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OVERVIEW OF GENERAL HEALTH STATUS IN PUBLIC ELEMENTARY SCHOOL STUDENTS 34 MAMPANG VILLAGE, KOTAPINANG DISTRICT

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Abstract

Elementary school children with an average age of 6-12 years are in a period where various changes in growth and development will affect their health condition. Child health is very important, considering that children are the next generation of the nation who will continue the nation's struggle for the better. As an effort to ensure children's health in healthy and optimal conditions. Through the 134-group KKN work program in Mampang Village, a health examination program was carried out for children at SDN 34 Kotapinang. This study aims to find out what the health picture of students at SDN 34 Kotapinang looks like. This type of research is quantitative research. Information was collected from 119 randomly selected elementary school students who participated in a health survey. Research tools are used to find common health problems such as body mass index (BMI), nutritional status, and vision problems such as nearsightedness and color blindness. The research design used was *cross-sectional*. The results showed that 75% of the total students who carried out health checks at SDN 34 Mampang had good nutritional status (normal), and another 25% were overnourished status, obesity, undernutrition and even there were students with malnutrition status. 10% of children have partial color blindness, and 20% of children have abnormal eye acuity.

Keywords: Child, Health, Primary School, Overview.

INTRODUCTION

Children's health is important, considering that children are the next generation of the nation who continue to build the nation in a better direction. School age is the time of continued development of maturity of physical, social, and psychological characteristics of children. The population of elementary school-age children is quite an important component in society, considering that the number is quite large, estimated at 23% or one-third of the total population of Indonesia. Children aged 6-12 years have an individual and active nature in a period where there are varied changes in the growth and development of children that will affect the child's health condition. Permenkes No. 43 of 2016 concerning SPM in the Health Sector contains various types of health services to meet the health needs of every citizen. One of them is the

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type of health service for school children, namely health services at the age of primary education. (Anggraini, 2021)(Anita Haryati & Hidana, 2019)

To find out the picture of students' basic health status can be done using health screening. Health screening is a health check that can help reduce the risk of disease arising from poor self-care and unhealthy life behaviors. This activity aims to detect early children who have health problems to immediately get treatment as early as possible. This health check consists of a head examination covering hair, eyes, nose, ears, mouth, and teeth, skin and nail examination, weight, and height. (Anggraini, 2021)

The eyes are the five most important senses and have a very vital function which can help a person to see objects. When entering school age, vision in children becomes a very important thing. With good eyesight, the teaching and learning process will occur well. Visual impairment in school-age children is one of the important health problems. Where if there is a visual impairment it will affect the teaching and learning process, and this will affect the child's achievement. According to WHO, it is estimated that nearly 18.9 million children under 15 years of age have sharp visual impairment. (Imat Rahmatillah & Fairuz, 2022)(Gama, 2019)

This disruption can be caused by insufficient lighting, for example in classrooms, lights used dim, or inadequate infrastructure so that the ergonomics of the teaching and learning process do not run well. This leads to eye refractive errors. Namely, eye disorders are when the eyes cannot see/focus clearly on an open area so that the vision becomes blurred, and for severe cases, this disorder can cause visual impairment (weakening of vision). Common refractive errors include myopia (nearsightedness), hypermetropia (farsightedness), and astigmatism. A refractive error that is often experienced by elementary school children is myopia (nearsightedness). Myopia (nearsightedness) is a disorder characterized by difficulty seeing distant objects, where the incidence of myopia increases during the school years, especially before and during the ten years and above. (Lukman Fauzi & Heriana, 2016)(Nurul Hidayah & Permana, 2016)

Vision examination in children is an important part of a comprehensive eye examination. Sharp vision is a measurement related to the examination distance to see the minimum size of objects at a certain distance. It is the ability to distinguish two separate stimuli in space against a high-contrast background. (Julita, 2018)

The presence of minimal visual impairment, may not be realized by the student/student, this occurs because of the lack of understanding of students/students about the process of visual impairment and teacher insensitivity in understanding the conditions that occur in these students. Many things can happen if mild visual impairment is left unchecked, one of which will cause more severe eye damage and learning achievement will decrease.

Eye health in children is important and must be sustainable, considering that communities with middle to lower socioeconomic status often subordinate eye health in children. It is necessary to carry out routine and continuous eye examinations at least once a year accompanied by education on the importance of maintaining eye health in children, according to the Ministry of Health of the Republic of Indonesia through the *Road Map* for Handling Visual Impairment 2017-2030 (Ministry of Health, 2017), provides strategies in the form of:

1) Ensure that schoolchildren with visual impairments can be corrected,
2) Develop a comprehensive health service pattern for patients with diabetic retinopathy, glaucoma, and *low vision*, and

3) Develop a comprehensive and inclusive concept of vision rehabilitation.(Yunia Irawati, 2022)

Growth and development are influenced by the intake of nutrients both in quantity and quality. Nutritional intake in school-age children is very important to note because school-age children are a group that is prone to nutritional problems. Fulfillment of nutrients is a factor that supports human development and is closely related to the level of intelligence, skills, and growth. Nutrients must be consumed appropriately and as needed to function in the body. The function of nutrients from food consumed is a source of energy, as a building and maintenance of cells and body tissues. Growth is an increase in the number and size (volume) of body cells seen from body weight, height, and head circumference. Every child goes through the process of growth and development according to the stages of his age, but many factors affect the process including genetic and environmental factors. Nutrient intake can be obtained from various nutrients, one of which is macronutrient compounds. Macronutrients are nutrients needed by the body in large quantities and mostly act as a source of energy such as carbohydrates, proteins, and fats. (Fri Rahmawati, 2020)(Fri Rahmawati, 2020)

Based on RISKESDAS data in 2018, nutritional problems in school-age children aged 5-12 years according to body mass index/age are 9.3% thin, which is divided into 2.5% very thin and 6.8% thin. Nutritional problems are more with a prevalence of 20.6%, namely fat 11.1% and very obese (obesity) 9.5%. The prevalence of short events was 23.6% with 6.7% very short and 16.9% short. Good nutritional status affects the process of growth and development of children, to improve intellectual abilities that have an impact on learning achievement in school.(Febriana Muchtar & Hastian, 2022)

RESEARCH METHODS

This research was conducted at SDN 34 Mampang Village, Kotapinang. This study was conducted to see the general health picture (BMI, Nutritional Status, and Vision Quality) of SDN 34 Mampang Village students. The type of research used is quantitative research with the research design used is *cross sectional*. The sample of the study was 119 students of SDN 34 Mampang Village. Data analysis was carried out using statistical analysis software, namely SPSS.

RESULT

Results of Univariate Analysis

Table 1. Characteristics of Respondents

Variable (n = 119)	F	%	CI95%
Age Year			
Min 9, Max 12, Mean 10.53, Me 11, Mo 11, SD 0.746			
Class			
IV	26	21.8	15.1 – 30.3
V	36	30.3	22.7 – 37.8
YOU	57	47.9	38.7 - 58.0
Gender			
Man	58	48.7	39.5 – 56.3
Woman	61	51.3	43.7 – 60.5
Riwayat Skrining			
Ever	11	9.2	4.2 – 15.1
Never	108	90.8	84.9 – 95.8

Based on the table above, it can be seen that 119 participants participated in the health screening in the age group of 9-12 years. The participants who participated in the screening were elementary school students in grades IV, V, and VI. Almost 50% of the total participants were grade VI students and almost all students had never participated in health screening before.

Table 2. Basic Health

Variable	F	%	CI95%
Z-Score			
Min -3.13, Max 3.61, Mean 0.125, Me -0.14, Mo -0.25, SD 1.268			
Status Gizi			
IMT/U			
Mystery Bitter (-3 SD)	1	0.8	0.0 – 2.5
Gizi kurang (-3 SD SD < -2 SD)	1	0.8	0.0 – 3.4
Gizi baik (-2 SD sd +1 SD)	89	74.8	66.4 – 83.2
Gizi lebih (+1 SD sd +2 SD)	15	12.6	6.7 – 20.2
Obesitas (> + 2 SD)	13	10.9	5.0 – 17.6
Eye Health			
History of Color Blindness			
Exist	11	9.2	3.4 – 15.1
None	108	90.8	84.9 – 96.6
Color Blindness			
Normal	95	79.8	69.7 – 87.4
Partial	20	16.8	9.2 – 26.1
Total	4	3.4	0.0 – 6.7
History of Myopi			
Exist	9	2.5	3.4 – 13.4
None	110	97.5	86.6 – 96.6
History of Hyperopia			
Exist	3	5.5	0.0 – 5.9
None	116	94.5	94.1 – 100
All Kiri			
Normal (20/20)	97	85.1	77.2 – 92.1
Abnormal (>20/20)	17	14.9	7.9 – 22.8
All Kanan			
Normal (20/20)	94	82.5	73.7 – 89.5
Abnormal (> 20/20)	20	17.5	10.5 – 26.3

Based on the results of univariate analysis, it can be seen in Table 2 above that 75% of the total students who carried out health checks at SDN 34 Mampang had good nutritional status (normal), and another 25% were overnutrition, obesity, undernutrition and even there were students with malnutrition status. In addition to good nutrition (normal), it turns out that many school children experience more nutrition and even obesity.

In the results of the eye health examination, it was found that the average screening participant had no previous history of color blindness, but after the examination, it turned out to increase by 10% of children who experienced partial color blindness from the total who had a previous history of color blindness. In addition, in the results of the vision examination, 17 students did not have normal eye acuity in the left eye, and 20 students whose right eye acuity was abnormal. This means that of the total students of SDN 34 Mampang who carried out a medical examination, 20% of children had abnormal eye acuity.

DISCUSSION

1) BMI and Nutritional Status

In general, school-age children are a group that is prone to nutritional problems. Based on the results of the study, it was stated that anthropometric examinations on elementary school students in the Penjaringan sub-district were very good, even though no one was weighing or standing under existing regulations. The results of this study are in line with the results of research where the results of measurement and assessment of nutritional status in SD Negeri 51 Kendari, in 21 school-age children obtained 2 children had poor nutritional status, 1 was obese and 18 children had good nutritional status. This is not in line with the results of the study, namely, the results of the study found that from 245 research samples, it was known that 60 students had nutritional problems, namely as many as 46 thin people and 14 obese people. (Felicia Kurniawan, 2022)(Febriana Muchtar & Hastian, 2022)(Fri Rahmawati, 2020)

Based on data obtained from screening conducted at SDN 34 Mampang Village, 25% of children are still found to be in good nutritional status. 1 person with malnutrition status, 1 person with less status, 15 people with more nutritional status, and 13 people have reached obese status. Another 89 children are already in good nutritional status.

2) Vision Quality

Based on the results of the study that based on visual acuity in general, the results of a study on 50 school-age children in Pekanbaru City, Riau Province, found that 26 people experienced abnormal visual acuity (52%). This exceeds half of the total studied. Based on the results of the study after an eye examination using both a Snellen card and trial lens, it was found that the students of SDN 04 Arab Melayu Kota Seberang Jambi who did not experience eye problems were 179 students with eye disorders as many as 82 students. However, it was found that the habits of SDN 04 Arab Malay Kota Seberang Jambi students in using gadgets were 183 students while those who were not were 78 students. This shows that there are still many students who can experience problems with visual acuity. This is not in line with the results of the study showing that in grade 5 elementary school students in the working area of the Matirodeceng Health Center, Pinrang Regency, 25 people experienced sharp vision impairment, and 119 people did not experience sharp vision impairment.(Dinul Tauhid Almaturidi & Herlina, 2021)(Imat Rahmatillah & Fairuz, 2022)(Gama, 2019)

For children of SDN 34 Mampang Village, 10% of children have partial color blindness. The results of the vision examination show that there are still about 20% who have abnormal eye acuity disorders. 17 students did not have normal eye acuity in the left eye and 20 students whose right eye acuity was abnormal.

CONCLUSIONS AND RECOMMENDATIONS

Elementary school children with an average age of 6-12 years are in a period where various changes in growth and development will affect their health condition. It is very important to know the general health picture of children, considering that children are the next generation of the nation who will continue the nation's struggle for the better. General health features include BMI, Nutritional Status, and Quality of Vision. Based on research conducted on children at SDN 34 Desa Mampang, Kotapinang, it is known that 75% of the total students who carried out health checks at SDN 34 Mampang had good nutritional status (normal), and another 25% were overnourished status, obesity, undernutrition, and even some students were malnourished. 10% of children have partial color blindness, and 20% of children have abnormal eye acuity. For this reason, various related parties must further increase attention to the quality of children's health, so that child health statistics, especially children of SDN 34 Mampang Village, Kotapinang achieve optimal health status.

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