

Lifestyle, Food Consumption, and Nutritional Status of Child Labor in Kendari City Southeast Sulawesi Province, Indonesia

メタデータ	言語: eng 出版者: 公開日: 2017-10-04 キーワード (Ja): キーワード (En): 作成者: メールアドレス: 所属:
URL	http://hdl.handle.net/2297/43068

Lifestyle, Food Consumption, and Nutritional Status of Child Labor in Kendari City Southeast Sulawesi Province, Indonesia

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Abstract

Since the economic crisis that swept Indonesia, the number of children involved in child labor has continued to increase in this country. This increase in child labor will have effects on nutrition and health issues. This study was performed to assess lifestyle, food consumption, and nutritional status of children involved in child labor in comparison with non-child laborers in Kendari City.

The study population consisted of 410 children aged 6–15 years old; 205 child laborers and 205 non-child laborers. Characteristics, lifestyle, and food consumption were determined by interview using questionnaires. Nutritional status of children related to body weight and height was determined by anthropometric measurements. Nutritional status for BMI for age (BAZ) was classified into five groups: very thin, thin, normal, overweight, obese. Nutritional status for height for age (HAZ) was classified into five groups: very short, short, normal, high, very high.

Among the child laborers 34.1% dropped out of school, 2.0% never attended school, and 21.0% smoked. The fathers of child laborers were predominantly engaged in daily labor 66.8%, and 15.1% were unemployed. Their mothers were unemployed 47.8%, and 47.3% were engaged in daily labor.

BMI for age of 5 groups showed that the majority of both child laborers and non-child laborers had normal weight. Height for age of 5 groups showed severely stunted growth and stunted growth in 25.4% and 21.9% of child laborers, respectively, while 26.3% and 22.9% of non-child laborers were very high or high, respectively ($P < .001$). Several variables affect these very large differences, including hours of study at school per day, hours of sleep at night, and hours of nap time. With the exception of protein, nutrient fulfillment for children was lower than the recommended dietary allowances (RDA).

KEY WORDS

child labor, lifestyle, food consumption, nutritional status

Introduction

In recent years, child labor remains a big developmental problem, not only because it negatively affects child development, but also because it significantly reduces human capital formation and thus growth performance¹⁾. The types of child labor vary according to the country's culture and the family culture, rural or urban residency, socioeconomic conditions and existing level of development, among other factors²⁾.

The number of child laborers in the world reached 218

million children under the age of 18 years; 7% in Latin America, 18% in Asia and 75% in Africa³⁾.

Since the economic crisis that swept Indonesia, the number of child labor has continued to increase from year to year. In 2002, 65.3% of the working children (10–15 years old) worked in agriculture, 12.2% in manufacturing and 11.3% in trading⁴⁾. In 2009, the number of children aged 10–17 in Indonesia were about 35.7 million. Of the number, about 1.7 million were child laborers⁵⁾.

Poverty is the main factor for the vulnerability of

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children in child labor. However, other factors are at play, including the perception of parents about the importance of education, lack of access to education, and the low quality of education. Tradition and culture also take on a part as cultural perceptions, childish, and the role of responsibility of children to their parents and their siblings that influence parents to decide whether a child is sent to school or become a worker⁵⁾.

One of the health problems that occur in child labor is malnutrition due to irregular eating patterns. Circumstances affecting malnutrition is one of the factors that cause a person to easily become prone to infectious diseases because of the weakened natural immune system⁶⁾. This study is important because it is not just to obtain information about the problems faced by child labor in Kendari, but also to solve the problem of child labor by the relevant agencies. Then can we consider ways to improve education on lifestyle, food consumption, and nutrition.

In Kendari, there are still children who worked as a port labor, bearer, buskers, scavengers and other workers. The purpose of the present study is to assess lifestyle, food consumption, and nutritional status of child laborers, and compare it with non-child laborers in Kendari city.

Methods

1. Design, Place and Time

The study design is a comparative cross sectional study. The research was conducted in Kendari City. It is the capital city of Southeast Sulawesi Province, Indonesia. Sample was collected in 5 districts such as District of Wua-Wua, District of Mandonga, District of Kadia, District of Puwatu, and District of Kendari Barat. Data collected from February 10 to March 15, 2014.

2. Number and Sampling Techniques

Samples were selected by purposive sampling. The number of samples taken was 410 children between the age of 6 – 15 years old which consists of 205 child laborers, and 205 non-child laborers were controlled. Among the 205 child laborers, 176 were boys and 29 were girls. Likewise for the 205 non-child laborers, 176 were boys and 29 were girls.

3. Research Contents

1) Characteristic: gender, age, number of living members,

educational status of children, smoking of children, father's job, mother's job and eating frequency, Lifestyle; hours of play per day, time playing video games per week, hours of watching television per day, hours of study at school per day, hours of study at home per day, hours of sleep at night and hours of nap time and Food consumption; fulfillment of energy, carbohydrates, protein, fat, vitamin A, vitamin C, and Fe of children were collected by interview using questionnaires.

2) Nutritional status of children from body weight and height was obtained by anthropometric measurements.

4. Data Processing and Analysis

Nutritional status was analyzed using World AnthroPlus software by WHO [Body Mass Index (BMI) for age z scores– (BAZ) and height for age z scores– (HAZ)].

The result was compared with the 2007 WHO growth standards for children age 5 – 19 years old. It was used in comparing the nutritional status of child laborers and non-child laborers.

1) Nutritional status for BMI for age (BAZ) of five groups:

Z-score value for very thin is the z-score < -3 , thin is $-3 \leq z\text{-score} < -2$, normal is in the range of $-2 \leq z\text{-score} < 1$, overweight is $1 \leq z\text{-score} < 2$, obese z-score ≥ 2 ⁷⁾.

2) Nutritional status for BMI for age (BAZ) of three groups:

Z-score value for underweight is the z-score ≤ -2 , normal is in the range of $-2 < z\text{-score} < 2$ and overweight is the z-score ≥ 2 ⁷⁾. This classification was used to compare these groups in child labor only.

3) Nutritional status for height for age (HAZ) of five groups:

Very short, if the z-score < -3 ; short, if the z-score is in the range $-3 \leq z\text{-score} < -2$; normal, if the $-2 \leq z\text{-score} < -1$; high, if the $-1 \leq z\text{-score} < 2$; very high, if the z-score ≥ 2 .

The collected food consumption data are converted into the form of energy of proteins, fats, carbohydrates, vitamin A, vitamin C and Fe using NutriSurvey 2005 software (Indonesian version).

5. Ethical Consideration

The subjects were told that their participation in the survey was voluntary, and their answers in the questionnaire would not disadvantage them in any way. Information collected from the questionnaire was kept

confidential. Informed consent was obtained by responding to the questionnaire. The study was approved by Medical Ethics Committee of Kanazawa University (permission number 468). Furthermore Authority to conduct the research was sought from Regional Research Council of Southeast Sulawesi Province, Indonesia.

Result

1. Characteristics of Children (Table 1)

The number of living members of child labor was 6.0 ± 2.3 while non-child labor was 5.1 ± 1.7 . The comparison of the number of living members shows significant difference ($p < .001$).

Regarding the educational status of children, 63.9% of child laborers were still in school, 34.1% dropped out of

school and 2.0% were never in school while 100% of non-child laborers were still in school.

Children smoking showed that all non-child laborers did not smoke while 21.0% of child laborers smoked.

Types of father and mother job comprise daily labor, self employee and entrepreneur, civil servant, and unemployed. The father's job of child laborers was predominantly daily labor 66.8% and 15.1% unemployed. Meanwhile, father's job of non-child laborers was mostly self employed, entrepreneur 57.6% and civil servant 34.6%. In addition, most of the child laborers' mothers were unemployed at 47.8% and daily labor at 47.3%, while non-child laborers' mothers were unemployed at 75.6%.

Height of child laborers was 137.5 ± 16.9 cm and that of non-child laborers was 140.9 ± 13.9 cm. There was a

Table 1. Characteristics of Children

Variable	N (n = 410)	Child Laborer (n = 205)	Non-Child Laborer (n = 205)	n(%)	p- value
Gender					
Male	352 (85.9)	176 (85.9)	176 (85.9)		
Female	58 (14.1)	29 (14.1)	29 (14.1)		
Age (Mean \pm SD)	410	12.0 \pm 2.3	12.0 \pm 2.3		
Number of Living Members^a	410	6.0 \pm 2.3	5.1 \pm 1.7		<.001
Educational Status of Children					
Still School	336 (82.0)	131 (63.9)	205 (100.0)		
Drop Out From School	70 (17.1)	70 (34.1)	0 (0.0)		
Never School	4 (1.0)	4 (2.0)	0 (0.0)		
Smoking of Children					
Smoking	43 (10.5)	43 (21.0)	0 (0.0)		
No Smoking	367 (89.5)	162 (79.0)	205 (100.0)		
Father's Job					
Daily Labor	153 (37.3)	137 (66.8)	16 (7.8)		
Self Employee and Entrepreneur	146 (35.6)	28 (13.7)	118 (57.6)		
Civil Servant	80 (19.5)	9 (4.4)	71 (34.6)		
Unemployment	31 (7.6)	31 (15.1)	0 (0.0)		
Mother's Job					
Unemployment	253 (61.7)	98 (47.8)	155 (75.6)		
Daily Labor	98 (23.9)	97 (47.3)	1 (5.0)		
Self Employee and Entrepreneur	34 (8.3)	10 (4.9)	24 (11.7)		
Civil Servant	25 (6.1)	0 (0.0)	25 (12.2)		
Nutritional Status^a					
Weight	410	32.2 \pm 9.4	33.8 \pm 9.7		.099
Height	410	137.5 \pm 16.5	140.9 \pm 13.9		.026
BAZ	410	-0.9 \pm 1.7	-0.9 \pm 1.1		.667
HAZ	410	-2.2 \pm 1.4	-1.6 \pm 0.9		.001
Nutritional Status of 5 Group					
BMI for Age					
Very Thin	26 (6.3)	21 (10.2)	5 (2.4)		
Thin	39 (9.5)	16 (7.8)	23 (11.2)		
Normal	317 (77.3)	150 (73.2)	167 (81.5)		
Overweight	18 (4.4)	10 (4.9)	8 (3.9)		
Obese	10 (2.4)	8 (3.9)	2 (1.0)		
Body Height for Age^b					<.001
Severely Stunted	81 (19.8)	52 (25.4)	29 (14.2)		
Stunted	83 (20.2)	45 (21.9)	38 (18.5)		
Normal	82 (20.0)	45 (21.9)	37 (18.1)		
High	82 (20.0)	35 (17.1)	47 (22.9)		
Very High	82 (20.0)	28 (13.7)	54 (26.3)		
Eating Frequency of Children^c	410	2.2 \pm 0.4	3.0 \pm 0.0		<.001

a. Probability Using Independent t – test

b. Probability Using Chi – Square test

c. Probability Using Mann - Whitney U test

significance difference in height ($p < .05$) for child laborers and non-child laborers. In addition, a significant difference was also found in the HAZ ($p < .001$) where child laborers was -2.2 ± 1.4 and non-child laborers was -1.6 ± 0.9 .

BMI for age of 5 group showed that most child laborers had normal weight of 73.2%, very thin 10.2% and 3.9% of child laborers was included in obese, while 81.5% of non-child laborers had normal weight, 11.2% of thin and obese was only 1.0%.

Height for age of 5 group showed that severely stunted in child laborers was 25.4%, stunted 21.9%, while non-child laborers 26.3% very high, 22.9% high with a significant difference ($p < .001$).

Eating frequency of child laborers was 2.2 ± 0.4 and non-child laborers was 3.0 ± 0.0 . It was found to have a significant difference ($p < .001$).

2. Food Consumption of Children (Table 2)

There was a significant difference ($p < .001$) in all nutrient fulfillment, such as fulfillment of energy, carbohydrate, protein, fat, vitamin A, vitamin C, and Fe for child laborers and non-child laborers. Nutrient fulfillment of child laborers was lower than non-child laborers. Almost all of nutrient fulfillment for child laborers and non-child laborers was lower than the recommended dietary allowances (RDA) except protein fulfillment.

Table 2. Food Consumption of Children

Variable	Child Laborer (n=205)	Non-Child Laborer (n=205)	p – value
Energy Fulfillment (%)	39.3 \pm 20.7	57.1 \pm 15.8	<.001
Carbohydrate Fulfillment (%)	36.2 \pm 20.9	49.0 \pm 18.2	<.001
Protein Fulfillment (%)	97.2 \pm 55.8	129.8 \pm 56.7	<.001
Fat Fulfillment (%)	33.6 \pm 25.4	55.0 \pm 21.9	<.001
Vitamin A Fulfillment (%)	17.4 \pm 15.9	35.7 \pm 27.7	<.001
Vitamin C Fulfillment (%)	5.2 \pm 7.1	22.8 \pm 21.7	<.001
Fe Fulfillment (%)	20.9 \pm 11.1	32.3 \pm 12.4	<.001

Probability Using Independent t-test; Fulfillment of Required Daily; Mean \pm SD

Table 3. Lifestyle of Children

Variable	Child Laborer (n = 205)	Non-Child Laborer (n = 205)	p – value
Hours of Play/Day	1.0 \pm 0.9 (1.0)	2.1 \pm 0.9 (2.0)	<.001
Times Playing Video Game/Week	0.3 \pm 0.6 (0.0)	1.3 \pm 0.7 (1.0)	<.001
Hours of Watching TV/Day	1.2 \pm 0.8 (1.0)	2.6 \pm 0.9 (3.0)	<.001
Hours of Study at School/Day	1.9 \pm 1.6 (2.0)	5.5 \pm 0.7 (6.0)	<.001
Hours of Study at Home/Day	0.1 \pm 0.3 (0.0)	1.4 \pm 0.6 (1.0)	<.001
Hours of Sleep at Night	6.1 \pm 0.9 (6.0)	8.2 \pm 0.7 (8.0)	<.001
Hours of Take a Nap	0.0 \pm 0.0 (0.0)	2.1 \pm 0.6 (2.0)	<.001

Probability Using Mann-Whitney U test; Mean \pm SD (Median)

3. Lifestyle of Children (Table 3)

Lifestyle of child laborers was less than non-child laborers. There was significant differences ($p < .001$). There were several variables that the difference was very large such as hours of study at school per day, hours of sleep at night, and hours nap time. Hours of study at school for non-child laborers were 5.5 ± 0.7 and for child laborers were only 1.9 ± 1.6 . Hours of sleep at night for child laborers were 6.1 ± 0.9 and non-child laborers was 8.2 ± 0.7 . Hours of take a nap for non-child laborers was 2.1 ± 0.6 while child laborers did not take a nap.

4. Circumstance of Child Laborers (Table 4)

There was a significant difference ($p < .001$) in working time of children. The working time of the aged 6 – 12 years was less than working hours of the age 13 – 15 years.

Children occupation of aged 6 – 12 years was grave cleaner 24.7% and busker 21.8% while children occupation of aged 13 – 15 years was port labor 31.7% and bearer 20.2%.

The reason to work was predominantly because of the economy where the aged 6 – 12 years was 78.2% and the aged 13 – 15 years was 85.6%. The earned money was mostly used for daily needs where the aged 6 – 12 years was 58.4% and 36.6% for school needs while the aged 13 –

15 years was 78.8%.

Moreover, the earned money allocated for the aged 6 – 12 years was mostly for parents, 45.5% while the aged 13 – 15 years was mostly for parents and themselves 54.8%. There was a significant difference ($p < .001$).

5. Child Laborers by Prevalence Nutritional Status (Table 5)

There was significant differences ($p < .001$) for BAZ and HAZ. The overweight has a lower than underweight as well as normal.

Food consumption for child laborers where there was a significant difference ($p < .001$) in fulfillment of energy, carbohydrate, protein, fat, vitamin C and Fe. Energy, carbohydrate, and fat fulfillment for the overweight was remarkably higher than the normal and the underweight. In addition, protein fulfillment for overweight was higher than RDA while for the underweight and the normal, protein fulfillment was slightly less than RDA.

Lifestyle of child laborers for the 3 groups was not of any significant difference, income of child laborers for 3 group was significant difference ($p < .05$).

Discussion

1. Circumstances of Children

Type of parents' job can describe how much families earn in income each month and the family economic situation. The family income of child laborers was lower than non-child laborers. In addition, family members of child laborers were larger than that of non-child laborers. It describes the hard economic situation of child laborers. Therefore, child laborers have to work to obtain money.

Long time work will reduce their time to perform other activities. They have less time for playing, studying and taking a rest rather than non-child laborers. It's consistent with Usman⁸⁾ statement that the allocation of time to work longer will have a negative impact on child labor because it will affect the growth and development of the child. Longer working hours for children will lessen time for other activities such as time with their family. In addition, long working hours also reduce educational opportunities and learning. Playtime is very little so that the development of children's creativity slower. And moreover, they will not be able to enjoy their childhood⁸⁾.

Table 4. Circumstance of Child Laborer

Variable	N n = 205	Age		n (%)	p-value
		6 – 12 (n = 101)	13 – 15 (n = 104)		
Working Time (Hours/Day)^a	205	5.3 ± 1.7(5.0)	6.7 ± 2.7(6.0)		<.001
Children Occupation					
Port Labor	44 (21.5)	11 (10.9)	33 (31.7)		
Busker	35 (17.1)	22 (21.8)	13 (12.5)		
Grave Cleaner	30 (14.6)	25 (24.7)	5 (4.8)		
Parking Attendant	27 (13.2)	12 (11.9)	15 (14.4)		
Bearer	24 (11.7)	3 (3.0)	21 (20.2)		
Scavenger	16 (7.8)	15 (14.8)	1 (1.0)		
Car Washer	8 (3.9)	1 (1.0)	7 (6.7)		
Hawker	8 (3.9)	8 (7.9)	0 (0.0)		
Multiple Work	13 (6.3)	4 (4.0)	9 (8.7)		
Reason to Work					
Economy	168 (82.0)	79 (78.2)	89 (85.6)		
Ask by Parents	25 (12.2)	18 (17.8)	7 (6.7)		
Invited Friends	7 (3.4)	3 (3.0)	4 (3.8)		
Others	5 (2.4)	1 (1.0)	4 (3.8)		
Using of Money					
Daily Need	141 (68.8)	59 (58.4)	82 (78.8)		
School Need	57 (27.8)	37 (36.6)	20 (19.2)		
Pocket Money	7 (3.4)	5 (5.0)	2 (1.9)		
Allocation of Money^b					
Themselves	51 (24.9)	22 (21.8)	29 (27.9)		<.001
Parents	64 (31.2)	46 (45.5)	18 (17.3)		
Parents and Themselves	90 (43.9)	33 (32.7)	57 (54.8)		

a. Probability Using Mann Whitney U test; Mean ± SD (Median)

b. Probability Using Chi- Square test

2. Nutritional Status of Children

Nutrient fulfillment of children was not good. In general, all nutrient fulfillment lower than RDA. It was consistent with South East Asian Nutrition Surveys (SEANUTS) study stated that more than half of Indonesian children had dietary intakes below the Indonesian RDA. The low intake levels contribute to a high prevalence of under nutrition and low values of biochemical parameters in children in all age groups⁹⁾. In addition, Riskesdas¹⁰⁾ reported that 40.6% people consumed food 70% lower than the RDA, this circumstance was mostly found in school-age children (41.2%) and adolescent children (54.5%)¹⁰⁾. Protein fulfillment for child laborers and non-child laborers was quite high, even exceeding the standards that have been set. It is due to the Southeast Sulawesi Province is one of the producers of seafood so that the availability of source of protein is more readily available and the price is also affordable.

Nutrient fulfillment lower than RDA shows results in malnutrition. One of the factors that affects nutritional status is food consumption and use of nutrients in the body. When the body obtains sufficient nutrients and when used efficiently, optimal nutrition status will be achieved. It allows physical growth, brain development, employability and health. On the contrary, if the body

lacks nutrients, it can lead to malnutrition and stunted growth¹¹⁾.

The height of child laborers is shorter than for non-child laborers. This is consistent with the comparison of nutritional status in 5 groups height for age where it was found to be severely stunted and stunted. This agrees with what Badan Litbang Kesehatan stated, that the national prevalence of short children is above 30%, the highest in children 6 – 12 years old, 35.8% and lowest in the age group 16 – 18 years¹⁰⁾.

It is needed for caregivers to intervene, such as a community health center to spread more nutritional education to parents. By doing so, this issue can be reduced.

Conclusion

1. There was a significant difference in the HAZ, where child laborers were shorter than non-child laborers.
2. There was not a significant difference in BAZ, where both groups were normal weight.
3. There was a significant difference in lifestyle. Child laborers has little time to play, study, and takes a rest because child laborers spent more time to work.
4. There was a significant difference in the nutrient fulfillment. Nutrient fulfillment of children lower than

Tabel 5. Analysis for Child Laborer by Prevalence Nutritional Status (BMI for Age)

Variable	Underweight ¹ n = 37	Normal ² n = 150	Overweight ³ n = 18	p-value	Multiple Bonferroni
Nutritional Status^a					
BAZ	-3.2 ± 0.9	-0.8 ± 0.7	2.6 ± 1.8	<.001	1-2,3 2-3
HAZ	-1.5 ± 1.2	-2.1 ± 0.9	-5.1 ± 2.1	<.001	1-2,3 2-3
Food Consumption^{a,b}					
Energy Fulfillment (%)	31.3 ± 8.1	34.9 ± 12.9	92.4 ± 15.6	<.001	1-2,3
Carbohydrate Fulfillment (%)	28.8 ± 7.1	31.9 ± 13.8	87.3 ± 21.2	<.001	1-2,3
Protein Fulfillment (%)	90.3 ± 38.4	87.9 ± 47.1	187.7 ± 72.7	<.001	1-2,3
Fat Fulfillment (%)	26.6 ± 17.7	29.2 ± 20.7	84.9 ± 15.8	<.001	1-2,3
Vitamin A Fulfillment (%)	21.1 ± 18.9	15.4 ± 14.3	25.7 ± 18.6	.010	2-3
Vitamin C Fulfillment (%)	6.8 ± 6.3	4.1 ± 5.6	10.8 ± 14.4	<.001	2-3
Fe Fulfillment (%)	19.9 ± 8.7	18.8 ± 9.4	41.2 ± 16.6	<.001	1-2,3
Lifestyle^c					
Hours Play/Day	1.2 ± 0.9 (0.1)	0.9 ± 0.9 (1.0)	1.0 ± 0.8 (1.0)	.511	
Times Playing Video Game/Week	0.3 ± 0.7 (0.0)	0.3 ± 0.7 (0.0)	0.1 ± 0.3 (0.0)	.580	
Hours of Watching TV/Day	1.1 ± 0.8 (1.0)	1.1 ± 0.7 (1.0)	1.1 ± 0.7 (1.0)	.207	
Hours of Study at School/Day	1.9 ± 1.6 (2.0)	1.9 ± 1.6 (2.0)	1.8 ± 1.2 (2.0)	.733	
Hours of Study at Home/Day	0.2 ± 0.4 (0.0)	0.1 ± 0.3 (0.0)	0.1 ± 0.3 (0.0)	.819	
Hours of sleep at Night/Day	6.3 ± 0.9 (6.0)	6.3 ± 0.9 (6.0)	6.5 ± 0.7 (6.0)	.118	
Long Time of Working (Years)	3.1 ± 1.8 (3.0)	2.9 ± 1.9 (2.5)	2.1 ± 1.4 (2.0)	.084	
Days Work in a Week	6.4 ± 1.1 (7.0)	6.4 ± 1.1 (7.0)	6.8 ± 0.7 (7.0)	.247	
Average Income/Day	18108.1 ± 9155.4 (15000.0)	21416.7 ± 11696.2 (20000.0)	16000.0 ± 1496.2 (10000.0)	.012	

a. Probability Using One Way Anova; Mean ± SD, Multiple Comparison (Bonferonni test)

b. Fulfillment of Required Daily

c. Probability using Kruskal Wallis test; Mean ± SD (Median)

RDA except protein.

- 5) Nutrition of children in Kendari was not good which is marked by low energy, carbohydrate, and vitamin fulfillment. It affected body weight and height.

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インドネシア共和国南東スラウェシ州ケンダリ市における 児童労働児の生活習慣と栄養状態

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要 旨

インドネシア共和国の経済危機以降、児童労働者は年々増加している。児童労働の増加は、栄養状態の悪化など子どもの健康問題を引き起こす可能性がある。そこで、本研究では、インドネシア南スラウェシ州ケンダリ市における児童労働者と非児童労働者の生活や栄養摂取状況を比較した。対象はケンダリ市在住の6歳から15歳の児童労働者205名と、その対照群としての同年代の非児童労働者205名である。調査は質問紙を用いた聞き取り調査、および身長・体重の測定により行った。分析はWHOのAnthro Plus softwareを用い各年齢におけるBMI (BAZ) と身長 (HAZ) のZスコアから分類した。

児童労働者の父親の67%は日雇い労働者、母親の48%は無職であり、非児童労働者とは経済状況に大きな相違がみられた。児童労働者の多くは家族の生活を支えるために働き、学校を中退する子どもが34%、学校へ行ったことがない子どもが2%みられた。労働の内容は発達に応じて異なっており、小学生では墓掃除、荷物運び、ゴミ捨て場での労働、中学生では港での荷物運び、車の通行介助、洗車など危険な仕事が多かった。また、児童労働者の喫煙率は21%と高く、休息時間は非児童労働者に比べ有意に短かった。体格では、BMI (BAZ) による差はみられなかったが、身長では非児童労働者に比べ児童労働者は有意に小さかった。食物摂取状況は、エネルギー、炭水化物、脂肪、ビタミン各種、鉄分などほとんどの栄養がWHOの推奨基準を大きく下回っていた。したがって、児童労働者は健全な発育や発達を阻害され、病気を発症する可能性が高いことが示唆された。