Rapid nutritional assessment of under five years old children in internally displaced families in Al-Anbar Governorate may 29th – June 2nd 2016

NRI/2016

Introduction

Child nutrition is a sensitive indicator for child wellbeing as it is directly affected by food availability/security and child illness. Any rapid change in food/nutrition availability or any acute illness will have immediate impact on child nutritional status, Hence, a series of rapid nutritional assessments planned and will be part of the internally displaced persons (IDPs) nutritional surveillance system in children (6-59) months of age.

Displacement and return trends continued throughout March and April 2016, most notably in Anbar, Ninewa, Salahulddin and Kirkuk governorates. International Organization for Migration **(**IOM) Displacement Tracking Matrix (DTM), as of April 28, identified 3,333,384 internally displaced persons (IDPs) and 656,778 returnees, an increase in returns of 99,378 since 2 March 2016. IOM continued distributing non-food item (NFI) kit and focusing on critical shelter rehabilitation. IOM distributed 6,046 NFI kits across five governorates in March and April 2016 (Anbar, Diyala, Erbil, Ninewa and Salahulddin).In order to improve the living conditions of IDPs in critical shelter arrangements such as religious buildings and unfinished buildings, IOM carried out shelter rehabilitations with support from the United State (US) Government and the European Union's Humanitarian Aid and Civil Protection department (ECHO) for 479 units in Baghdad and Salahulddin governorates, out of a total of 829 planned. IOM also upgraded four IDP camps in Baghdad, from unplanned to fully operational, organized camps, by training camp management staff to build their camp coordination and camp management skills. A cash distribution, sponsored by the US Association for International Migration, was conducted in Erbil for the most vulnerable Syrian refugees living outside camps; 100 families received cash to address their most pressing needs, including food, shelter and healthcare *(IOM-Iraq Mission).*

In almost all emergencies, nutrition is in danger, as people flee their homes, crops are destroyed, communication and transport become difficult,

and the social structure of society is altered. To estimate the need for increased food supplied, the nutritional status of the affected population is important information *(Field guide on rapid nutritional assessment in emergencies, WHO 1995).*

Aims of the study

To assess nutritional status of children (6-59 months) in internally displaced families in Al-Anbar governorate (15 camps).

Materials and methods

Sampling and Design and training activity

The study was conducted in Al-Anbar governorate/Ameriyah Al-Falluja for the period from May 29th – June 2nd 2016, one local supervisor was assigned and the total number of teams was five, each team comprised of two health staffs from Al-Anbar Health Directorate/Nutrition section with the support of Nutrition Research Institute and United Nations Children's Fund (UNICEF). The sample comprised of 1650 children selected inclusively in this cross-section study. One day training course was conducted prior to the implementation of study.

Data Collection

The study includes collecting data related to personal information (age, gender) and anthropometric measurements through direct interview and using a pre-made questionnaire form.

Anthropometric measurements

Body physical measurements were obtained for all children (6-59 months) included in the study; weight was recorded using a standard weighing scale

(uniscale). For children aged two years old and above, height was measured using a standard measurement board in a standard position (standing up) and length was taken for children less than 2 years old in a standard position (laying down). Z-scores were calculated for length/height-for-age, weight-for-length/height, weight-for-age and body mass index (BMI)-for-age. A cut-off point of less than minus two standard deviations (-2SD) was used to define stunting (length/height-for-age Z-score), wasting (weight-for-length/height Z-score), and underweight (weight-for-age Z-score) and a cut-off point of above +2 Z-score and +3 Z-score (weight-for-length/height and BMI-for-age Z-scores) were used to define overweight and obesity respectively. Foot oedema was also examined for both feet to detect children with severe acute malnutrition.

Data computerization and Analysis

Data entry was done using MS-Excel based programme and coded and analyzed with SPSS. The nutrition part was analyzed by WHO Anthro software v3.2.2 based on (2005) World Health Organization (WHO) standards and results were categorized by the WHO classification for assessing severity of malnutrition by prevalence ranges.

Results and discussion

The overall grand number of children enrolled in the study comprised of 1650 children that was equally distributed according to their genders.

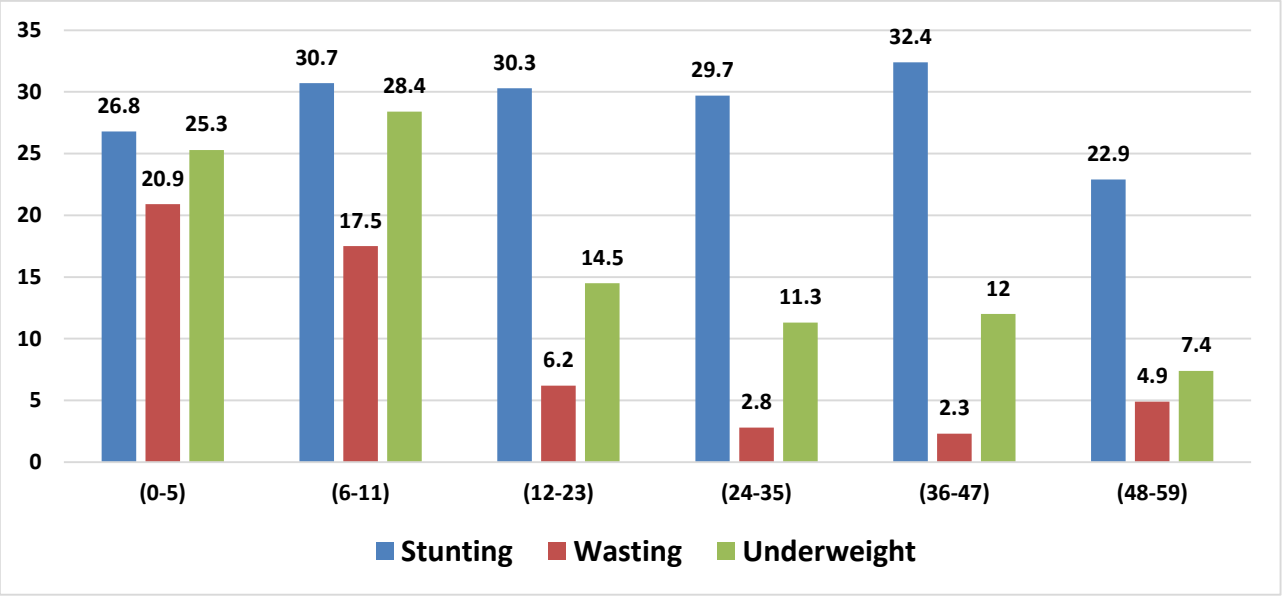
The table below summarizes the results for wasting, stunting, underweight for WHO standards, where 6.0% of the children were suffered from wasting and 2.3% of children were found to be severely wasted (wasting and severe wasting were assessed as the prevalence of weight-for-length/height below –2 SD, and –3 SD of the median WHO standard population respectively). The prevalence of stunting and severe stunting was 28.7% and 9.1%

respectively (length/height-for-age below –2 SD, and –3 SD of the median WHO standard population respectively). Underweight was found in 13.3% of children (weight-for-age less than –2 SD of the median WHO standard population), and 5.0% of children were suffered from severe underweight (weight-for-age lower than –3 SD of the median WHO standard population). Based on WHO classification, most of the malnutrition rates were considered medium in severity (wasting rates below 10%; stunting rates below 30% and underweight rates below 20%). For overnutrition, 6.5% of children had overweight (BMI-for-age above +2 SD) and 1.6% was obese (BMI-for-age above +3 SD).

Growth indicators of children under 5 years, by WHO standards (2005)

	Number	Stunting %	Severe stunting %	Wasting %	Severe wasting %	Underweight %	Sever underweight %	Overweight %	Obesity %
Boys	**842**	**28.1**	**9.3**	**7.1**	**1.9**	**13.1**	**5.5**	**6.4**	**1.3**
Girls	**808**	**29.2**	**8.9**	**4.9**	**2.6**	**13.6**	**4.5**	**6.6**	**1.9**
Total	**1650**	**28.7**	**9.1**	**6.0**	**2.3**	**13.3**	**5.0**	**6.5**	**1.6**

As shown in the figure below children 6-11 months of age had higher rate of underweight (28.4% than others and those aged 36-47 months had higher stunting rate (32.4%) than others while children (0-5 months) had higher rate of wasting (20.9%) than other children enrolled in the study and no statistically significant difference in the prevalence of wasting and underweight among some age groups, although the results show roughly the same level for both indicators.



Distribution of children by their nutritional status and age categories

Conclusions

According to WHO classification, the prevalence of malnutrition rates of children included in the study (stunting, underweight and wasting) were in the medium category of severity in prevalence ranges

Recommendations

1- Protection, promotion and support of breastfeeding and timely introduced, safe and appropriate complementary feeding as core interventions for prevention and management of severe malnutrition.

2- Promotion of healthy diet which is an essential factor to maintain a healthy body weight.

3- Conduct further nutritional assessment on regular basis in order to monitor the nutritional status of under five years old children.

Rapid nutritional assessment in under 5 years old children in emergency situations questionnaire form.

Q1: Governorate: ……..

Q2: Form Num. :……

Q3: Child name:……..

Q4: Sex: ☐ Boy ☐ Girl

Q5: Visit date:……../……../2016

Q6: Birthdate: ……../……../……..

Q7:Age: …… year

…… months

Anthropometry

Q8: Weight: ☐☐ , ☐ Kg

Q9: Height: ☐☐☐, ☐ Cm

Oedema of both feet: ☐ Yes ☐ NO