

Nutrition Training for Madrasah Ibtidaiyah Teachers in Semarang Regency

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ABSTRACT

The purpose of this study was to analyze the knowledge of Madrasah Ibtidaiyah (MI) teachers in Semarang Regency about nutrition. This study used a quasi-experimental design. Seventeen teachers were provided with training covering four modules in four hours. The data obtained were analyzed using ANOVA. It showed that the understanding of 94% of the teachers about nutrition had a score higher than 60. There was a slight increase in the knowledge of nutrition among the teachers but it was not statistically significant ($F=2.395$; $p=0.173$). It is concluded that training on nutrition for MI teachers in Semarang Regency slightly increased their knowledge on nutrition.

Keywords: Madrasah Ibtidaiyah, nutrition knowledge, Semarang regency, teachers, training

INTRODUCTION

School plays an important role in the implementation of nutrition and health promotion for children when they are in the early stages of life. Healthy lifestyles must be followed by students and become their habits, which are expected to come with the positive results of eating healthy food and some psychosocial factors (Imron *et al.* 2023). In the communication process, teachers have a role as communicators and students as communicans (Inah 2015). However, the understanding of nutrition among the teachers of Madrasah Ibtidaiyah (MI), or the Islamic equivalent of middle school, has not been well exposed. The MI teachers in Semarang Regency rarely have any training on nutrition. In 2018, the prevalence of severely stunting and stunting among children aged 5–12 years in Central Java Province was 5.6% and 15.2%, respectively (MoH RI 2019). Therefore, a nutrition training was designed for MI teachers. The aim of this study was to analyze the knowledge of nutrition among MI teachers in Semarang Regency.

METHODS

This study used a quasi-experimental design and was conducted in Semarang Regency, from July to December 2022. The ethical approval for this study was obtained from the Health Research Ethics Committee of Faculty of Public Health, Diponegoro University. Before the study was conducted, approval was obtained

after the expository from the teachers. There were seventeen teachers who were selected from one MI according to their education. The data were collected using structured questions prepared according to the topic of the module. Four modules were prepared for the participants: 1) module on nutrition to prevent stunting in students; 2) module on nutrition to prevent anemia in students; 3) module on balanced nutrition to prevent obesity in students; 4) module on nutrition to prevent dengue fever in students. Each module was explained and discussed with the participants for one hour. The data obtained were analyzed using ANOVA.

RESULTS AND DISCUSSION

The results of the study showed that the teachers' nutrition knowledge scores changed after the training. The mean score before the training was 74.12 ± 12.776 , and the mean score after the training was 78.24 ± 11.311 (Table 1).

Most of the teachers were female (88.24%) and more than half of the teachers were more than 31 years old. The percentage of the teachers having good knowledge in nutrition is increased from 41.18% to 64.71%. There was an increase in understanding of nutrition after the training, although not statistically significant ($F=2.395$; $p=0.173$). Sasmita *et al.* (2023) showed that the knowledge of the students increased significantly after being educated about nutrition. The discussion among the teachers on each question about nutrition in Figure 1 showed that before and

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Table 1. Distribution of teachers' nutrition knowledge and characteristics

Variable	n	%
Nutrition knowledge before training		
Good	7	41.18
Average	6	35.29
Fair	3	17.65
Weak	1	5.88
Nutrition knowledge after training		
Good	11	64.71
Average	5	29.41
Fair	0	0.00
Weak	1	5.88
Age		
18–30 years	6	35.29
31–45 years	7	41.18
46–59 years	4	23.53

after the training, most of the teachers could answer the questions well. The teachers had difficulties in explaining the principles of designing nutritional menu for students and also in describing food portion. The teachers could explain well about iron-enriched food source; factors of obesity among the students; daily portion of food per plate; virus causing dengue fever; and main

factors of the dengue fever. Virus can affect the body's immunity. Balanced nutrition is needed by the body so that immunity is maintained.

CONCLUSION

Nutrition training for MI teachers in Semarang Regency could improve their understanding of nutrition as many as 4.12 point, although not statistically significant. It is concluded that nutrition training can be effectively used as an intervention method to improve teachers' knowledge of nutrition.

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DECLARATION OF CONFLICT OF INTERESTS

The authors have no conflict of interest in the preparation of the manuscript.

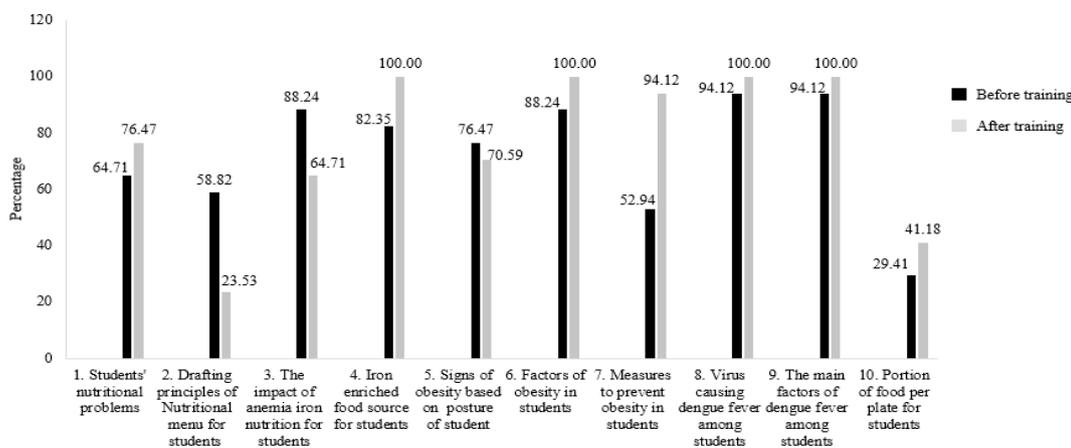


Figure 1. Teacher knowledge scores for each nutrition item before and after the training

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