

THE EFFECT OF NUTRITION EDUCATION THROUGH WHATSAPP TO THE NUTRITIONAL KNOWLEDGE OF MOTHERS ABOUT FOOD CHILDREN PICKY EATER

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ABSTRACT

Picky eater and lack of maternal nutrition knowledge is an issue that affects the lack of food intake in preschool children. Every individual in an urban setting and being able to use the app android Whatsapp. This study aims to determine the effect of nutrition education through WhatsApp on maternal nutrition knowledge. This study design was a one-group pre-post test design. Intervention in the form of virtual nutrition education through the application WhatsApp for one week. Before and after nutrition education nutrition knowledge was measured through a questionnaire about the type, size and manner of child food processing. Nutritional analysis using statistical test-Wilcoxon Signed Ranks Test. Maternal nutrition knowledge about the types of food children between before vs. after education was 80.00 ± 20.28 vs. 95.56 ± 12.75 ($p = 0.000$), knowledge of the amount of food children 30.56 ± 19.92 vs 75.00 ± 29.617 ($p = 0.000$) and knowledge of how to cultivate the child's diet vs. 87.78 ± 52.22 vs 19.289 ± 20.44 ($p = 0.000$). Nutrition education through Whatsapp can improve the nutritional knowledge of mothers of children picky eaters.

Keywords: Nutrition Education, knowledge, WhatsApp

INTRODUCTION

Behavior picky eating (picky eater) is one of the issues that affect food intake deficiency in preschool children (Sumarni, 2015). The results of the study in the city of Durham UK showed more than 20% of children aged 2-6 years were selective eaters, and 18% were classified into a pretty picky (Utami, 2016). The number of children aged under five is picky eaters in Indonesia about 20%, of which 44.5% had mild to moderate malnutrition Priyanti (2013). Children who experience more picky eaters at risk of having a low birth weight, especially preschoolers. The behavior of a picky eater who is not addressed as early as possible can lead to children accustomed preference "choose the food and can cause the child nutrition deficiencies that may affect nutritional status (Saraswati, 2012; Nadimin, 2018).

picky eater affected by the lack of nutritional knowledge, parenting, parent eating behaviors, interactions of mothers and children, exclusive breastfeeding, solids, and the psychological and physical condition of children (Rufaida, 2015). The research result

Rina Damayanti (2017) states that there is the influence of mothers' knowledge of nutrition and feeding patterns on the incidence of malnutrition among children under five in Puskesmas Gajahan Surakarta.

Picky eater solution overcomes the problem that needs to be done to increase knowledge through nutrition education activities. Irnani Hayda's research results (2017) states that there is an influence of nutrition education to primary school children's nutritional knowledge. While the research results (Febriati, 2017) states increased knowledge of balanced nutrition through nutrition education intervention. Both studies were not much different from the results of the study Hima Aliya (2017) which states that nutritional education has an influence on increasing the knowledge of balanced nutrition in children 4 Kandangsapi SD Muhammadiyah Surakarta. Nutrition education can be provided through extension by using media such as posters, leaflets, comics and other interesting media (Rahmiyati, 2017).

Nutrition education in the era of information technology should not be done

face to face. Availability of communication tools such as mobile phones (HP) and android, becoming an important alternative to improve nutritional knowledge. Almost every family in an urban cell phone or android, so it needs to be used as a medium to conduct nutrition education among officers with the client (family toddlers). Nutrition education is virtually considered to be more efficient, where officers do not need to come to visit or otherwise target mothers young children do not need is visiting officers. Intraksi both can take place without being limited by time and space. Nining research Wahyuni NH (2017) states that there is the influence of nutrition education through social media Instagram towards balanced nutrition knowledge (PGS) of high school students.

One of the virtual applications that can be used for nutrition education is Whatsapp. Whatsapp application has advantages compared to other applications, such as group education can create, send pictures and the like and can use audio and video so it can be an interesting educational media targeted to interact.

Based on this writer is interested to analyze the effect of WhatsApp nutrition education to increase knowledge of mothers about child feeding picky eaters.

METHOD

Types of research

This study design was a one-group pre-post test design. Before and after the intervention measurement of nutritional knowledge on each respondent. Furthermore, intervention in the form of virtual nutrition education through the application *WhatsApp* for one week, Using media such as posters, accompanied by questions and answers online.

Research samples

Samples are mothers of children with picky eaters. A sample size of 36 mothers of children picky eaters. The sample selection using a purposive sampling method with direct netting in a kindergarten in the city of Makassar and through social media. The criteria are the following samples have children picky eaters, have a smartphone, using WhatsApp application and willing and able to participate be the sample.

Data collection

Nutritional knowledge of data collection using a questionnaire containing knowledge of the type, quantity and food preparations picky child eater. The questionnaire was filled out online by a predetermined time.

Processing and analysis of data

Processing data using a data processing application program and the MS program. Excel. Before the data is inputted into a data processing application program, these data redacted to prevent incorrect data entry. Data were analyzed using the Wilcoxon Signed-Ranks Test to determine changes in mothers' knowledge of child feeding picky eaters between before and after nutrition education.

Ethical Clearance

This study protocol was reviewed and a recommendation from the Commission on Health Research Ethics (KEPK) Poltekkes Kemenkes Makassar, Indonesia. Before performing data collection begins with a request for approval on each respondent's informed consent.

RESULTS

Characteristics of Respondents

Table 1. Characteristics of Respondents

characteristics	N	%
Age:		
19-29 years	7	19.5
30-49 years	27	75.0
50-64	2	5.5
Education:		
Primary school	1	2.8
Junior high school	1	2.8
Senior High School	15	41.7
College	19	52.7
Work:		
Government employees	7	19.4
Employee	11	30.6
trader	3	8.3
Housewife	15	41.7
total	36	100

Most of the respondents aged 30-49 years with the education level of university campuses and graduated from high school.

Work that most respondents are housewives and employees.

Effect of Nutrition Education Nutrition Knowledge against Mother

Table 2. Maternal nutrition knowledge scores between before and after nutrition education

science of nutrition	Before	After	p-value
Type of food a child	80.00 \hat{A} \pm 20 284	95.56 \hat{A} \pm 12 749	0000
Number of child food	30.56 \hat{A} \pm 19 922	75.00 \hat{A} \pm 29 617	0000
How to cultivate food	52.22 \hat{A} \pm 19 289	87.78 \hat{A} \pm 20 440	0000

Table 2 above shows that there is increased knowledge score maternal nutrition before and after nutrition education through WhatsApp, good knowledge about the types of food children ($p = 0.000$), the number of food children ($p = 0.000$) as well as knowledge about how to cultivate the child's diet ($p = 0.000$).

DISCUSSION

Nutrition education is essentially an activity to deliver nutritional messages to change people's behavior or the target group (Rahmiyati, 2017; Nadimin, 2018). Nutrition education in this study conducted virtually through the use of WhatsApp application with the group chat feature. Nutritional messages are sent in the form of paper, posters and pictures. The frequency of message delivery is performed three times a week for one month. The results showed a significant increase in knowledge of nutrition between before and after education. Increased maternal knowledge about the kind of food the child reaches 15 points, the knowledge about the amount of children's food increased by points and knowledge about how to cultivate the children's food increased by 35 points.

These results are consistent with research conducted by Rahayu (2018) in Puskesmas Rapak Mahang Tenggara and implemented by Fifiandyas (2018) on the expectant mother. Both of these studies indicate that nutrition education can improve the nutritional knowledge that targets both high school students and the mother KEK (chronic energy deficiency).

The use of online media as a medium of nutrition education is proven to increase knowledge of the target. This is in line with several previous studies. Nuryati (2017) found that the use of social media can improve postnatal care knowledge. The same thing also delivered by Mita (2017) that nutrition education using Instagram social media to enhance the knowledge and attitudes of balanced nutrition in students of Communication Sciences University of Sriwijaya Indonesia. The result of the students in the school students conducted by the Prime (2017) showed that the application of android-based nutrition education media can

improve attitudes, knowledge and practices of balanced nutrition in children.

In general, nutrition education through WhatsApp media can improve maternal nutrition knowledge but not all goals of this educational experience change such knowledge. It really depends on the activity of the target interaction and activity in this study group. There is a small proportion of the target less-active response to any information submitted. Officers sometimes had to call over a network against specific targets so that they actively read the information on the Whatsapp group. Another factor influencing the change of knowledge in this study is the level of formal education (Nadimin, 2015) and employment. Some goals of this study had low educational backgrounds that are less interested in the information submitted.

CONCLUSION AND RECOMMENDATION

Nutrition education through the media WhatsApp proved to improve maternal nutrition knowledge about the type, amount and manner of food processing food picky eater children. Expected to take advantage of social media in providing nutrition education using instructional media more interesting and varied.

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