

ASSESSMENT OF THE NUTRITIONAL STATUS AMONG PRESCHOOL CHILDREN IN MILITARY FAMILIES IN THE POLICE BARRACKS AL-HAJ YOUSIF AND ABU SAAD IN KHARTOUM

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ABSTRACT

Malnutrition is condition that develops when the body doesn't get the right amount of the macro and micro nutrients needs to maintain healthy tissues and organ function. This study aimed to assess the nutritional status among Preschool children in Military families in the police barracks al-Haj yousif and Abu saad in Khartoum state. The study was carried out in the police barracks al-Haj yousif and Abu saad in Khartoum state. The total numbers of the study population (105) children were selected randomly. Data was collected using a questionnaire. The study was conducted during the period from august (2018) to February (2019). Data was analyzed using Statistical Package for Social Sciences (SPSS). The majority of Children (73.3%) were in the age group (49- 60 months) and found that females more than males. the Prevalence of malnutrition Percentage According to BMI-for Age z- scores among children's in the study area where (68.6%) are moderately malnourished (18.1%), of them are normal, (13.3%) are mild malnutrition and Complete absence of all symptoms of Kwashiorkor and Marasmus. The study recommends that more research is needed in this area, and the data obtained should be used to construct reference value of Sudanese children.

INTRODUCTION

Sudan's borders include over 1.8 million square kilometers of land, including desert in the north, semi-arid areas, tropical and urban areas and an estimated population of approximately 31 million people. Of this number, 32.7% live in urban areas, 67% in rural areas, and 8% are nomads (PHC mapping 2011). Sudan is a country of farmers, agro-pastoralists and pastoralists, the majority of whom rely on the rains for both cultivation and pasture / grazing. As part of the Sahel belt, Sudan suffers from recurrent drought-years and poor harvests, and since the separation the country has experienced economic instability with a food prices across the country. The most recent information estimates that currently 46.5% of the population lives below the national poverty line (less than 1.5USD per person per day) [Sudan Population Census. 2010].

Records show that for some years Sudan has suffered from a silent killer and major destroyer of its development and human resources in the form of a static acute and chronic malnutrition rate which affects children under five years of age; this is the most

vulnerable age group. The first reports on the status of malnutrition in the country were in 1987 when 32% of children were reported to be stunted. This has not improved over the years to the most current estimate of 35% of children stunted [Sudan National Human Development Report 2012].

METHODS

This study will be conducted at military families in the police barracks al-Hajyousif and Abu saad in Khartoum state. The total coverage is (105) child were chosen, their age between 3- 5 years. Primary data will be gathered by using a questionnaire will be pretested and will be consisted of close ended question. The questionnaire will be completed by direct interview with mother of child to provided needed information about socioeconomic and demographic characteristics "age, gender, dietary pattern "24 hour recall, dietary habits. Anthropometric measurements will be used to find out participant's weight, height; weight and height will be measured and express as body mass index (BMI - weight (kg)/height (m²). The secondary data will be collected from existing literature in the internet, books, journals and papers in

addition to unpublished dissertations. Data was analyzed using Statistical Package for Social Sciences (SPSS).

RESULT

Table 1: Number of Meals Consumed by the Preschool Children per Day in the police barracks al-Haj yousif and Abu saad in Khartoum state.

Number of Meals per Day	Frequency	Percent (%)
One	1	1.0%
two	41	39.0%
Three	63	60.0%
Total	105	100%

Table (1) Show the number of Meals Consumed by the Preschool Children per Day in the study area (60.0%) of the children took three meals per day, (39.0%) of the children took two meals per day and only (1.0%) of the children took one meals per day.

Table 2: Number of Snacks Consumed by the Preschool Children per Day.

Number of Snacks per Day	Frequency	Percent (%)
One	49	46.7%
two	51	48.6%
Three	4	3.8%
None	1	1.0%
Total	105	100%

Table (2) Show the Number of Snacks Consumed by the Preschool Children per Day in the study area. (48.6%) of the children took two Snacks per day, (46.7%) of the children took one Snacks per day, (3.8%) of the children took three Snacks per day and only (1.0%) of the children did not took Snacks per day.

Table (3): Prevalence of malnutrition Percentage among the Preschool Children in the police barracks al-Haj yousif and Abu saad in Khartoum state by using BMI-for-age- girls/boys 3-5 years (Z-Scores).

Classification	Frequency	Percent (%)
Normal	19	18.1%
Mild malnutrition	14	13.3%
Moderate malnutrition	72	68.6%
Total	105	100%

Table (15) show the Prevalence of malnutrition Percentage (According to BMI- for Age z- scores (WHO)) among children's in the study area where (18.1%), of them are normal, (13.3%) are mild malnutrition and (68.6%) are moderately malnourished.

DISCUSSION

Prevalence of malnutrition Percentage According to BMI-for Age z- scores (WHO 0226) among children's in the study area where (68.6%) are moderately malnourished (18.1%), of them are normal, (13.3%) are mild malnutrition and Complete absence of all symptoms

of Kwashiorkor and Marasmus. This prevalence of moderate malnutrition may be attributed partially to Medium Nutritional Awareness among the mother's in the study area, together with insufficient food. which did not agrees with the findings of Gopaledes et al., (1988) stated that highest prevalence rate of wasting and stunting was observed in children whose mothers had no education, they also found that the rate of Malnutrition may be due to insufficient and inappropriate supplementary food and recurrent infections such as diarrhea, due to unsanitary environment

REFERENCES

1. Sudan National Human Development Report 2012. Geography of Peace: Putting human development at the center of peace in Sudan. University of Gezira. 2009 data quoted.
2. WHO Multicenter Growth Reference Study Group. WHO Child Growth Stand Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: methods and development. (WHO, Geneva, 2006) Available on the world wide web at <http://www.who.int/childgrowth/>
3. Federal Ministry of Health, *Mapping of PHC Services in Sudan*, 2010.
4. Megan Deitchler et al; Introducing a Simple Measure of Household Hunger for Cross-Cultural Use. FANTA-2, Technical Note No12, Feb 2011.
5. Sudan Household Health Survey 2010 report.
6. Sudan National Human Development Report 2012.