

Knowledge of the Prophet Healthy Lifestyle on Students in Pesantren: a Comparison between Hand Fan and Leaflet Health Educational Media

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Abstract. Background: Hand fan and leaflet health education media has been extensively used in health promotion. The application of Prophet healthy lifestyle not only spiritual benefit, but also physical health too. In the pesantren environment, an effective health education media to teach the Prophet's healthy lifestyle is absolutely needed to achieve the health level goals. The purpose of this study was to compare the effectiveness of hand fan and leaflets education media in increasing knowledge levels about the Prophet healthy lifestyle. **Methods:** This study used quasi experimental design, with pre-posttest two group design. Hand fan media group and leaflet media group, each group sample were 55 students. Data analysis used the *Wilcoxon Signed Ranks test* to compare scores before and after intervention in each group by questionnaire, then the *Mann-Whitney test* to compare between hand fan and leaflets groups. **Results:** There were significant differences ($p < 0.05$) pre-post intervention in both groups. There was a significant difference ($p 0.01$) on mean score of knowledge between hand fan media group and leaflet media group. **Conclusion:** Both hand fan and leaflet media had improving the respondent's knowledge.

Keywords: hand fan, health educational media, leaflet, Prophet healthy lifestyle.

1. Introduction

The five pillars of Prophet 's healthy lifestyle consist of eating patterns, sleeping patterns, activity patterns, hygiene patterns and stress management patterns. These five patterns, if people applied properly and correctly, they had not only get the spirit benefit, but physical health is also well approved. The Prophet's healthy lifestyle refers to the healthy lifestyle promoted by the Indonesian Minister of Health that concerning the education on healthy living. (Kemenkes, 2011)

According to the Ministry of Health (2011), the healthy lifestyle habits was one of many factors that can affect health conditions. The application of clean and healthy behavior was one of health protection to a person or group who aware for improving their health.

In research on healthy lifestyles in Iran, it turns out healthy lifestyles were significantly associated with the incidence of breast cancer. (Ghosn et al, 2020)

Minister of Health the Republic of Indonesia Regulation No. 1/2013 regarding guidelines for organizing and developing Pos Kesehatan Pesantren (POSKESTREN), supports the realization of the independence of Pesantren's people and the their community to behave in a clean and healthy life. One of them is through preventive health programs, such as a health education. In the pesantren, a health education is integrated with the education of the Prophet healthy lifestyle with various methods and media.

In Indonesia, various kinds of health education media have begun to facilitate the public about healthy lifestyles, support in the form of hand fan, disk, leaflets, posters, books, comics, videos, etc. The media has been used in exploration, training, and seminar activities to increase the knowledge of PAUD and kindergarten teachers and healthy breakfast education for students, elementary teachers and collage students (PERGIZI, 2016) and family (Sari Husada and PERGIZI, 2016).

All health education media are the embodiment of the healthy lifestyle that was launched by the Indonesian Ministry of Health. However, although the hand fan media has been generally used as a health promotion education media, but there is no study that proves that the hand fan education media is effective in increasing certain knowledge. In the pesantren environment, an effective health education media to teach the Prophet's healthy lifestyle is absolutely needed to achieve the learning goals.

The purpose of this study was to compare the effectiveness of hand fan and leaflets education media in increasing knowledge levels about the Prophet healthy lifestyle.

2. Instruments and Methods

2.1 Design, Place and Time

The This research used quasi experimental design, with pre-post test two groups design. One group had intervention with hand fan media and the other group had intervention with leaflets media. All media about the Prophet healthy lifestyle education. Pre – post test used questionnaire.

Group 1. O1 - x1 - O2

Group 2. O1 – x2 – O2

O1 : pretest

O2 : post test

x1 : hand fan media

x2 : leaflet media

This research was conducted in University of Darussalam Gontor (Pesantren College), in December 2019.

2.2 Instruments

The instrument used in this study were hand fan and leaflet media about the Prophet healthy lifestyle, questionnaire about hand fan and leaflet content provided.

2.3 Population and Research Subjects

The sample population was all female students of University of Darussalam Gontor. The number of each group used the formula of two independent groups (Rachmat, 2012)

$$\sigma^2 = \frac{(n1 - 1)S1^2 + (n2 - 1)S2^2}{(n1 - 1) + (n2 - 1)}$$

$$n = \frac{(Z\alpha + Z\beta)^2 + 2\sigma^2}{\Delta^2}$$

σ = standard deviation sought

S1 = standard deviation of the first group

S2 = standard deviation of the second group

n1 = group 1 sample size

n2 = group 2 sample size

Z α = confidence interval (5%; 1.96)

Z β = power of test (95%; 1.64)

Δ = average difference with significant p value

This study used the Kapti (2011) research method, with the same research design and a sample size was 30 respondents.

$$\sigma^2 = \frac{(30 - 1)8,53^2 + (30 - 1)10,38^2}{(30 - 1) + (30 - 1)}$$

$$\sigma^2 = \frac{72,7609 + 107,75}{2}$$

$$\sigma^2 = 90,25$$

$$n = \frac{(1,96 + 1,64)^2 + (2 \times 90,25)}{6,52^2}$$

$$n = 55$$

The number of samples each group were 55 students.

2.4 Data Analysis

Three steps of data analysis:

1. Normality distribution data test with Shapiro Wilk test. If p value >0.05 , the data was normal distribution.
2. Analysis the differences each group of pre – post intervention with Wilcoxon Signed Ranks Test (all data had not normality distribution).
3. Analysis the difference between leaflet media group and hand fan media group with Mann Whitney Test (all data had not normality distribution).

3. Results and Discussion

The result of all data normality distribution test with Shapiro Wilk test can be seen in table.1 below.

Table 1: Data's Normality Distribution

Data	n	p - value
Pretest hand fan	55	0.000
Posttest hand fan	55	0.000
Pretest leaflet	55	0.000
Posttest leaflet	55	0.000

Table 1 shows that there was no data that had normal distribution. So, the statistical comparative analysis used the Wilcoxon Signed Ranks test to analysis pre – post knowledge score about Prophet healthy lifestyle in both intervention (hand fan media and leaflet) and Mann Whitney test to analysis mean knowledge score between hand fan and leaflet media.

Table 2. The knowledge scores pre – post intervention hand fan and leaflet media group

intervention	n	Pretest*	Posttest*	P value**
Hand fan	55	12 (8-14)	13(11–15)	0,00
Leaflet	55	12 (9 - 3)	13(10–14)	0,00

*Median (minimum – maximum)

***Wilcoxon Signed Rank Test*

Table 2 shows that, there were significant differences knowledge scores of the prophet healthy lifestyle between pre and post test in both hand fan and leaflet media group ($p < 0.000$). It shows the post-test scores were higher than the pretest in both interventions (hand fan and leaflet).

The increasing of respondent's knowledge (post test score were higher than pretest scores) in both groups (hand fan and leaflet media) reflected an increasing the knowledge that influenced by media assistance which made it easier for respondents to remember the material provided.

It was in accordance with other educational media research such as research conducted by Beaujean et al (2016) which states that both the movie and the leaflet are valued and effective intervention tools for improving knowledge about their study.

Other research that used educational media as a means to increase knowledge about healthy lifestyle is Karimlou's study (2019), he said that the counseling such as educational media can improve health promoting lifestyles in middle-aged women.

In a study of the effectiveness of health education media in UK hospital waiting rooms, found that the variation of amount, topicality and material's quality in waiting room are needed. As most patients notice health education materials and find them very useful. (K. Maskell et al., 2018)

Table 3. The knowledge mean scores between hand fan and leaflet media

intervention	n	Median (minimum- maximum)	Mean \pm SD	P value*
Leaflet	55	13(10-14)	12.58 \pm 0.7	0,010
Hand fan	55	13(11-15)	13 \pm 1.0	

**Mann Whitney Test*

Table 3 describes that there was significant difference knowledge scores of the prophet healthy lifestyle between hand fan and leaflet media group. (p 0.010). It also shows the hand fan post test value was higher than the leaflet.

Three functions of visual media were: 1) the attention function: to attract and direct students' attention to concentrate on content related to the meaning of the image displayed or the text that accompanied the subject. 2) the affective function: the level of student amusement when seeing the display of text, images or visual symbols that can arouse students' emotions and attitudes; 3) the cognitive function: makes it easier for respondents to understand and remember information or messages contained in images or symbols. (Levie, W.H. & Lentz, R. 1982)

The finding in this study can be related to the fact that hand fan media, is more attracting than leaflet ones. This interest could be due to the hand fan media having more functions compared to leaflets such as fanning, blowing air with tools. Also, hand fan media is easy to carry around especially on hot days, to cool the body. Respondents who were also students, can use this media while studying in hot weather. When the media is used functionally to cool the body, respondents repeatedly see the information in it. Unlike the leaflets whose use is only as information media (Bardaweel & dashash, 2018).

However, although statistically there were significant between the use of leaflet and hand fan media, the real difference was insignificant. This is shown by table 3, it explains that the difference in average score of post-test in the two media was only 0.5 which could be interpreted that between the two media there was different in one question. The difference in

one of these question obviously cannot prove that the use of hand fan media is more effective than the use of leaflets. It still needs further research with a certain period of time to see deeper changes in knowledge (Trihono,2002).

4. Conclusion

Both hand fan and leaflet media had improving the respondent's knowledge. Hand fan media more effective increased knowledge about the Prophet healthy lifestyle compared to leaflet media. We recommend for future research to consider.

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