# KNOWLEDGE, ATTITUDE AND FOOD PRACTICES OF SCHOOL CHILDREN OF ELEMANTARY SCHOOL IN PADANG

by

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Abstract

Malnutrition especially chronic malnutrition, as indicated by prevalence of stunted is more prevalent in schoolchildren in Indonesia. This nutrition and health problem is closely related to knowledge, attitude and food practices of both children and their parents. The objectives of this study were to identify knowledge, attitude and food practices of both children and their parents, especially related to knowledge on food balances and food pyramid.

A cross-sectional study was designed in elementary school of Kuranji subdistrict of Padang. Primary information was collected by trained nutritionist through some methods, as well konvensional interviews include education, food knowledges and practices, second, focus group discussion and indepth interview to 114 schoolchldren, their parents and selected school teachers.

Result of the study show that knowledge and attitude of both children and their parents were knot enough to create good food practices, especially related to Indonesia food pyramid guideline. The impact of this problem is to prevalence of chronic protein energy malnutrition or stunted was high in this group of children. This study suggest and recommend to improve nutrition education to school community, integrated to school health program

## 1 Introduction

School-based programs, especially in elementary school, can play an important role in promoting lifelong healthy eating. because dietary factors "contribute substantially to the burden of preventable illness and premature death in the Indonesia.. Indonesia has had a dietary guidelines since 1994. The guidelines were developed by the department of health, School-based nutrition education can improve dietary practices that affect young persons' health, growth, and intellectual development. Undernutrition , even moderate undernutrition can have lasting effects on children's cognitive development and school performance.. Chronically undernourished children attain lower scores on standardized achievement tests, especially tests of language ability

When children are hungry or undernourished, they have difficulty resisting infection and therefore are more likely than other children to become sick, to miss school, and to fall behind in class (36,37); they are irritable and have difficulty concentrating, which can interfere with learning (38); and they have low energy, which can limit their physical activity

Therefore, young children need nutrition education to help them develop lifelong eating patterns consistent with the Dietary Guidelines for Indonesian young chldren and the Food Guide Pyramid.. Schools are ideal settings for nutrition education for some reasons, as well as

1. Schools can reach almost all school age children .
2. Schools provide opportunities to practice healthy eating.
3. Schools can teach students how to resist social pressures, because of eating is a socially learned behavior that is influenced by social pressures

A comprehensive school health and nutrition program empowers students with not only the knowledge, attitudes, and skills required to make positive health decisions and nutrition but also the environment, motivation, services, and support necessary to develop and maintain healthy behaviors

The problems in elementary school in Indonesia are as follows, first how is the food knowledge, attitude and practices of both children and their parents, second how is the prevalence of malnutrition of schoolchildren in Padang

Objective of the study,. This study aimed are as follows

**1.** to know nutrition knowledge and practices of schoolchildren l, especially related to food pyramid as food guideline used in Indonesian

2. to assess the nutritional knowledge and understanding of primary school children in order to identify the most effective format for future nutrition messages.
3. to know nutrition knowledge and practices of parents, especially mother, in relation to their children and food habits

3. to know nutrition knowledge and practices of teachers, related to their children health and nutrition states

**2. Method and design of the study**

This study was designed as a cross sectional survey in a elementary school namely Sekolah Dasar Negeri No 27 of Keluarahan Sangai Sapih of Subdistrict Kuranji in Padang City

A quantitative methodology was employed and 114 children, aged 9-12 years of $4^{th}$, of $5^{th}$, of $6^{th}$, class and their parents

The questionnaire was designed by the authors of multicenter of 10 universities around the country based on the Nasional Food Guideline, namely Pedoman Umum Gizi Seimbang (PUGS) using Food pyramid. Informed consent was obtained from all participants of this study, according to nasional rule scientific researchFour qualitative methods were done focuss group discussion with group schooldren, group of parents. Indepth interviews were also conducted to some mothers and some selected teachers

Issues discussed included parental food rules, children's perceptions of 'good' and'bad' foods, diet-disease links and food groupings. This study aimed to assess the nutritional knowledge and understanding of primary school children in order to identify the most effective format for future nutrition messages aspecially food guideline of Indonesian food pyramid

Descriptive statistics were used to identify the demographic characteristics of the students and parents, current knowledge, attitude and practices of both themQualitative analisis was done to learn structure of nutrition knowledge and practices of school community member

## 3. Result and Discussion

Sungai Sapih villige of Kuranji subdistric where SD No 27 located was around 8 to 10 km outside central of the city, more populous subdistrict, population were mostly poor or nearly poor. During the last earth quake or September earthquake with 7.9 SR this villige was disaster, more than 50 % of building, include SD No 27 has severe disaster.. This subdistrict was characterisized by quite traditionally in social and cultural point view

Characteristics of parents of the students were shown by this table 1 as follows

Table 1 Distribution of Parents based on their Education

| No | Education level | Father N=114 | Mother N=108 |
|---|---|---|---|
| 1 | Elementary school | 21.1 | 18.2 |
| 2 | Secodary school | 19.4 | 30.0 |
| 3 | High school | 49.1 | 46.4 |
| 4 | Academy/university | 3.7 | 5.5 |
| | Total | 100 | 100 |

The education level of fasther dan mother of the students was relatively high, it was more than father and mother of the students have high school level or more. This education status is important related to effective format for future nutrition messages based on food guideline of Indonesian food pyramid

Table 2. Distribution of Responden Based of Twelve Selected Knowledge and Practices of Parents

| No | MATERI PENGETAHUAN IBU | Frequency |
|---|---|---|
| 1 | Food pyramid is the same with 4 sehat 5 sempurna | 95.5 |
| 2 | Breakfast is important | 67.2 |
| **3** | Vegegetables were consumed by the child dayily | **78.7** |
| 4 | Fruits were consumed by the child daily | 92.2 |
| 5 | Cfhildren need to drink water ≥5 glasses daily | 95.9 |
| 6 | Children need regular sport activities ≥3 times/week | 15.5 |
| 7 | Children need to consume makanan beraneka ragam | 64.8 |
| 8 | No single food is complete | 31.1 |
| 9 | Children need more caerbohydrate | 77.9 |
| 10 | Small fat is enough | 77.9 |
| 11 | Small sugar is enough | 82.8 |
| 12 | Children need snacks | 61.5 |

Mostly parents stated that food balance of food pyramid is the same with "4 Sehat 5 Sempurna" , only 67.2 % of them said that breakfast is important for their students. About 65 % said that for their children need to consumed variety of foodstuff

**1. Knowledge and food practices of schoolchildren**

More than 90 % students of elementary school said that food balances more or less same to "slogan 4 Sehat 5 Sempurna", only abiout 17 % to 35 % of students said zat rice can be change to other carbohydrate sources as well as mie, cassava and others.

**Tabel 2 Distribution of children by some knowledge of students related to food pyramid based on grade of class**

| Knowledge | 4th | 5 th | 6 th | average |
|---|---|---|---|---|
| Piramid GS same to 4**S**5**S** | 92.7 | 97.6 | 91.2 | 94.0 |
| Rice can replaced by mie | 17.1 | 28.6 | 32.4 | 25.6 |
| Rice can replaced by cassava | 34.1 | 85.7 | 41.2 | 50.0 |
| I consume vegetable 2-3 x/day | 90.2 | 98.2 | 99.1 | 95.7 |
| Drink milk is the best | 53.7 | 25.2 | 25.1 | 36.6 |

Foods commonly eaten were rice, cooked vegetables, and fresh fruits In relation with grade of student class, it was shown that in some aspect there were correlation between grade of students classes with knowledge and

food practices of schoolchildren. Also swown that more than 1/3 of children said milk is the best and can replace some other foodstuff

Conclusion from focused group discussion and indepth interview shown that food knowledge of schoolchildren was relatively same with their parents.

In nutrition status of schoolchildren field , this study shown that prevalence of stunted in this group schoolchlidren was too high, it was around 30 %, it was also shown that the older the children have the higher the prevalence of stunted, as shown in table 3 as follows

Table 4 Distribution of chldren based on nutrition status and grade of student class.

| No | Nutrition Status Body height/age | Grade of students classes | | |
|---|---|---|---|---|
| | | 4th | 5 th | 6 th |
| 1 | Normal | 87.8 | 54.8 | 47.1 |
| 2 | Stunted | 9.8 | 40.5 | 52.9 |
| 3 | Tall | 2.4 | 4.8 | 0 |

This above table 3 shown th prevalence of stunted or chronic malnutrition was relatuively high, the prevalence was increase 9.8 % in in group 4th class and become higher, itg was 40.5 % in group of 5 th and the highest was in the group 6 th class. The group 6 th class children was born during the global crisis in 1996, so they had the impact of global and local economic crisis to their growth and development

## 4. Conclusion and recommendation

1. The knowledge of both schooldren and their mother in food balance and pyramid was low. They stated that food pyramid and food bazlance was more or less same with "4 sehat 5 sempurna"

2. There was no correlation between knowledge an food practices voth children and their mother related to parent education
3. The prevalence of stunted was too high, it was about 30 % in this group of children and shown that the older the age become higher the prevalence of stunted among the schooldren

Recommendation to solve this problem are a school-based program to promote healthy food habit and practices, integrated to apropriate curriculum, and school health program. Indonesia has had dietary guidelines since 1994 to be impelented. The guidelines were developed by the ministries of health, agriculture and education, as well as universities.

**Referance**


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