

Assessment of health status among orphans in social institute in Tikrit city, Iraq.

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ABSTRACT

Background: Health status among the orphans in social institute is of critical importance because they represent significant part of the community, as well as their surrounding circumstances differ from the others as all know.

aim of the study to assess the health status among the orphans in social institute in Tikrit city

Pateints and Methods: Across sectional study was conducted on 40 residents(boys and girls)at average age between (3-18)years by using a questionnaire form. A period between the beginning of February to the end of April of 2014.A questionnaire form was designed to the of study including information about family history , any health problem ,physical examination regarding weight ,height ,body mass index(BMI).

The Results: We found that normal BMI is the commonest among them 47%. The proportion of high BMI increase with the age instead that the proportion of low BMI decrease with age. 31 % of the students between 7 –11years whereas only 39 %of those between 12-18 years were overweight. The normal BMI are equal among both females and males. Psychological problems were prominent among orphans and had become the most important contributor of lower life quality. Of 40 orphans provided credible information on the vital status of their parents; 50% had lost their father, 30% their mother and 20% had lost both parents ,About the information that was collected from them about if they have had infected with any of these communicable diseases throughout the period of staying there , we found 38% had measles, 31%had mump,18%had rubella,4%typhoid fever .Also we found high percentage (47%) of orphans had unknown history of immunization .On examination (6%)were anemic ,no jaundice, with(8%)have gross anomalies of amputated arm ,amputated arm with speech difficulty and mongolism . As well we found (17%)who were neurologically abnormal (mentally Retarded) and 26% were psychologically upset. a community-based prevention ,care approach and support from rich people should be the cornerstone of the plan for improvement .

Conclusion: Orphan children had normal BMI and their age (12-18) years about 47% for each. 50% of orphan children lost their parents. Measles is a frequent infectious disease among orphan children. High percentage (47%) of orphans had unknown history of immunization.

Key words: BMI, Orphan, Tikrit city .

INTRODUCTION

It is well known that childhood is a period of rapid growth and maturation in human development, and that extra nutrients are needed to support their growth spurt. Healthy eating patterns in childhood and adolescence promote optimal childhood health, growth, and intellectual development, as well as prevent health problems later in adulthood and old age [1,2]. Adolescent food habits are an important concern in the present accelerated nutrition transition [3]. Food habits established in childhood and adolescence tend to be stable into adulthood [4,5]. Nutrient intake during adolescence may be of critical importance because it is the only period of extra-uterine life during which the velocity of growth accelerates in both a linear and body cell mass fashion. Thus, nutritional patterns in these years may strongly influence growth and reproductive maturation[6]. During adolescence, young people are assuming responsibility for their own eating habits, health-related attitudes and behaviours [7] and their growing independence is often associated with unconventional eating patterns [8].

Fruits and vegetables provide dietary fiber and several vitamins (such as A and C) and minerals. Low intake of fruits and vegetables is associated with an increased risk of many types of cancer. Low intake of dietary fiber is associated with constipation and an increased risk of colon cancer. Low intake of dairy products may reduce peak bone mass and contribute to later risk of osteoporosis. Protein-rich foods (e.g., meats, beans, dairy products) are good sources of B vitamins, iron, and zinc. Low intake of protein-rich foods may impair growth and increase the risk of iron-deficiency anemia and of delayed growth and sexual maturation. Low intake of meat or meat alternatives may indicate inadequate availability of these foods at home. Special attention should be paid to teens who follow a vegetarian diet. Eating disorders are associated with significant health and psychological morbidity. Eighty-five percent of all cases of eating disorders begin during adolescence. The earlier adolescents are treated, the better their long-term prognosis [9]. Nutritional deficiencies and poor eating habits established during adolescence can have long-term consequences, including delayed sexual maturation and lower final adult height [10]. Poverty can result in hunger and compromised food quality and nutrition status. Inadequate dietary intake interferes with learning. A poor appetite may indicate depression, emotional stress, chronic disease or eating disorder. Excessive consumption of convenience foods and foods from fast-food restaurants is associated with high fat, calorie, and sodium intakes, as well as low intake of certain vitamins and minerals. Meal skipping is associated with a low intake of energy and essential nutrients, and, if it is a regular practice, could compromise growth and sexual development. Repeatedly skipping meals decreases the nutritional adequacy of the diet. The aim of study is to assess the health status among the orphans in social

institute in Tikrit city And the most important objectives were: To determine the distribution of malnutrition [over and underweight] among the orphans. to assess the distribution of illness (acute or chronic).among the orphans and their effects on the resident's general health to assess the effect of relatives and any others who provide supplementations on their life .

Subject & Methods

The study carried out A cross sectional study was conducted in Tikrit city during a period between the beginning of February to the end of April of 2014. The sample is taken as the whole orphans in the social institute who were 40 persons .

A questionnaire designed to be distributed and filled in by interviewer in the social institute . It was completed under supervision of the group members and then collected by them. Information from 40 residents aged between (3-18) years old was obtained, including two types of items:

A- Items that filled include age, sex, , have parents or not, have any illness or disability, immunization history, and if he have received any support from relatives or others and dietary habits.

B- Items that obtained by research group members:

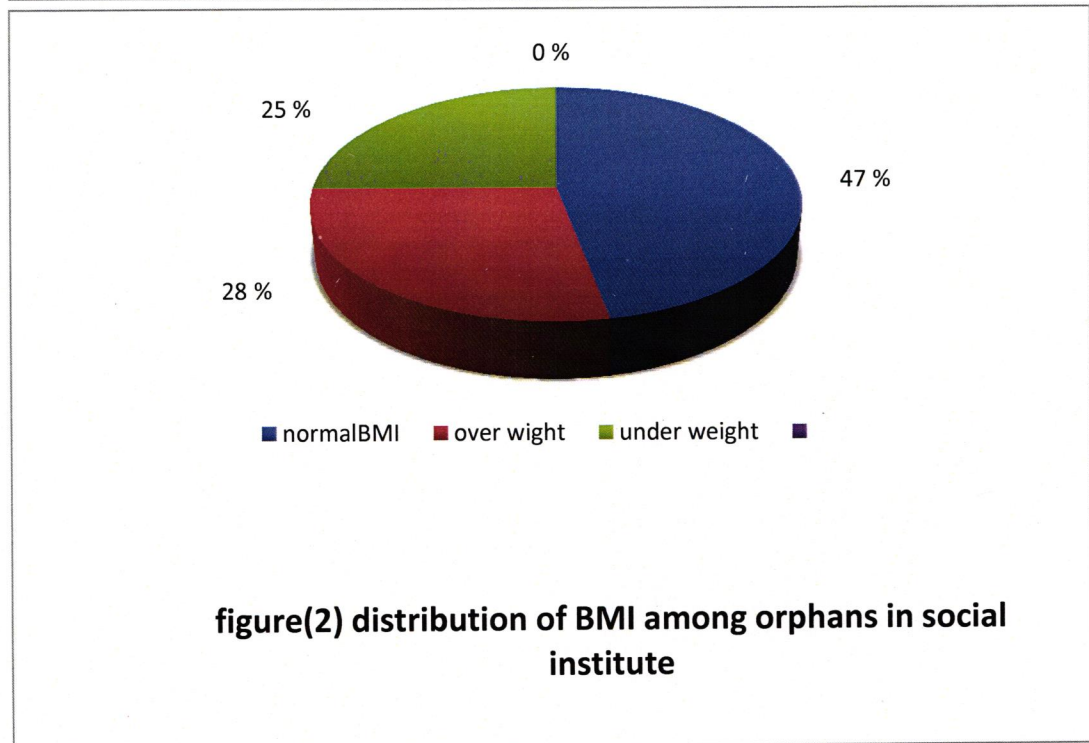
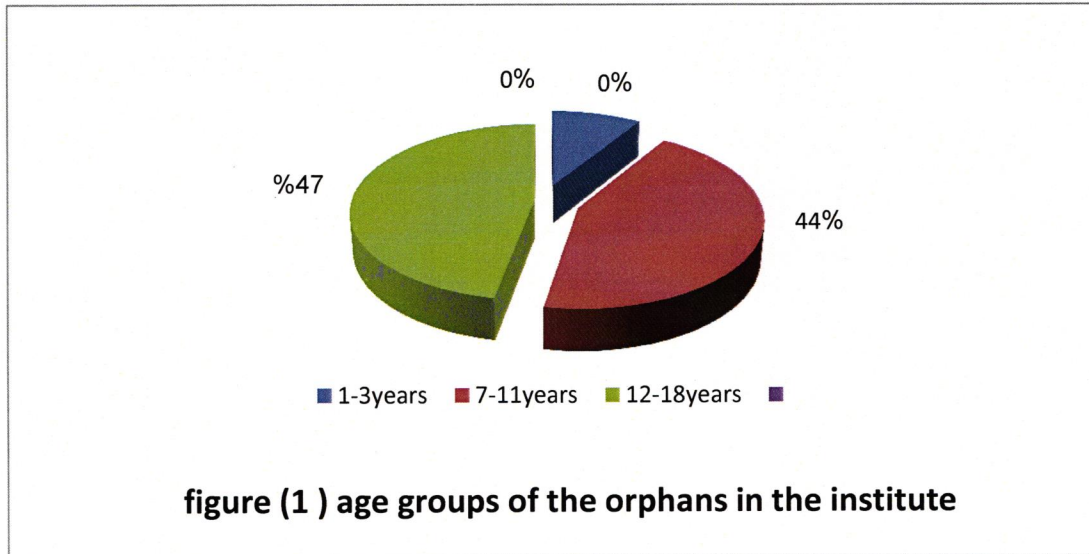
Nutritional assessment made with accurate measurement of height and weight by using weight scale and tape measure, and then BMI is calculated by dividing the weight(kg) on square height (m^2), weight were classified according to BMI into 3 groups: underweight if BMI= 15-19, normal weight if BMI= 20-25, over weight if BMI>25 (Look to appendix). Also we assess the nutritional status of 3residents aged between (1-3)years by using growth chart. Then simply we examined them for the presence of anemia, jaundice, neurological anomalies and gross anomalies .

The collected data then arranged by master table and results analyzed and presented as tables and figures. Statistical analysis done properly and the significance were tested using a chi square test at p-value = 0.05

Results

It was found that out of total sample in figure (1), were (8,3%)were between the 1-3 years of age, (44,4%)were between 7-11years of age ,and (47,2%)were between 12-18 years of age. Figure(2)shows that among 36 residents in social institute ,(47%)were found to have BMI between (20-25)kg/m², for those with BMI less than 20 kg/ m²,were (25%), those of BMI more than 25 Kg/m² represented (28%) of the sample.. The results revealed that among residents of social institute who were between 1-3 years of age0 were overweight, (33%) were of normal BMI, and (66%) were under weight, whereas the results from residents who were between 7-11years of age: (37%) were under weight,(31%) were overweight, (31%) were normal, whereas the results from residents who were between 12-18years of age: (16%) were under weight, (39%) were overweight ,(61%) were normal BMI as in figure

(3). Regarding total of (52.7%) male; (31%) of them were under weight, (47%) were of normal BMI and (21%) were overweight; whereas among females who had a total of (47.2%) females; (17%) of them were under weight, (47%) were of normal BMI and (35%) were overweight as shown in figure(4). of 36 orphans provided credible information on the vital status of their parents; 50% had lost their father, 47,2% their mother and 36,1% had lost both parents as in table(1).



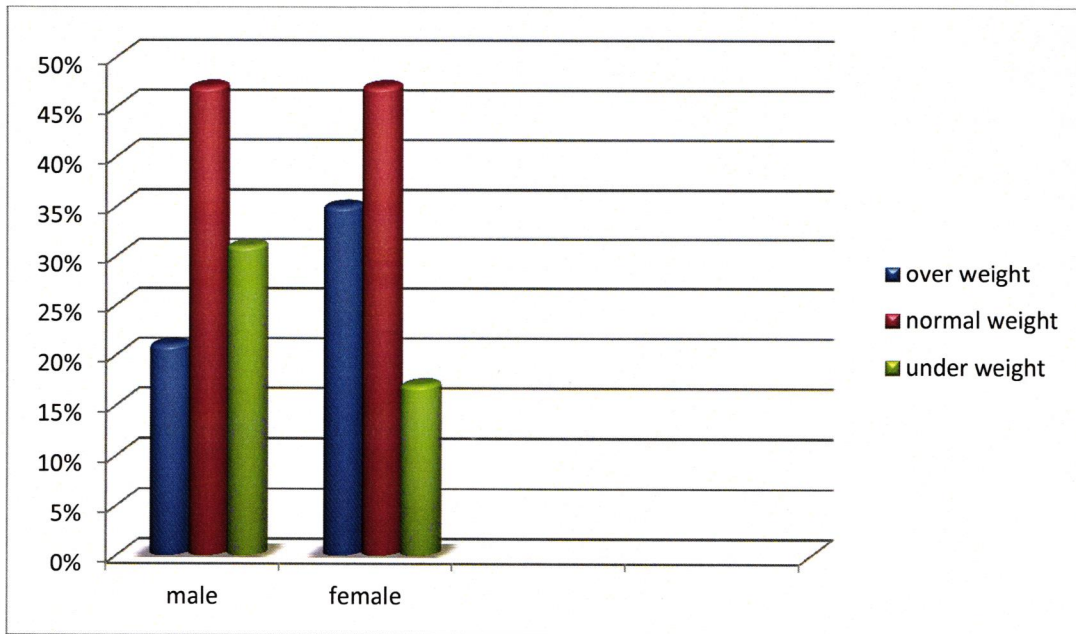


Figure (3) distribution of BMI among orphans in social institute according to age

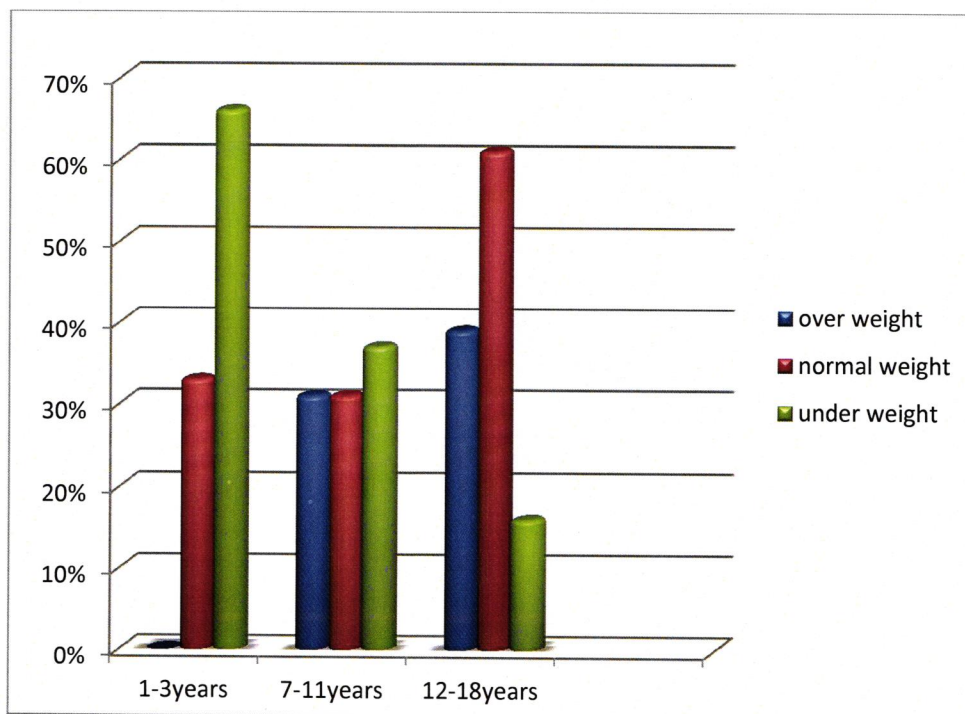


Figure (4) distribution of BMI among male and female in social institute

Table(1) show percentage of vital status of parents of the orphans in social institute

Categories of orphans	NO.	Percent%
Paternal	20	50%
Maternal	12	30%
Double(Both)	8	20%
Total	40	100%

Table (2) show percentage of immunization status among orphans in social institute

Immunization status	NO.	Percent%
Don't know	19	47.2%
Immunized	14	36.2%
Not Immunized	7	16.6%
Total	40	100%

Table (3) show the percentage of communicable diseases among orphans in social institute

Disease	NO.	Percent%
Measles	16	38%
Mump	12	31%
Rubella	7	18%
Typhoid Fever	2	4%
Not infected	3	9%
Total	40	100%

Discussion

The study of almost residents in social institute had provided result which had implications for nutritional evaluation and health assessment include medical problems as well as immunization history . It shows the calculated BMI among them and the effect of age, sex, and family history on it. Dietary habits was considered regarding number. and type of the consumed meal. Data from the current study indicate that the normal weight for patient or BMI was the dominant among residents in social institute, followed by high BMI or those with overweight, and to lowest extent those with low BMI. In compared with About 50% of children in Russian⁽⁵⁾ orphanages fail to thrive and are found well below the standard growth curve as well as 17,24% of orphans in rural Henan Province in China⁽²⁴⁾. The proportion of high BMI increase with the age ,31% of the residents between the age 7-11 years were overweight, the percentage between the age of 12-18 years has become 39%, This can be explained by increase body fat composition with the age. Longitudinal studies⁽²⁾ support the finding that people generally gain weight as they become older. The normal BMI are equal among males and females. This unusual finding because the male gender tend to have more lean muscle mass than females. Underweight

among females are the predominant, the reason can be due to predilection of ladies nowadays to weight reduction and diet restriction. Unlike recent studies in Britain have indicated that females between the age 12 and 16 have a higher BMI than males of the same age by 1.0 Kg on average [21]. The present data suggest that the psychological status of the residents have great negative effect on all aspects of their life , especially among those who are disabled and neurologically abnormal who represent 16,6% of the sample. the orphans were less satisfied with their lives, had less desire to study, less pocket money and suffered . Although there was no significant difference of 'probability to get sick', it seemed that orphans were less likely 'to be taken to see the doctor' when they fell ill. In the orphans' group the answers to 'What is your main problem at present is focused on economical support , skills to earn money and equal treatment by others. the provided credible information on the vital status of their parents; 50% had lost their father, 47,2% their mother and 36,1% had lost both parents as in compared with vital status of orphans parents in rural Henan Province in China in which 55.81% had lost their father, 29.07% their mother and 15.12% had lost both parents. Overall 9% of children under 15 years have lost at least one parent in sub-

Saharan Africa⁽¹⁵⁾ These children suffer higher rates of mortality and malnutrition. Fewer are immunized and many must drop out of school. This study has some limitations. First, being a institute-based study with a relatively small sample size limited the power of explanation and extrapolation of the results. Therefore it provides only preliminary evidence on the association between orphan hood and nutritional and psychological outcomes in this setting. better-designed study with larger sample size and more-detailed information is needed to understand the association more fully. Secondly, some important determinants, such as the date of parental death or accurate information from orphans' caregivers, could not be obtained. Thirdly, self-reporting may have introduced information bias in this survey due to the sensitive nature of this study and inaccurate memory. The impact of

orphanhood on growth and nutritional status seems obvious. Children rely on their parents to provide food, shelter and stable living circumstances. Orphans are also at greater risk of being infected by a variety of infectious diseases without parents' care, such as diarrhoea, anaemia and upper respiratory disease, all of which threaten normal growth and nutritional status. Indeed, the nutritional status of all children in the area was poor, consistent with studies conducted in Zaire, Uganda.

Conclusion

Orphan children had normal BMI and their age (12-18) years about 47% for each.

50% of orphan children lost their parents.

Measles is a frequent infectious disease among orphan children.

High percentage (47%) of orphans had unknown history of immunization.

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