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CHILD UNDERNUTRITION: CAUSES AND CONSEQUENCES

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ABSTRACT

Child undernutrition is the most pressing problem of the world, damaging to both children and nations. Nutritional status is a major determinant of the health and well-being of children. Inadequate diets and chronic illness are associated with poor nutrition among children. Greater incomes at the household level means more can be invested in food consumption, access to clean water, good hygiene and health care, and more effective childcare arrangements. This paper is purely conceptual in nature and deals in length with the causes and consequences of child undernutrition. We select some studies regarding the causes of child undernutrition and on the basis of these studies make inferences.

Key Words: - child undernutrition, underweight, nutrition.

INTRODUCTION

Child undernutrition results when the child is deprived of protein, energy or both. It strikes early in childhood and is the most prevalent, devastating form of malnutrition in the world. Inadequate food intake results in poor growth in children and weight loss and wasting in adults. In other words, undernutrition can be defined as a state wherein deficient nutrients supplied to the cells to provide the basis for optimal functioning. It is a condition resulting from deficiency of food delivered to the cells. Undernutrition is a deficiency of calorie or of one or more essential nutrients. Undernutrition and hunger are age old problems that endure today. More than 820 million people are chronically undernourished because they are unable to obtain sufficient food by any means (*Ghosh-2001*). Chronic undernutrition results from a continuously inadequate diet, reducing physical capacity, lowering productivity, stunting growth and inhibiting learning. Yet enough food is produced worldwide to provide adequate food for all.

The current global populations of some 6 billion people have 15 per cent more food available per capita than had the world's 3 billion people some four decades ago. After fifty years of substantial economic growth, steady progress in agricultural productivity, remarkable increases in per capita food availability, and numerous international and national efforts to address hunger, undernutrition remains a formidable global problem (*Ghosh-2001*).

Undernutrition is a serious problem in India. As per estimation 45.20 per cent of children are stunted, 47.10 per cent are underweight and 15.90 per cent are wasted. The Composite Index of Anthropometric Failure (CIAF) was considerably higher (*about 59.90 percent*) than any of these indicators (*Nandy et al -2005*).

OBJECTIVE OF THE STUDY

The researcher has set the following objectives in mind while writing the paper:

- 1)** To know the reasons of child undernutrition.
- 2)** To analyse the different studies conducted by various researchers for explaining the reasons of child undernutrition.
- 3)** To know the effects of undernutrition in the future course of time.

REASONS OF CHILD UNDERNUTRITON

Despite the substantial progress in economic growth, abundance in production in food grains, more coverage in terms of drinking water facility, development of new knowledge on diseases and improvement in healthcare arrangements, the problem of undernutrition is continuously affecting many parts of the world adversely and damaging the lives of children in various ways.

Following studies describe different reasons for the prevalence of undernutrition in children in different regions:

REVIEW OF PREVIOUS STUDIES

The following previous studies are consulted for this purpose:

Raghav Gaiha et. al. (2010), found that income growth together with food price stabilization are the necessary conditions for curbing the child undernutrition. Education has the desired effect but it is less strong than expected. They also stressed upon the improvement in the quality of home environment, awareness regarding the importance of household hygiene and sanitation particular in rural areas.

United Nations World Food Programme (2009), according to its study "*The cost of hunger in Bolivia: The social and economic impact of child undernutrition*", the cost of child undernutrition in *Bolivia* reached to US\$ 552 million in 2005, equivalent to 5.8 percent of Gross Domestic Product (GDP) and 31.8 percent of total social expenditure in the country.

Martinez & Fernandez (2008), in a project document on Central America and the Dominican Republic for the period from 2004 to 2008, found that the consequence of the schooling gap caused by undernutrition in the first years of life can be seen in workers' productivity. Their reduced human capital affects their individual well-being as well as the economic capacity of society as a whole. The impact of the underweight prevailing in 2004 on the productive population of the countries analysed is estimated at losses equivalent to US\$ 1.582 billion due to the education gap and US\$ 111 million due to mortality, at 2004 values. Thus, the productivity loss of undernutrition is very high.

Chilton Mariana, Michelle Chyatte and Jennifer Breaux (2007), in their paper “*The negative effects of poverty and food insecurity on child development*” find that poor child development begins in utero when a child may be exposed to intrauterine growth restriction due to the undernourishment of the mother. Poor uterine growth is indicated by low birth weight (infants weighing <2500gm. at birth) and is associated with poor development such as lower cognitive scores, decreased activity and poor language development.

Gopalan, C (1992), argued that ‘malnutrition is associated with a cluster of related often coexistent factors that together constitute what may be termed the ‘*Poverty Syndrome*’. The major attributes are: (1) Income levels that are inadequate to meet basic needs of food, clothing and shelter; (2) Diets that are quantitatively and qualitatively deficient; (3) Poor access to safe drinking water and poor sanitation; (4) Poor access to healthcare, and; (5) Large family size and high levels of female illiteracy.

Lipton (2001) argues that there is a circulation of poverty and undernutrition which are responsible for one another such as undernutrition might make the poor unable to take advantage of welfare programmers, such as food for work, since they are too weak to work hard and remain poor. Being poor, they cannot afford adequate/nutritious food for their children which is responsible for undernourishment.

Osmani and Bhargava (1998), in their studies, it emerges from their cross sectional analysis that child undernutrition is due to lack of urbanization; female illiteracy; lack of access to healthcare; absence of safe drinking water and sanitation and low birth weight.

Dionisia Maffioli, in a paper entitled, “Nutritional Status of Children and the Family: Asia-Africa Comparison” found that the risk of child to be undernourished is more in large families. According to her, in a large family system the child cannot get the required nutrients and proper attention, which make him/her undernourished.

CONSEQUENCES OF CHILD UNDERNUTRITON

Undernourished or Hungry children cannot learn as much, as fast, or as well because chronic undernutrition harms their cognitive development during this critical period of rapid brain growth, actually changing the fundamental neurological architecture of the brain and central nervous system and do more poorly in school and have lower academic achievement because they are not well prepared for school and cannot concentrate (Cook et al 2009). The following are some of the consequences of child undernutrition:

1 UNDERNUTRITION AND MORTALITY

According to Jean Ziegler (*the United Nations Special Reporter on the Right to Food for 2000 to March 2008*), mortality due to malnutrition accounted for 58 percent of the

total mortality in 2006: According to the [World Health Organization](#), undernutrition is by far the biggest contributor to [child mortality](#), present in half of all cases.

2 UNDERNUTRITION AND ILLNESS

Undernutrition increases the risk of infection and infectious disease; for example, it is a major risk factor in the onset of active [tuberculosis](#). In communities or areas that lack access to safe drinking water, these additional health risks present a critical problem.

3 UNDERNUTRITION AND CANCER

Cancer is now common in developing countries. According a study by the [International Agency for Research on Cancer](#), in developing world, cancers of the liver, stomach and esophagus were more common, often linked to consumption of carcinogenic preserved foods, such as smoked or salted food, and parasitic infections that attack organs.

4 UNDERNUTRITION AND FUTURE GENERATION

Hunger respects no age barrier; it is wreaking a disproportionate impact on children, with dire consequences for current and future generations. In many communities chronic hunger is “inherited” — the impact of undernutrition on pregnant and lactating women severely restricts their children’s lifelong capacity for physical growth, intellectual development, and economic productivity — perpetuating a vicious cycle of inter-generational hunger and poverty.

5 UNDERNUTRITION AND THE PROGRESS OF THE NATION

Undernutrition has a negative impact on a country's production capacity as a result of a higher prevalence of mortality and lower level of education attained by the population suffering from undernutrition (*Martinez & Fernandez-2008*). It hampers the progress and process of economic development of any nation. It decreases learning and earnings capacity which shorter work lives and produces less productive work force. These are essential to economic growth. And economic growth is essential for increasing incomes, reducing undernutrition, poverty and improving food security. The manner in which development strategies achieve growth, however, and the number of people who participate in and benefit from it are as important as the growth itself. Therefore, a healthy labour force is needed to boost the progress of the nation.

6 UNDERNUTRITION AND PSYCHOLOGICAL DISORDERS

Undernutrition also creates psychological disorders. According to [the Lancet](#), undernutrition, in the form of [iodine deficiency](#), is "the most common preventable cause of mental impairment worldwide." Even moderate [iodine deficiency](#), especially in pregnant women and infants, lowers [intelligence](#) by 10 to 15 I.Q. points, posing an incalculable potential loss to a nation's development. Research indicates that improving the awareness of nutritious meal choices and establishing long-term habits of healthy eating have a positive effect on a cognitive and spatial memory capacity, potentially increasing a student's potential to process and retain academic information.

The other consequences of undernutrition are: it makes mental impairment, weak social system, loss of GNP, weak political system etc.

CONCLUSIONS

We can conclude by highlighting the following points:

- 1) It can be said that the main reasons of child undernutrition are low level of income, illiteracy, poor access to safe drinking water, poor sanitations, poor access to health care, large family size, maternal under-nourishment and low agricultural productivity.
- 2) Further the effects of child undernutrition are worse or costly than the expenditure require for curing the undernutrition. Therefore, it is in the interest of a nation to initiate the programme to combating the problem of child undernutrition

Now it be concluded by quoting *Amartya Sen's* interview on his book, "*The Argumentative India*" that the removal of undernutrition in India requires a combination of health initiatives, nutrition intervention such as midday day meals and the creation of extra income, particularly, for those whose families are hungry because they have no work experiences to break the vicious circle of chronic undernutrition.

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