A PROFILE OF NUTRITIONAL STATUS OF UNDER FIVE YEAR OLD CHILDREN IN INTERNALLY DISPLACED PERSONS (IDPS) CAMP, JALOZAI DISTRICT NOWSHERA

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ABSTRACT

Objectives: *To analyze the degree of malnutrition in children under five years of age in IDPs camp of Jalozai, district Nowshera and to assess the ratio of malnourishment among gender.*

Methodology: *The study was conducted at Jalozai camp, Nowshera for a period of three months duration. A sample of 100 children with age range six to fifty nine months (6months to 59months) with certain degree of malnutrition was selected according to the inclusion criteria. The data was gathered from the record of Primary Health care Centre Jalozai of Merlin (Medical Relief Lasting Health Care. Children were diagnosed as mild, moderate and severe degree malnutrition on the basis of their height and weight for their respective ages (Gomes and Harvard classification). Standard weight charts were used for assessment. The data was analyzed by applying the descriptive statistics using SPSS version 10.*

Results: *Out of 100 malnourished children, 40 (40%) were boys and 60 (60%) were girls. Eight boys (20%) and 17 girls (28.3%) had mild while 32 (80%) boys and 43 girls (71.7%) had moderate malnutrition. Severe degree malnourished children were excluded from the study. Among 51 children of age between 6 and 23 months, 33 (64.7%) children were breast fed, 16 (31.3%) were bottle fed and 2 (4%) were both bottle and breastfed. 63 (63%) children were immunized completely, 34 (34%) partially and 3 (3%) children were not at all immunized.*

Conclusion: *Prevalence of malnutrition increases for refugees and IDP's, and is more common in female as compared to male gender.*

Keywords: *Malnutrition, Food Security, Internally Displaced Persons (IDPs), Mid Upper Arm Circumference (MUAC), Immunization.*

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INTRODUCTION

Millions of people worldwide are suffering from hunger and under nutrition. One of the major factors which contribute to this international problem is food insecurity. This is a condition which exists when people don't have sustainable physical or economic access to enough safe, nutritious, and socially acceptable food for a healthy and productive life[1].

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According to the United Nations, there are 840 million undernourished people in the world the majority of which (799 million) are living in the developing countries. Most of these under-nourished people reside in the continents of Africa and Asia[2].

The root causes of food insecurity in developing countries are poverty, war and civil conflict, political corruption and bankruptcy, such national policies that do not promote equal access to food for all, environmental degradation, barriers to trade, insufficient to no agricultural development, population growth, low levels of literacy, social and gender inequality, poor health status of the masses, cultural insensitivity, and natural disasters like floods, earthquakes etc.

It has been recognized that the vast majority of deaths and a high mortality among children in the developing world is associated with under and malnutrition. Infancy and childhood are times of active growth in terms of physical size,

mental, emotional, sexual maturation and psychological development .normal growth is dependent upon proper and adequate nutrition. When intake of energy is not optimum, this can ultimately lead to malnutrition in long run. Malnutrition has got association with poor developmental achievement and poor school performance .malnourished children face long term sequel such as impairment of mental and intellectual capacity[3].

Worldwide, certain groups of people are more vulnerable to food insecurity than others. Various vulnerable groups include: victims of conflict (e.g. refugees and internally displaced people.), migrant workers, and marginal populations, women of reproductive age, ethnic minorities, and low literacy households.

Refugees and internally displaced people deserve special care, as they constitute a large proportion worldwide. These groups of people are vulnerable to many health crises as they are triggered by many risk factors such as lack of shelter, poor personal hygiene and poor environmental sanitation, outbreaks of diseases, war, drought, famine and shortage of food.

This study was conducted at Jalozai camp district Nowshera where thousands of people have been displaced from Swat, Hangu, Bajaur, Waziristan and other tribal areas of Khyber Pukhtun Khwa province due to ongoing conflict. The main objective of the study was to analyze the degree of malnutrition and to assess the ratio of malnutrition among different gender under five year's children after they have been displaced from their home towns.

METHODOLOGY

This cross sectional and descriptive study was carried out in internally displaced persons (IDPs) camp based at Jalozai, district Nowshera. The study duration was three months period (March 2010 to May 2010.). short duration for study was due to their uncertain temporary stay at camp.100 children with some degree of malnutrition were selected by applying non probability purposive sampling technique. Children were diagnosed and classified as mild, moderate and severely malnourished on the basis of their heights and weights for their respective ages. Standard weight charts were used for assessment. If weight is less than expected for that age then child is considered malnourished. Children with weight of 75-90% of the expected weight were considered as mild degree of malnourished. Children with weight of 60-75% of the expected weight were considered as moderately malnourished, while children below 60% of the expected weight were considered as severely malnourished. Apart from height and weight presence of edema, hair changes, skin changes, muscle wasting, level of appetite and alertness of child were also considered (Gomez and Harvard classification for malnutrition). All children with age range of 6 months to 59 months of either sex, residing inside the IDPs camp, with mild to moderate malnutrition were included. Data was collected from the record of primary health care Jalozai of Merlin (medical relief lasting health care), an international organization, based at Peshawar.

The data was presented as means or proportions and percentages. These were compared with each other. The study variables were age, sex, place from where displaced, deworming status, degree of malnutrition, MUAC, immunization status, presence of palmer pallor, feeding pattern and type of feeding program. The data was analyzed on a computer using SPSS version 10 and presented in the form of tables and graphs.

RESULTS

Out of 100 malnourished children, 40 (40%) were boys and 60 (60%) were girls as shown in Figure 1.

26 children were among age group 6-11 months, 25 among 12-23 months, 20 among 24-35 months, 14 among 36-47 months while children among the age group 48-59 months were 15 Figure 2. 8 boys (20%) and 17 girls (28.3%) had mild while 32 boys (80%) and 43 girls (71.7%) had moderate malnutrition Figure 3. 63 (63%) children were immunized completely, 34 (34%) partially and 3 (3%) children were not immunized at all Figure 4.

16 male children (40%) and 25 (42%) female malnourished children had a history of being dewormed, while 24 male (60%) and 35 female (58%) children with malnutrition had no history of being dewormed in the last 6 months.

Among 51 children of ages between 6 and 23 months, 33 children (64.7%) were breastfed, 16 (31.3%) were bottle fed and 2 (4%) were both bottle and breast fed Figure 5.

One male child out of 8 children with mild degree malnutrition and 11 male children out of 32 children with moderate degree of malnutrition, while 2 female children out of 17 with mild degree malnutrition (12%) and 15 female children out of 43 with moderate degree of malnutrition (34.8%) had clinical signs and symptoms of vitamin A deficiency (conjunctiva xerosis and bitot's spots) shown in Figure[7].

Figure 1: Sex wise Distribution of Malnourished Children (n=100)

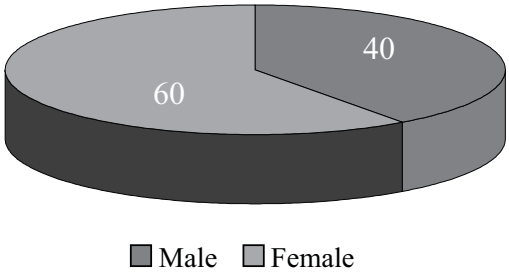


Figure 2: Different age Groups of the Malnourished Children (n=100)

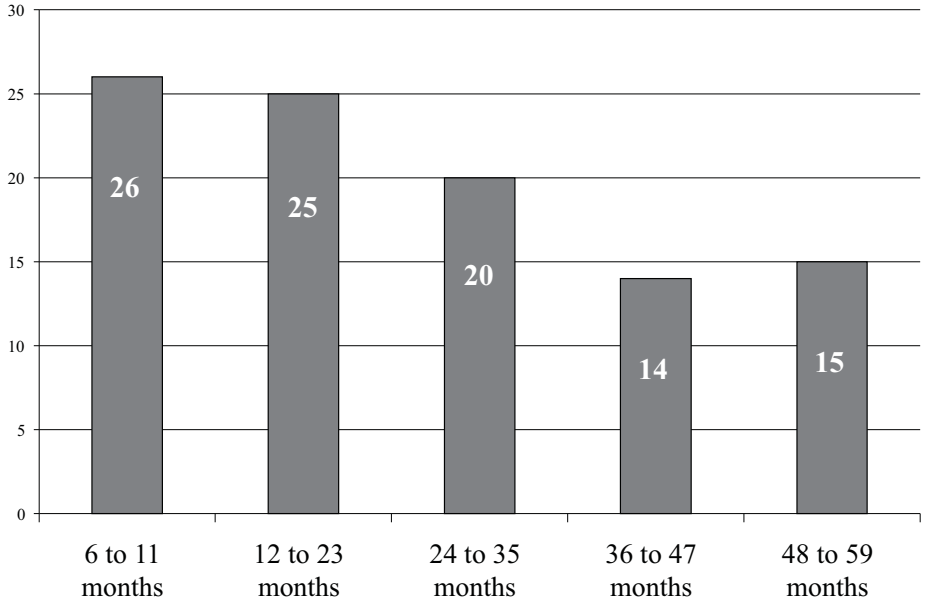


Figure 3: Sex wise Distribution of Degree of Malnutrition (n=100)

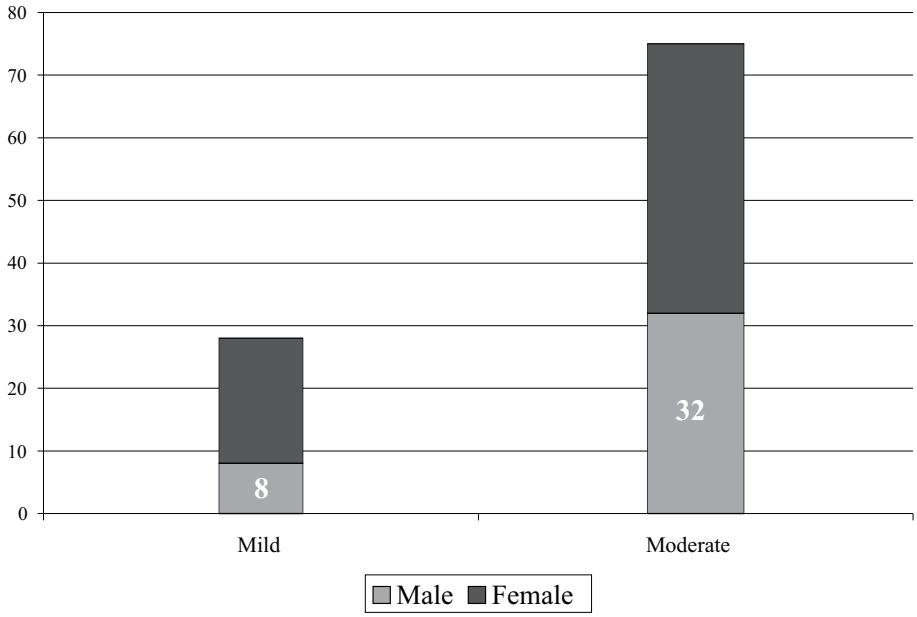


Figure 4: Immunization status of Malnourished Children (n=100)

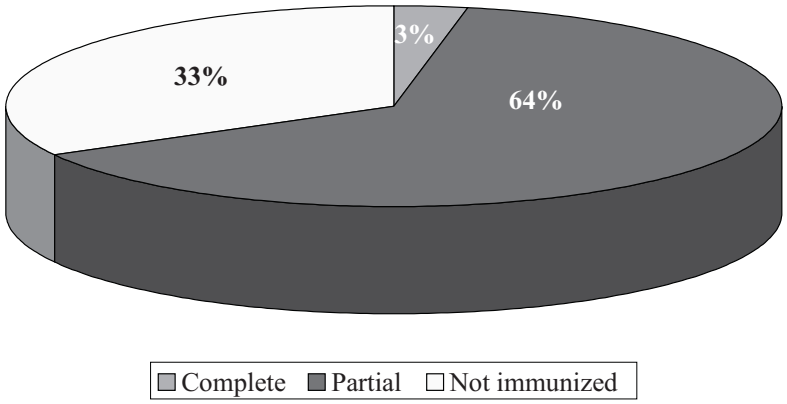
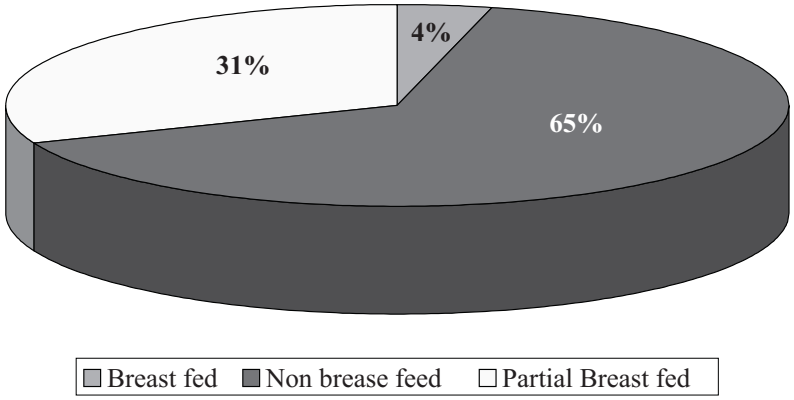


Figure 5: Feeding pattern (Breastfeeding Status) of Malnourished Children (n=100)



DISCUSSION

Childhood malnutrition is a major issue in developing countries that requires intervention. In emergency situations, the prevalence of malnutrition and mortality among malnourished children tends to increase[4].

It is obvious from the study that malnutrition is more common in children in camps as compared to the general population. The reasons behind this could be that such children are vulnerable to many health crises as they are triggered by many risk factors such as lack of shelter, poor personal hygiene, poor environmental sanitation and out breaks of diseases.

Previously diarrhea and infection (cough) and low level of immunization were the risk factors for stunting growth in Sudanese children[5] but in this study no significant association was established.

In many countries like Sudan this was established that breast feeding has very positive impact to decreased malnourishment among children. In many countries breast feeding was encouraged to lessen the problem of the malnourishment among children[6]. In this study it was found that despite of quite high no of children in study sample who were breast fed but still the developed malnutrition.

The study shows that malnutrition is more common in female gender as compared to male and the only possible reason for this could be the gender discrimination in our male dominated society.

Lack of Immunization of children against infectious diseases was found to be a contributory factor in malnutrition in this age group as this lead children prone to suffer from diseases and malnutrition.

The results also highlighted the high prevalence of vitamin "A" deficiency among the malnourished children as indicated by conjunctiva xerosis and bitot's spots. 12 out of 40 male (30%) and 17 out of 60 female (28.3%). This is high in comparison to the results from different areas of Sudan and it is well above the WHO threshold denoting significant vitamin A deficiency[7].

CONCLUSION

Childhood mortality and prevalence of malnutrition increases for refugees and IDP's as compared to general population due to their vulnerability to different risk factors at cmps. Malnutrition was found to be more common in female as compare to male children due to gender discrimination.

Recommendations

Health care providers should emphasize the importance of breastfeeding in the first year of life, particularly in developing countries where safe alternatives to human milk are unavailable. Much emphasis should be made on immunization of children against major killing diseases. Health care provider should motivate the parents to stop gender discrimination among their children.

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None Declared

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CONTRIBUTORS

RG and MAK contributed equally to the research and preparation of the manuscript. All authors listed contributed signi?cantly to the research that resulted in the submitted manuscript.