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### WORKSHOP ON THE DEVELOPMENT OF PHOTONovel-BASED NUTRITION EDUCATION

#### MATERIALS AT SD NEGERI NAIKOTEN 1 KUPANG

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#### Abstract

**Introduction:** The government and the community have made various efforts to prevent and overcome nutritional problems, but this has not been able to solve it. Therefore, nutrition education that is made needs to pay attention to the needs of the target audience, especially school children. The development of nutritional education using this photonovel will involve parents, who are a very important part, because they provide access to food for children.

**Objective:** Analyzing the mother's self-efficacy in providing nutrition education to others using the photonovel; the quality of nutritional education materials used in making photonovels; and the implementation of the workshop design and the obstacles found for improvement.

**Method:** A case study was conducted on 10 mothers of grade I, II, and III SD Negeri Naikoten 1 Kupang using questionnaires, FGDs and interviews. **Result:** The development of photonovel-based nutrition education media was carried out using existing poster education media, which were considered to still not convey messages that were easily understood by the school children. The results of the study showed that mothers were more confident in providing nutrition education to others using photonovels. The mothers also agreed that photonovel is good to use and can be used properly by anyone. **Conclusion:** Efforts to develop nutrition education media by the health office can be carried out using photonovels. The resulting photonovel is more targeted because it discusses the nutritional problems that are more specific to the area.

**Keywords:** Workshop; Nutrition education; School children; Photonovel.

## INTRODUCTION

Health problems, especially nutritional problems in Indonesia, cannot be resolved. The government and the community have made various efforts to prevent and overcome nutritional problems, but this does not solve the problem. Nutritional problems that occur in Indonesia are very diverse and do not happen due to the same cause. Meanwhile, the nutritional education plans carried out by experts have not been able to accommodate this. The development of nutrition education programs is usually only based on the knowledge and experience of experts and available data. Whereas, the development of nutrition education by considering its participants is also very important to do.

School-age children are one of the age groups that are at risk of experiencing nutritional problems because during this period the body requires adequate nutritional intake every day to ensure the fulfillment of the body's needs and activities. Children who consume foods with adequate nutrition on a regular basis will grow healthy and perform well academically and stay fit to participate in activities (SAEMEO RECFON and Kemendikbud RI, 2019). However, not all children are able to meet their nutritional needs every day. One influencing factor is the wrong eating habit of children. Parents of children have an important role in teaching good eating habits to children, but not all parents have good nutrition education. Thus, nutrition education for parents of school children is very necessary as an effort to prevent and overcome nutritional problems in school-age children.

The nutrition education needs to pay attention to its participants. This can be done by having a joint discussion about the problems they face and the solutions they expect. This participation can enable learners to recognize abilities not only in themselves but also in other "non-expert" members of society (Roter et al, 1981). This is then known as participatory learning model. The development of participatory learning models is designed according to the functional learning needs for rural communities (Arbarini et al, 2018).

The development of nutrition education carried out using a participatory learning model aims to increase parental participation in discussing problems with eating habits faced by children, their causes, and then finding joint solutions to solve these problems. One form of participatory learning model is photonovel. The development of nutrition education using this photonovel will show that parents are a very important part, because they provide and provide access to food for children (Ademuyiwa et al, 2019).

SD Negeri Naikoten 1 Kupang is one of the elementary schools (SD) in the city of Kupang. This school is located only 250 m from Naikoten Inpres Market which provides various sources of food needed by the local community. Students of SD Negeri Naikoten 1

Kupang have a habit of bringing lunch or pocket money to buy food sold in the school canteen. It is just that during the pandemic the school cannot hold full face-to-face learning, so the school choose to close the school canteen for a while. However, there are still food vendors selling street food outside the school which are located opposite the highway. This then makes the snacks sold are not guaranteed to be clean. Therefore, school children need to be provided with nutritional education about good eating habits so that children do not make the wrong choice of food that should be consumed or not.

This study aims to analyze the mother's self-efficacy in providing nutrition education to others using a photonovel made; the quality of the nutritional education materials used in the making of the photonovel; and implementation of the workshop design and identified barriers to improvement. Studies on the development of nutrition education materials using photonovels in Indonesia are still very rare. Thus, research results can provide input to nutrition program implementers and makers regarding efforts to improve community nutrition education by conducting nutrition education that is right on target and in accordance with community needs. This can be done by inviting participants (target targets) to participate in the development of nutrition education through joint discussions with experts.

## **METHODS**

The research was conducted with a case study type, which is part of a qualitative method that wants to explore a particular case in greater depth by involving the collection of various sources of information. The research will be conducted at SD Negeri Naikoten 1 Kupang, which is one of the elementary schools (SD) in Kupang City. The population of this study was the mothers of grade I-III students at SD Negeri Naikoten 1 Kupang. The technique of taking the subject in this research is purposive sampling. The research subjects that became the sample were selected based on inclusion criteria, namely the students' mothers that were willing to attend the workshop, aged between 25-40 years, and had a minimum high school education. While the subjects who could not be sampled in the study were determined based on the exclusion criteria, namely the student's mothers that did not attend more than 2 meetings in a row and did not fill out the assessment sheet provided. The subjects selected were 10 student mothers.

The instruments used in this study were participant assessment sheets from previously available nutrition education media and the quality of the nutritional education materials used in the making of the photonovel, focus group discussion (FGD) question

guides before the workshop, interview questions guide during evaluation, cameras, voice recorders, and stationery. The nutrition education variable uses a measuring instrument with four phases of participatory learning, namely 1) identify and prioritize problems; 2) plan strategies with the community; 3) put strategies into practice; and 4) evaluate and reflect on progress (Fottrell et al, 2016). The research will be carried out through a workshop on the development of photonovel- based nutrition education materials at SD Negeri Naikoten 1 Kupang which will be held for 2 weeks. The photonovel will be made with the theme of School Children's Eating Habits. The participant's assessment sheet on the nutrition education media that already existed and the quality of the nutritional education media, namely photonovels made using an instrument with answer choices, namely 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree.

The participant's assessment were carried out on the nutrition education media that had existed before and the quality of the nutritional education materials used in the making of the photonovel. Participants' assessment sheets will be assessed descriptively. Nutrition education media is considered good if the average value reaches the standard value of the assessment, namely the value of "3" or "agree", while the educational media is considered poor if the average value is less than the standard value, namely the value of "2" or "disagree".

The development of nutrition education materials has the aim of changing children's wrong eating habits by developing educational media into photonovels that can be accepted and used by parents to teach good eating habits to their children. This activity consists of several meetings in each phase. The research implementation uses FGD with four phases of participatory learning. The research was carried out for 2 weeks. At the beginning of the workshop activities, not all mothers were actively discussing so that information about children's eating habits was still lacking. On the next day, to invite mothers to be active in discussions, socialization was carried out on good eating habits, then continued to invite mothers to express opinions according to their experiences and the solutions implemented in building good eating habits for children.

## **RESULTS**

The research subjects were mostly mothers of grade I students, as many as 8 participants, while the other 2 participants were mothers of grade II and VI students. Mother of class VI student was not the initial target of the research subjects who wanted to be selected, but because of the same study schedule as the class I students, the mother of

student participated in this workshop activity. Meanwhile, class III students were unable to participate in the study due to different study schedules, so that no mother could attend the workshop which was held at 08.00-10.00 in the morning according to a mutually agreed schedule.

### **1. Literature Review of Existing Nutrition Education Media**

The government has made various efforts aimed at building superior Indonesian human resources, one of which is through the Germas program or Gerakan Masyarakat Hidup Sehat (the Healthy Living Community Movement). The educational media that is often used in this Germas campaign is poster media, but this poster media still has drawbacks such as posters that can only be found in certain places such as hospitals, health centers, or during the Germas campaign which may not necessarily cover all ages and backgrounds social status. In fact, everyone needs this information because the existence of educational media such as this poster will be able to provide solutions to the nutritional problems faced by the community. Therefore, an assessment of the existing nutrition education media was made so that evaluations with the community could be carried out, the results of which could be useful in developing educational media to be better and beneficial for everyone.

The results of the participant assessment showed that 7 out of 10 mothers agreed that the Ministry of Health nutrition education poster media was considered good (average score  $\geq 3$ ). Meanwhile, 3 out of 10 mothers did not agree and considered that the poster media was still not good (average score  $< 3$ ). The Ministry of Health's nutrition education poster does contain short and easy-to-understand material. However, because the display is made too general, not all age groups can be targeted for education, especially for school children. Posters are considered not to describe messages that are easily understood by school children, such as the lack of pictures that children like or the contents of messages that display cause and effect so that children are more interested in reading.

### **2. School Children's Eating Habits**

Children of SD Negeri Naikoten 1 Kupang have different eating habits and they are not yet fully able to choose and determine their own eating habits so that parents have an important influence in helping the formation of good eating habits for children.

“Every morning, parents want to give a quick breakfast because the children want to go to school. So, for that I alternate sometimes eggs, sometimes sausages, and sometimes nuggets.” (R05)

There are some children who are given food supplies and are not given pocket money, there are also children who do not bring lunch but are provided with pocket money,

and partly there are children who bring lunch as well as pocket money. It's just that the school has not been able to make a healthy canteen so that some snacks are still sold outside the school which is directly opposite the highway. This then makes the snacks sold are not guaranteed to be clean.

"I give lunch and snacks. Snacks a day Rp. 5000." (R08)

The influence of parents is not only about good eating habits and prohibitions against snack foods but also dietary restrictions that are taught by parents. Food taboos that are trusted by parents and applied to children are not necessarily true and appropriate. So that these dietary restrictions need to be discussed with mothers so that there are no misunderstandings that cause children to lack certain nutrients.

### **3. Mother's Self-Efficacy in Providing Nutrition Education to Others Using Photonovels Made**

This activity then provides new information to mothers about good children's habits and needs to be applied in daily life. At first, the mother thought it was still difficult because the child was used to the old habits. But over time, children want to participate in trying new and healthier eating habits, not only through new things taught by mothers but also through photonovels given to children as examples.

"Yes, I reminded them not to eat street food at school and always wash their hands before eating. My son who previously did not like to eat fish, I introduced the benefits of fish for brain intelligence. So, try it first, don't immediately say you don't like it." (R03)

Mothers are also confident in providing nutrition education to others using photonovels. Not only using existing printed books but also through social media by sharing photonovel files that have been previously shared. This activity was only carried out for 2 weeks, but through printed books and photonovel files that had been distributed, the mothers were confident that they would continue to provide nutrition education to others through the photonovel.

"We can share it through group chat, later when asked we can explain that this is good for parents and children to introduce good nutrition." (R05)

"I explain by telling the cause and effect of consuming unhealthy snacks such as inflammation, cough and cold. So cleverly we explain it to them so they will listen." (R08)

#### **4. Quality of Photonovel-Based Nutrition Education Media**

Assessment of photonovels that have been made together with participants is also carried out with the aim that in the future photonovels can be made better with different topics according to the needs of the community. The results of the participant assessment showed that 10 out of 10 mothers agreed that photonovel-based nutrition education media was good to use as a good, useful teaching tool, displayed information in accordance with the problems faced by the community, easy to understand, and most importantly, mothers were confident in providing education to others use photonovels that have been co- created.

#### **5. Implementation of the Workshop Design and Obstacles Found for Improvement**

The initial design of the workshop was carried out for 1 month, but due to the need for time adjustments with the participants, it was agreed that the workshop would be carried out for 2 weeks, namely the activity was carried out 3 times in 1 week. The activity plan for the first week is to have a discussion with participants about children's eating habits at home and at school, but due to the shortened time so that the preparation of the discussion becomes more rushed, it is considered that there are still many discussion materials that have not been discussed as material for making photonovels. In addition, another obstacle encountered was that at the beginning of the activity it was planned that the subject needed was the mother of grade I-III elementary school students. However, at the time of the study, there was a change of principal 3 times so that the learning schedule also changed 2 times in the first week. So, it is difficult to collect the mothers of third grade students because the learning schedule is not in accordance with the schedule for the implementation of the workshop activities.

### **DISCUSSION**

The results of this assessment indicate that nutrition education media in the form of the Ministry of Health posters are less illustrative of messages that are easily understood by school children, such as the lack of pictures that children like or the content of messages that display cause and effect so that children are more interested in reading. In addition, there are no health posters commonly found in SD Negeri Naikoten 1 Kupang that explain nutrition. Most of the posters discuss the importance of maintaining cleanliness, obeying teachers and parents, smoke-free areas, etc.

This problem became the basis for the implementation of the photonovel-based nutrition education media development workshop at SD Negeri Naikoten 1 Kupang. The photonovel was then made together with the student's mother. The research target was

conducted on the students' mothers because most of the decisions about eating children and families and how the food was prepared were made by mothers. Some fathers have a role in preparing meals in the family for a reason, but fathers and children believe that mothers know the best ways to teach and instill healthy eating habits for children and families (Lindsay et al, 2018).

Mothers who attended the workshop were mothers who were often at school and looked after their children until it was time to go home, so that they understood more about their children's eating habits at school. At the beginning of the workshop, the women were not necessarily active in the discussion. Some mothers are still shy to actively give their opinion so that only 3 out of 10 mothers are actively speaking. The information obtained will be very useful in developing photonovel material in the future. The results of this study are similar to the findings of Pyle (2013) and Howitt et al. (2021) which focuses on developing photobooks for children. There are situations where the children are not very active during the discussion. Even so, children will still be able to provide information to their families while at home with the help of photobooks made.

The photos used in the making of the photonovel were collected with the participating mothers who were willing to become models and their children. There are 2 active mothers who send photos. The photos sent are photos of children's eating habits at home and at school along with activities such as eating lunch during recess, playing, and buying snacks with friends. The photos that have been collected are then compiled and selected according to the scenarios that have been discussed with the mothers to be included in the photonovel. Photonovels are made in the form of illustrated and colorful comics using templates from the Canva application compiled by researchers. The design of the photonovel that was made later is still going through revision with the mothers regarding the lack of discussion material. The revised photonovel was then printed and distributed to the mothers of the participating students and to the school.

The results show that mothers are confident in providing nutrition education to others using photonovels. Not only using existing printed books but also through social media by sharing photonovel files that were previously given. Some mothers said that they had started teaching their children good eating habits using their photonovels. Although at first the mothers thought it was still difficult because the child was used to the old habits. But over time, the children wanted to join in trying new and healthier eating habits. This is in line with research conducted by Pyle (2013) that children will see themselves and their parents in the photobooks made, so children will know that the book is telling stories about



them. This kind of understanding will foster curiosity in children to want to better understand the contents of the book.

The results of the assessment of the quality of photonovel-based educational media, namely mothers agree that photonovel-based nutritional education media are good for use and can be utilized properly by anyone. The neighbors even gave a positive response and hoped to be able to take part in the workshop and want to immediately get nutrition education through photonovels told by mothers.

## **CONCLUSION**

The conclusions that can be drawn from the results of the discussion of this study are as follows:

- a. The assessment of the Ministry of Health's nutrition education poster media, namely the poster is considered to not describe messages that are easily understood by school children, such as the lack of pictures that children like or the content of messages that display cause and effect so that children are more interested in reading.
- b. Mothers are confident in providing nutrition education to others using photonovels.
- c. Assessment of photonovel-based nutrition education media, namely the mother agrees that photonovel-based nutrition education media is good to use and beneficial for all.
- d. Obstacles found during the implementation of the workshop activity design are 1) discussions regarding the timing of the activities must be carried out from the beginning; 2) discussion from the beginning with participants regarding the discussion material to be discussed and also the implementation schedule; 3) and considering the time of the study according to the schedule of each research subject. Through these obstacles, it is hoped that further workshop activities can consider existing obstacles and be able to develop photonovel workshops to be even better.

## **RECOMMENDATION**

The Public Health Service is expected to continue to carry out Germas campaigns, especially in schools, especially elementary schools. This is because Germas posters have not been found to be displayed in schools, even though children also need nutrition education apart from parents and teachers. The Public Health Service also needs to consider the development of nutrition education media using photonovel because it can provide better results, is more targeted, and can answer and assist the community in solving nutritional problems that have not been resolved in their area.

Future researchers need to develop photonovel-based nutrition education media with different nutritional themes so that they can become continuous photonovels and do not just stop after the research is done. Further researchers also need to consider the obstacles to implementing the workshops that have been described previously.

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