonesian population.^{1,2,3}

The level of public knowledge about the maintenance of dental and oral hygiene will affect the good or bad of dental and oral hygiene. One of the factors causing dental and oral health problems is the level of knowledge. According to Basic Health Research (RISKESDAS) data regarding the proportion of dental problems according to South Sulawesi Province 2018, it is stated that 55.5% of teeth were damaged, perforated or painful, 24.4% of teeth were lost due to extraction or self-loss, teeth had been filled due to cavities of 4.0%, loose teeth of 12.0% .^{4,5}

According to the Regulation of the Minister of Health of the Republic of Indonesia (KEMENKES) regarding efforts on oral and dental health, Dental and Oral Health is a healthy state of hard and soft tissue teeth and related elements in the oral cavity, which allows individuals to eat, talk, and interact socially without dysfunction, esthetic disturbances, and discomfort due to disease, occlusion irregularities, and tooth loss so that it is able to live productively socially and economically. Tooth extraction is the last option for patients whose teeth have been damaged and cannot be treated anymore. Some of the people have understood the importance of maintaining teeth in the oral cavity, but there are also those who still do not understand and tend to remove damaged teeth instead of treating teeth.^{6,7}

Based on the research conducted by Batrrix E Marimbun et al. (2016) Good oral hygiene can be realized through knowledge and good and correct behavior towards maintaining oral health. Knowledge is a factor that shapes a person's behavior. Lack of knowledge will form wrong behavior and attitudes towards maintaining oral health. Based on the research done by Gisela Harlindong et al. (2014) Adolescence is at a time of rapid physical, mental, and psychosocial changes that have an impact on various aspects of life. At this time, they began to have the freedom to convey their rights and obligations, began to choose something that was considered good by them, and the period where people wanted to find out something new.

Therefore, in this case, high school students are a group of adolescents whose age is extremely relevant to be studied regarding their level of knowledge about tooth extraction.^{8,9} Based on the description above, the researchers intend to do research on the differences in the level of knowledge of the students before and after giving education about tooth extraction at Darul Istiqamah Maros Islamic Girls School.

METHOD

This research design used Quasi Experimental research type with a pretest-posttest design. This research was conducted in February 2021. The number of samples in this study were 45 samples. The method used was purposive sampling. Sampling was done by distributing pre post questionnaires and post test with inclusion criteria aged 14-17 years and have had permanent tooth extraction. Then, the Wilcoxon test was carried out by using SPSS version 25 data processing.

RESULTS

Table (5.1.1). Frequency Distribution of Respondents' Answers Before Treatment.

| Pre-Test | Frequency | Percentage |
|----------|-----------|------------|
| Poor | 23 | 51.11% |
| Moderate | 21 | 46.67% |
| Good | 1 | 2.22% |
| Total | 45 | 100.00% |

Based on the table (5.1.1), it shows that out of a total of 45 samples, 23 respondents (51.11%) had poor knowledge, 21 respondents (46.67%) had moderate knowledge, while 1 respondent had good knowledge (2.22%). Thus, most of the respondents' knowledge was in the poor to moderate range before the treatment was given.

The following univariate analysis describes the frequency distribution of respondents' knowledge based on answers during the post test (after treatment) about tooth extraction at Darul Istiqamah Maros Islamic Girls School.

Table (5.1.2). Frequency Distribution of Respondents' Answers After Treatment.

| Post-Test | Frequency | Percentage |
|-----------|-----------|------------|
| Moderate | 2 | 4.44% |
| Good | 43 | 95.56% |
| Total | 45 | 100.00% |

Based on the table (5.1.2), it reveals that out of a total of 45 samples, 2 respondents (4.44%) had moderate knowledge and 43 respondents (95.56%) had good knowledge. Therefore, most of the respondents' knowledge is in the good category after being given treatment.

Table 5.1.1 Normality Test

| Condition | Kolmogorov-Smirnov | |
|-----------|--------------------|---------|
| | Statistical test | P-Value |

| | | |
|-----------|-------|-------|
| Pre-Test | 0.147 | 0.016 |
| Post-Test | 0.196 | 0.000 |

Based on the table (5.1.3), it shows the results of normality test in the conditions before and after treatment. The results of the normality test were obtained by using the Kolmogorov-Smirnov test because the number of samples was greater than 30. The p-value in the conditions before treatment obtained was 0.016 and after treatment was 0.000. This shows that the p-value obtained was smaller than 0.05. This indicates that the data used are not normally distributed. Then the Wilcoxon Test was used.

Table (5.1.4) Comparative Test Before and After Treatment

| Condition | Mean | Std.Deviation | P-Value |
|-----------|--------|---------------|---------|
| Pre-Test | 5.667 | 1.919 | 0.000 |
| Post-Test | 13.156 | 1.665 | |

Based on the table (5.1.4), it shows the results of the recap of the respondent's answer data. At the time before the treatment, the value of the respondent's answer had an average of 5,667 with a standard deviation of 1,919, while the result of the value of the respondent's answer after the treatment had an average of 13,156 with a standard deviation of 1,665. This reveals that there is an increase in the average answer of respondents after being given treatment of 7,489. The Wilcoxon test results obtained a p-value of 0.000 which is smaller than 0.05. Therefore, from the significant test results statistically, it can be concluded that H_a is accepted and H_0 is rejected, which means that there is a difference in the level of knowledge of the students before and after giving education about tooth extraction at Darul Istiqamah Maros Islamic Girls School.

DISCUSSION

This research is regarding the knowledge level of students before and after giving education about tooth extraction at Darul Istiqamah Maros Islamic Girls School using power point slide media. Sampling was done in February 2021. This study aimed to determine the level of knowledge of the students before and after giving education about tooth extraction.

The table shows that there is a significant difference between the level of knowledge of the students before and after giving education about tooth extraction at Darul Istiqamah Maros Islamic Girls School. The value of the level of knowledge after giving education has increased on the previous value. The table shows the difference in the knowledge level of students before and after giving education about tooth extraction, namely 23 respondents (51.11%) had poor knowledge, 21 respondents (46.67%) had moderate knowledge, while 1 respondent (2.22%) had good knowledge. Therefore, most of the respondents' knowledge was in the poor to moderate range before the treatment was given. It can be

concluded that students who have a sufficient level of knowledge are in the category due to many influencing factors such as the awareness of the students to find this out.

Before the treatment, the respondent's answer value had an average of 5,667 with a standard deviation of 1,919, while the results of the respondent's answer after treatment were 2 respondents (4.44%) and 43 respondents (95.56%) had good knowledge. Hence, most of the respondents' knowledge is in the good category after being given treatment having an average of 13,156 with a standard deviation of 1,665. This reveals that there is an increase in the average answer of respondents after being given treatment of 7,489. The Wilcoxon test results obtained a p-value of 0.000 which is smaller than 0.05. Therefore, from the significant test results statistically, it can be concluded that there is a significant difference in the knowledge of the students before and after giving education.

This study shows that the sample before education is given has insufficient knowledge about tooth extraction. This is also supported by the lack of information on this. It is different from teenagers outside the Islamic boarding school because the Islamic boarding school is based on boarding school, so that students have limited access to information, especially through social media. They only rely on books in the library or information on social media when they are on holiday or when they get the opportunity to access the internet. At Darul Istiqamah Islamic Girls School, they also hold health seminars once a week, but the seminar material that is delivered has never discussed about oral health. Usually, students who have complaints of teeth and mouth only ask the UKS (School Health Unit) nurse so that the lack of health personnel is also a factor in the lack of education at the school.

According to Ni Putu Novi Niantari, et al. (2018) A person comes to the dentist if the complaints of oral and dental disease are at an advanced level, so that the tooth extraction is chosen as the treatment. (6) Tooth extraction is a process of removing teeth from the alveolus, where the tooth can no longer be treated. This procedure is usually done as a routine procedure for patients, because tooth extraction is the easiest and the best way to get rid of toothache. It is no exception to the students, according to the results of the interviews conducted by the researchers, the students stated that it was better to remove the tooth than to keep it because it took a long time to fill a tooth and required more expensive costs. Besides, there were also students who stated that removing a tooth could be a solution to avoid feeling repeated pain in the tooth.

This research becomes a factor that influences and adds insight into the knowledge of the students because it provides information about tooth extraction. The large number of students still do not understand and are aware of the importance of the problem of maintaining teeth that can still be treated in relation to the state of the function of the teeth, including mastication (chewing), phonetics (speaking) and most importantly aesthetic (appearance) functions.

This is in line with the research of Gisela Harlindong et al. (2014). Adolescents are at a time of rapid physical, mental, and psychosocial changes that have an impact on various aspects of their lives. At this time, they began to have the freedom to convey their rights and obligations, began to choose something that was considered good by them, and the period where they wanted to find out something

new. Therefore, in this case, high school students are a group of adolescents whose age is extremely relevant to be studied regarding their level of knowledge about tooth extraction ⁽⁹⁾ in this study, it proves that Darul Istiqamah female students can receive education well and can be seen through post-test questionnaires.

The results reveal that there is a change in the respondent's knowledge after education using power point slide media. The results of this study are in accordance with the research of Fatan (2015) stating that there is an increase in knowledge after counseling using power point media ⁽¹⁰⁾ According to Yuliansah (2018), a person's knowledge through vision is 83% greater than 11% through hearing and recalling in 50% of sight and 20% of hearing.

The use of media in learning can generate interest, motivation, provide stimulation and have a psychological influence on students in receiving information. In general, educational media has benefits including clarifying learning materials, being able to arouse learning enthusiasm, encouraging interaction between students and educators, are able to foster learning independence and to help form the same perception of learning material. Learning media has the function of arousing learning motivation, clarifying the content of the material, stimulating interest in learning and overcoming the limitations of space and time. Microsoft Power Point is a software that can be used to help learning media. In the Power Point program, there are many features that can be used to create interesting, interactive and fun learning media.⁽¹¹⁾

According to research conducted by Rina Hifdzul Rahmi (2018), after giving education, the results of the pre-test and post-test of the video animation group showed significant results compared to the power point group, but both groups still showed improvement so that this study could be regarded to be not in line.⁽¹²⁾

CONCLUSION AND SUGGESTION

Based on the results of research that has been conducted at Darul Istiqamah Maros Islamic Girls School, it can be concluded that: The level of knowledge of the students before treatment has an average of 5,667 with a standard deviation of 1,919. The level of knowledge of the students after treatment had an average of 13,156 with a standard deviation of 1,665. Based on the Wilcoxon test results, it obtained a p-value of 0.000 which is smaller than 0.05. Therefore, from the significant test results statistically, there is a difference in the level of knowledge of the students before and after giving education about tooth extraction at Darul Istiqamah Maros Islamic Girls School. The researchers suggest that further research should not only investigate about knowing the level of knowledge using power point slide media, but also it can be compared with other media such as video, etc.

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