

# Children's Nutrition Status Based on Streetism, Mobility, and Social Cohesion Perspective in Makassar (Study Epidemiology Analytic)

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## Abstract

**Background.** Changes in community structure from argument to industry and lifestyle changes, socio-economic societies are suspected as a backdrop to the increasing prevalence of non-communicable diseases, so that the incidence of non-communicable diseases varies greatly in epidemiological transitions. One of the epidemiological problems that often arises is the problem of child nutrition. Street children nutrition is very concern in Makassar City. Street children in Makassar city are increasing every year. This was seen in 2014 the number of street children was 220, in 2015 there were 250 children, while in 2016 it increased to 305 street children. Street children are at risk of suffering from nutritional disorders. The nutritional status of street children is very dependent on mobility, streetism, mobility, and social cohesion. The study was conducted with the aim of analyzing the nutritional status of street children based on the perspective of streetism, mobility and social cohesion in Makassar. The benefits of this research are expected to be able to develop theories and concepts regarding the nutritional status of street children based on epidemiological studies. **Material and Methods** The type of research used was an observational method in a cross-sectional study design. The sampling method uses simple random sampling. The study was conducted in September-January 2020. The number of sampling was 90 people. The population and research sample are street children in Makassar City. The data analysis technique used in this study is Chi-square. **Results.** There is an influence of streetism and social cohesion on street children in Makassar. The results of the analysis of the relationship between *streetism*, mobility and social cohesion with the nutritional status of street children found that *streetism*  $p(0,000) < p(0,05)$ , *mobilitas*  $p(0,075) > p(0,05)$ , *kohesi sosial*  $p(0,075) > p(0,05)$ . **Conclusion.** Streetism has a very significant influence on the status of street children in Makassar. It is recommended that the social service and health office work together with halfway houses to provide information on nutrition to street children so that they understand about nutritious food, healthy eating patterns.

**Keywords:** *Street children, nutritional status, mobility, streetism, social cohesion, epidemiology.*

## Introduction

Changes in community structure from argument to industry and lifestyle changes, socio-economic societies are suspected as a backdrop to the increasing prevalence of non-communicable diseases, so that

the incidence of non-communicable diseases varies greatly in epidemiological transitions. <sup>[1]</sup> One of the epidemiological problems that often arises is the problem of child nutrition. Street children nutrition is very concern in Makassar City. Street children in Makassar city are increasing every year. This was seen in 2014 the number of street children was 220, in 2015 there were 250 children, while in 2016 it increased to 305 street children. Street children are at risk of suffering from nutritional disorders. <sup>[2]</sup>

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The nutritional status of street children is very dependent on mobility, streetism, mobility, and social cohesion. The study was conducted with the aim of analyzing the nutritional status of street children based on the perspective of streetism, mobility and social cohesion in Makassar City. The benefits of this research are expected to be able to develop theories and concepts regarding the nutritional status of street children based on epidemiological studies.

Street children who leave home, either voluntarily or because they are forced to live on the streets, become a risk for street children. Their living and living conditions are faced with risks related to nutrition, health, deviant sexual behavior, drug and alcohol abuse, threats of physical and psychological violence. Determination of the health status and nutritional status of street children is closely related to the mobility of street children, social cohesion, streetism in solving problems faced. Streetism

contains an understanding of how street children live their lives on the road.

### Material and Method

**Material and Methods** The type of research used was an observational method in a cross-sectional study design. The sampling method uses simple random sampling. The study was conducted in September-January 2020. The number of sampling was 90 people. The population and research sample are street children in Makassar City. The data analysis technique used in this study is Chi-square

### Results

Data on street children collected as many as 90 people spread across all roads in the Makassar City area were then measured for nutritional status. The results of these measurements can be seen in the following table.

**Table 1 Effects of Streetism on the Nutritional Status of street children**

Streetism	Nutritional Status of Street Children								P value
	Wasting		Normal		Overweight		Amount		
	Frequenci	Percent	Frequenci	Percent	Frequenci	Percent	Frequenci	Percent	
High	45	90,0	3	6,0	2	4,0	50	100	0,000
Medium	17	56,6	11	37,9	1	3,4	29	100	
Low	3	27,3	5	45,5	3	27,3	11	100	
Amount	65	72,2	19	21,1	6	6,7	90	100	

Table 1 explains that the variable streetism is obtained  $p(0,000) p < (0,05)$ , giving an influence on the nutritional status of street children

**Table 2 Effects of Social Mobility on the Nutritional Status of street children**

Social Mobility	Nutritional Status of Street Children								P value
	Wasting		Normal		Overweight		Amount		
	Frequenci	Percent	Frequenci	Percent	Frequenci	Percent	Frequenci	Percent	
High	20	90,9	1	4,5	1	4,5	22	100	0,075
Medium	27	90,0	2	6,7	1	3,3	30	100	
Low	25	65,8	9	23,7	4	10,5	38	100	
Amount	72	80,0	12	13,3	6	6,7	90	100	

Table 2 explains that the variable social morbidity obtained  $p (0.075) p > (0.05)$  did not influence the nutritional status of street children.

**Table 3 Effects of Social Cohesion on the Nutritional Status of street children**

Social Cohesion	Nutritional Status of Street Children								P value
	Wasting		Normal		Overweight		Amount		
	Frequenci	Percent	Frequenci	Percent	Frequenci	Percent	Frequenci	Percent	
High	40	85,1	4	8,5	3	6,4	47	100	0,047
Medium	30	81,1	5	13,5	2	5,4	37	100	
Low	2	33,3	3	50,0	1	16,7	6	100	
Amount	65	80,0	19	13,3	6	6,7	90	100	

Table 3 explains that the social cohesion variable obtained  $p (0.047) p > (0.05)$ , does not have an effect on the nutritional status of street children

### Discussion

Table 1 explains that the variable streetism is obtained  $p (0,000) p < (0.05)$ , giving an influence on the nutritional status of street children. This is related to several factors such as income, choice of food, free lifestyle and others. Street children are children who spend most of their time doing daily life activities on the streets such as making a living and or wandering, in other public places. Street children have their own characteristics such as age between 5-10 years, carrying out activities on the streets, mostly dull appearance, neglected clothing, and high mobility. [3]

Streetism is a term that describes the desperate situation of children, who are forced to spend most of their time outside the home, often sleeping on the street and engaging in activities to generate low income. [3], [4]

Streetism arises in urban areas such as Makassar, where children who come from suburbs or slums in the city, who do not get attention and are not taken care of by their parents, are on the road forcefully or with their own awareness to fulfill their basic needs, especially food sufficiency. Streetism is related to freedom of life on the streets, freedom of family problems, work to fulfill basic life needs, not bound by regulations, limited housing and home facilities as well as physical and non-physical violence

Streetism conditions have an impact on the nutritional status of street children. Adequate nutrition of

street children is related to their daily food consumption. Healthy and nutritious food can be fulfilled by buying processed foods or food ingredients that are processed into food. Street children buy food from the work of begging, busking, parkers, porters or laborers, and various other jobs.

Freedom as a sign of streetism has an impact on the nutritional status of street children. Street children who are bigger and have a higher income, will spend their money on non-food needs. As part of street children buying cigarettes and smoking to show freedom and non-attachment to rules. Some of them have even begun to try coplo pills or alcoholic drinks, which are widely available on the streets and easy for them to access.

Isbach et al. reported as many as 63.2% of street children who spent 4-8 hours per day on the road with very thin nutritional status. The energy used to work on the streets is not proportional to the food they consume. The same was reported by Hakim et al., 66.67% of street children underweight and 33.33% of normal body weight who worked on the streets of Bangladesh. [5],[6]

Patriasih, et al. in Lembang City, Bandung, West Java, found that from 324 street children samples, 80.4% had underweight and were obstructed. Common diseases suffered by street children are diarrhea as much as 22.7% and diseases as much as 18.4%. Research conducted by Nur'aini in the city of Bandung, shows that most street children work as singers, spending 4-8 hours a day and

4-6 days a week. The average level of energy and protein adequacy of children is in the category of mild deficits, iron and vitamin C in the low category and vitamin A in the sufficient category. [7], [8]

Rathod et al reported that a survey of children in Mumbai, India, where 56 of them were women. About 77 percent of the total children are malnourished. Of the total number of malnourished children, 43 percent of children are obstructed, 38 percent are underweight and 19 percent are wasted. About 36 percent had a fever and 17 percent had diarrhea in the past year. [9]

Sehra, RN., Conducted a nutritional status assessment and identified general health problems among street children in Bikaner, Rajasthan, India, stating that 41.5% of children have normal nutritional status, while 59.5 suffer from lack of energy protein (KRP). Likewise, Meshram et al. Reported on the nutritional status of street children in India, that the prevalence of anemia was still high in street children. [10], [11]

Table 2 explains that the variable social morbidity obtained  $p (0.075) p > (0.05)$  did not influence the nutritional status of street children. This can be due to the mobility of the area or migration of the population, which is the driving factor that makes the community leave the region of origin and the pull factor that makes the community come to the area, will not immediately change its economic capacity.

Regional mobility occurs around Makassar City such as Kab. Gowa, Kab. Maros, Kab. Takalar and Kab. Jennepono or other regions in South Sulawesi and influenced by four important factors, namely factors that can drive the migration process, which are issued by the area of origin and are likely to be negative, migration process, factors that are in the migration channel area, individual factors of the population migrating. [12], [13]

People who come to Makassar for economic and employment reasons, but do not have sufficient education, skills and abilities to work, will eventually live in slums with work as laborers, coolies, or other informal sectors. The work is not enough to provide a living to finance the needs of his family. The child from the family then becomes a street child, a child who spends most of his time on the road working as a beggar, buskers, scavengers, parking attendants, coolies or laborers.

Mobility in the Makassar City itself also does not have an impact on nutritional status, because mobility does not directly improve consumption patterns and fulfill the food needs of families and street children. Street children who work as scavengers, have high mobility, but instead become thinner because of the large amount of energy used to carry out physical activities on foot or pedal the garbage collection wheels.

Research conducted by Goodmana et al., Assessing household and maternal factors associated with child street migration in Kenya, shows no significant relationship between increasing maternal childhood difficulties and child street migration. [14]

Literature study mainly from three continents (Africa, Asia, and Latin America) and observing economic, political, social, and environmental versions, carried out by Alem et al., Informs that the majority of road occupants are categorized as children working on the street in Africa, while in Asia some of them are left from their homes. Children who come to the streets may be driven by factors such as coercion by families, lack of access to education, and the existence of an unpleasant life in Africa. Children in Asia are encouraged by families to work as laborers and street vendors, as a source of family livelihood. [15]

Table 3 explains that the social cohesion variable obtained  $p (0.047) p > (0.05)$ , does not have an effect on the nutritional status of street children. This can be due to several factors such as high integrity and quality of life as part of the results of social cohesion. Social cohesion is an order that has shared values and interpretations, which reduces wealth and income disparities, and generally enables people to have a sense of involvement in a community, face shared challenges, and have a perception of shared community. [16]

Social cohesion occurs because the values held have in common and then build a community to face common challenges, and have a perception of community similarity. Social cohesion is based on quality of life, scope of life and integrity. integrity as a part of forming community social cohesion has not been able to improve the nutritional status of street children. Although there is a sense of unity and harmony and solidarity among street children, but what will be distributed or assisted to other street children is still limited.

Quality of life is still low, especially in food availability and food consumption patterns. Even

though the availability of sufficient food will provide an opportunity for every family member to meet their food needs. Likewise, the level of education as a determinant of quality of life, will cause the families of street children, namely mothers and fathers, lack adequate knowledge about healthy and balanced food, so that street children who still go home will get food that is not nutritious enough.

Hakim, RL, conducted research on energy intake and infectious diseases with the nutritional status of street children in the city of Semarang. The research sample of 90 street children with cross sectional study design. The results of the study concluded that there is a relationship between energy intake and infectious disease with the nutritional status of street children.<sup>[17]</sup>

Cumber et al. Stated that street children are at risk of carrying a greater burden of disease. The lifestyle of street children is more vulnerable to risk and health problems than children who live at home, when street children roam the streets looking for food and money. The street child sleeps in half-destroyed houses, abandoned basements, under bridges and in the open air. Street children usually work in poor conditions, are dangerous to their health, and starve for several days.<sup>[18]</sup>

### Conclusion

Streetism has a very significant influence on the status of street children in Makassar. It is recommended that the Social Service and Health Office work together with halfway houses to provide information on nutrition to street children so that they understand about nutritious food, healthy eating patterns

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**Ethical Considerations:** Ethical clearance was obtained from Institute of Health Science “Maluku Husada”, Ambon, Indonesia; with number” RK.09/KEPK/STIK/IX/2019. Just before the interview, written (or thumb impression) consent was obtained from each participant in Institute of Health Science Ambon guidelines.

**Conflicts of Interest:** The authors alone are responsible for the views expressed in this article and they do not necessarily represent the views, decisions, or policies of the institutions with which they are affiliated.

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