Nutritional Assessment of Working Children in village-Qaliyobia

Thesis

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بسم الله الرحمن الرحيم

قَالُواْ سُبْحَانَكَ لاَ عِلْمَ لَنَا إِلاَّ مَا
عَلَّمْتَنَا إِنَّكَ أَنتَ الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم

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Amira El-Sayed Musslem

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List of Abbreviations

BMI :Body mass index.

CDM :Construction Design Management.

IHDO :International Hazard Datasheets on Occupations.

ILO :International Labour Organisation.

IPEC :International Programme on the Elimination of Child Labour.

NCI : National Cancer Institute.

NHISOHS :National Health Interview Survey-Occupational Health Supplement.

NIOSH :National Institute for Occupational Safety and Health.

NLM :National Library of Medicine.

OECD :Organization for Economic Co-operation and Development.

OSHA :Occupational Safety and Health Administration.

WHO : World Health Organization.

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Abstract

Background: Children's increased vulnerability puts them at a high risk of work related health problems.

Objectives: to assess the nutritional status of working children in comparison to non working children in Arab Gohina village, Qaliyuobia; and measure prevalence of anemia and parasitic infestation in working children in Arab Gohinavillage, Qaliyuobia.

Subjects and Methods: A comparative cross-sectional study was used to compare75 working children in small industrial workshops and 75 non working children school children of the same residence. All children were interviewed using a pre-designed questionnaire including socio-demographic, work characteristics, social and nutritional habits and health complaints. Also, the studied groups were subjected to physical examination. Blood samples were taken to assess haemoglobin levels, urine and stool samples were taken to assess infection and parasitic infestations.

Results: The parents of working children were of lower education level and their fathers were more likely to work in skilled jobs, than the comparison group with a statistically significant difference between the two groups. They have also lower income level than comparison group. There is no significant difference between working children and students in their dietary habits except appetite disorders which is more common in working children. The student group showed more obesity (13.33%) than the working group (2.67%) and also showed more overweight (29.33%) than the working group (20%) with a statistically significant difference. There is no significance difference between the student and working groups in the carbohydrates intake. The student group eats Vegetables once weekly (41.33%) compared to the working groups (16%) and eat vegetables twice weekly (29.33%) compared to the working group (70.67%). The student group eats fruits, dairy products, Beverages and protein more than the working group, but the student group takes less sweet than the working group. Comparison between students and working children concerning symptoms shows no significance difference in between the two groups in diarrhea, abdominal pain, laziness, bleeding per rectum, fatigue, regurge,

dizziness while headache is more in the working group (10%) than the comparison group (4%).The working group has more pallor (54.67%) than the comparison group (6.67%) and no significance difference in between the two groups in skin disease. The working group has less weight (50.21 ± 8.41), height (152.01 ± 8.44) BMI (21.62 ± 2.56) than the comparison group (60.72 ± 10.09), (161.39 ± 6.96)(23.29 ± 3.09) respectively.

Conclusion and Recommendations: This study concluded that Labor is a factor that may negatively affect the health of Children. It has been found that the working children have less Hb level than the students. More attention to health problems among working children, with controlling child labor, abolishing child labor in hazardous occupations and performing periodic medical examination to monitor their health and development.

Key words: child labor, nutritional status, anthropometry.

Introduction

The United Nations Convention on the Rights of the Child defines child as "a human being below the age of 18 years unless under the law applicable to the child, majority is attained earlier ***(UNICEF, 2012a).***

The Egyptian law of labor stated that a child should not work at an age less than 17 years old ***(Ministry of Manpower, 2003)***.

Child work refers to the employment of children in any work that deprives children of their childhood, interferes with their ability to attend regular school, and that is mentally, physically, socially or morally dangerous and harmful ***(ILO, 2012a).***

This practice is considered exploitative by many international organizations. Legislations across the world prohibit child labor ***(United Nations, 2006; IPEC, 2011).***

Child work was employed to varying extents through most of history. Before 1940, numerous children aged 5–14 worked in Europe, the United States and various colonies of European powers. These children worked in agriculture, home-based assembly operations, factories, mining and in services such as newsier. Some worked night shifts lasting 12 hours. With the rise of household income, availability of schools and passage of child labor laws, the incidence rates

of child labor fell ***(UNICEF, 1988; Prügl, 1999; Hindman, 2009).***

In developing countries, with high poverty and poor schooling opportunities, child work is still prevalent. In 2010, sub-Saharan Africa had the highest incidence rates of child work; with several African nations witnessing over 50 percent of children aged 5–14 working. Worldwide agriculture is the largest employer of child labor***(UNICEF, 2012b).***

Child labour accounts for 22% of the workforce in Asia, 32% in Africa, 17% in Latin America, 1% in US, Canada, Europe and other wealthy nations. The proportion of child labourers varies greatly among countries and even regions inside those countries. Africa has the highest percentage of children aged 5–17 employed as child labour, and a total of over 65 million. Asia, with its larger population, has the largest number of children employed as child labour at about 114 million. Latin America and Caribbean region has lower overall population density, but at 14 million child labourers has high incidence rates too***(ILO, 2012b)***.

Child labour is still common in many parts of the world. Estimates for child labour vary. It ranges between 250 to 304 million, if children aged 5–17 involved in any economic activity are counted. If light occasional work is excluded, ILO estimates there were 153 million child labourers aged 5–14

worldwide in 2008. This is about 20 million less than ILO estimate for child labourers in 2004. Some 60 percent of the child labour was involved in agricultural activities such as farming, dairy, fisheries and forestry. Another 25 percent of child labourers were in service activities such as retail, hawking goods, restaurants, load and transfer of goods, storage, picking and recycling trash, polishing shoes, domestic help, and other services. The remaining 15 percent laboured in assembly and manufacturing in informal economy, home-based enterprises, factories, mines, packaging salt, operating machinery, and such operations ***(Yacouba etal.,2010)***.

Two out of three child workers work alongside their parents, in unpaid family work situations. Some children work as guides for tourists, sometimes combined with bringing in business for shops and restaurants. Child labour predominantly occurs in the rural areas (70%) and informal urban sector (26%).

Contrary to popular beliefs, most child labourers are employed by their parents rather than in manufacturing or formal economy. Children who work for pay or in-kind compensation are usually found in rural settings, than urban centers. Less than 3 percent of child labour aged 5–14 across the world work outside their household, or away from their parents ***(Ericand Nina, 2005).***

Vast majority of child work is found in rural settings and informal urban economy; children are predominantly employed by their parents, rather than factories ***(Eric and Nina, 2005).***Poverty and lack of schools are considered as the primary cause of child labor ***(ILO, United Nations, 2008).***

The incidence of child work in the world decreased from 25% to 10% between 1960 and 2003, according to the World Bank ***(Norberg and Johan, 2007).*** Nevertheless, the total number of child laborers remains high, with UNICEF and ILO acknowledging an estimated 168 million children aged 5-17 worldwide, were involved in child labor in 2013 ***(UNICEF, 2013).***

The effects of child work on growth and health have been reported but distinguishing the effects of work from those of poverty has been problematic.Many studies that have reported on the association of child work with growth, Japanese study showed a 4 cm difference in height between those who started work before the age of 14 years and those starting after the age of 18 years ***(Shah, 1984)***.

A longitudinal study in Hyderabad, India ***(Satayanarayana et al., 1985)*** followed up 410 boys, characterized by their height for age at entry into normal, moderate, and severely malnourished, up to the age of 17 years.

Significant differences in height and weight attained by 17 years were demonstrated in each nutrition group. However, no attempt was made to control for socioeconomic factors within the groups. Height, weight, and signs of malnutrition were significantly more common among 110 children working in carpet weaving factories compared with 290 school children matched for age in Jaipur, India (***Joshi and Sharma, 1996)***.

Employment provides the potential for many benefits to teenagers, including opportunities to earn money for themselves and their families; gain valuable time management, interpersonal and occupation-specific skills; develop discipline and responsibility; and enhance self-confidence and self-esteem ***(Resnicket al., 1997).***

Work also poses potential threats to the physical, emotional, economic and academic health of teenagers. Like their adult co-workers, teenagers face exposure to a variety of health and safety hazards that can lead to injury and illness. Somecommon hazards for teenage workers are heavy lifting, cutting tools, cleansing chemicals and infectious diseases ***(Executive Office of Health and Human Services, 2014).***